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Audit Theory Paradigms

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“Quoth the Professor: ‘Well, it may be all right in practice, but it will never work in theory.’” (Warren E. Buffett, 1985)

The goal of this paper is to present several candidates for the theory of auditing. Herein, there is no pretension to formulate a “new” audit theory, nor is there any effort to elevate one expression of theory over another. However, toward the end of this paper, a distinction is made between “macrotheory” (a global or all-encompassing perspective) and “microtheory” (models for dealing with specific decisions) along with an assertion that the two, taken together, can be very useful for research and practice.

The first sections of the paper are an excursion through literature that promises some attention to “a theory of auditing.” A search for such literature produces only a few pieces that have such pretensions. The broad conclusion from this review is that all the existing expressions of audit theory fall short.

As the title suggests, this paper deals with “paradigms” that give rise to audit theories. A *paradigm* is taken in the same context as it was in the *Statement on Accounting Theory and Theory Acceptance* [Committee on Concepts and Standards for External Financial Reports, 1977] as introduced by Kuhn [1970] and defined in the plural as “conceptual and instrumental frameworks that provide modes from which spring particular coherent traditions of scientific research.” In this context, a *paradigm* is a “world view” that enables researchers, theorists, and practitioners to discern audit phenomena in terms of *input*—specification of the problems of interest, *setting*—the empirical domain over which the audit work/research is applied, and *process*—the kinds of tests and standards used to adjudicate contradictory propositions. A paradigm, when shared by all concerned, may lead to a single prevailing theory—a broad view and focus for research and practice. This context of “paradigm” is much broader than that used by some researchers when they refer to a particular model or algorithm used in research data analysis.

Nevertheless, the exposition on paradigms herein suffers from the limitation of this author’s and others’ perceptions of the world of audits. Specifically, perceptions of audit theory paradigms are influenced by existing literature and

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thought that begin with a focus on financial statement audits. This biases our “world view” in the direction of quantifiable assertions instead of more subjective subject matter and toward the audit report output instead of the audit process. Anderson [1983] put these biases in focus when he explained the context of internal audit department peer review in terms of being similar to, but more than, an audit. Many theorists infer that a general definition of auditing (e.g., ASOBAC, 1972) can be stretched to encompass all manner of assertions, but Anderson maintains that differences in purpose and subject matter distinguish peer reviews from other activities that are considered “auditing.” Indeed, Anderson characterizes most audit theory as being based on “the financial audit paradigm.”

Theory and Theory Acceptance

An accumulation of literature, thought, and practice has not yet led to the acceptance of a unique audit paradigm. The search continues for a compelling basis for (a) specifying the activities that collectively constitute “auditing,” and (b) resolving controversies about audit activities. Auditors are not alone in this regard. Our brethren in financial accounting have already reached this conclusion about the content of external financial reports [Committee on Concepts and Standards for External Financial Reports, 1977]. In both cases, one is tempted to conclude that even the possibility of an acceptable normative theory is denied. Perhaps the possibility of an acceptable positive theory is likewise denied.

Even if a generally accepted audit theory were proclaimed by a duly constituted committee, the search for a “better theory” no doubt would continue. No matter what issues someone apparently resolves, someone else will raise a case or counter-example to show that the resolution does not work. Such is the fate of modern social science. Consider a “theory of materiality” as an example—one that applies equally to both accounting and auditing. People have struggled with it for a long time, finally pronouncing this truism [FASB, 1980, paragraph 132; Leslie, 1985, paragraphs 2-9]: “The omission or misstatement of an item in a financial report is material if, in the light of surrounding circumstances, the magnitude of the item is such that it is probable that the judgment of a reasonable person relying upon the report would have been changed or influenced by the inclusion or correction of the item.” This statement does not appear to be a sufficient product for a theory of materiality. Yet, some would argue: “That’s as good as it gets. Practitioners and researchers/theorists just need to grapple with materiality in each and every case, depending on the facts and circumstances.”

Turning to auditing, the search for a generally accepted audit theory appears to be equally difficult and unsatisfying. Nevertheless, the benefits to practice and research may be in the journey, not at the final destination.

Role of Theory

An audit theory paradigm—a perceptive “world view”—should first enable people to recognize “audit phenomena.” Audit theory should then facilitate description, explanation, and prediction of these phenomena in research and

professional practice. Such a theory might possess elements both of positive theory and of normative theory.

However, an anonymous commentator (not an auditor) raised this issue: The meaning of “audit phenomena” is not clear to me, therefore I do not understand what is meant by “audit theory.” In light of this kind of comment, one must try to capture at least the rudiments of a paradigm in a concept or definition that differentiates audit phenomena from other phenomena. The most general definition appears to be this: “Auditing is a human evaluation process to establish the adherence to certain norms, resulting in an opinion or judgment” [Schandl, 1978]. The central features of this definition are (a) human judgment process, and (b) norms. With this beginning, “auditing phenomena” can at least be distinguished from such things as physics, pharmacy, and singing (although not from the truly “auditory” process of judging singing performances). It is no surprise that the Committee on Basic Auditing Concepts [1972] sought to express a definition that would narrow the field of “audit phenomena,” producing a definition that relied heavily on “assertions about economic actions and events” and “communication of the results of evidence evaluation to interested users,” thus adding to the central features (c) emphasis on economic data, and (d) communication.

Even though these definitions may be widely accepted, in whole or in part, they are clearly not sufficient to lead everyone to a common paradigm or a generally accepted theory of auditing. While many people have little trouble recognizing most “audit phenomena,” people still look to different empirical domains for evidence, and they frequently apply differing tests, standards, and research methods. Something is missing. Too many auditors lament the lack of theory to go unacknowledged. (See the Appendix for a sample of theory complaints.) However, most of these complaints can be traced not to differing paradigm starting places—the audit phenomena—but to desires for theory closure *within* an audit paradigm.

Theory Closure

Whenever people agree on a theory, the agreement is always achieved within the social context of the time, accommodating the then-current perceptions of cost and benefit, technology, and socio-political factors. Times change and so does knowledge of the field. The history of science is replete with discarded theories, most of which deserved to be discredited and tossed by the wayside. When they were overthrown, new directions took their place.

So it is with audit theory. Conformity with a single world view that presents a complete identification of all possible audit phenomena, a complete enumeration of empirical domains, and a complete inventory of research tests and standards has not been accomplished. In fact, it may not be desirable. Pretending to achieve such closure would invite intellectual and practical stagnation. While complaints about audit theory (Appendix) may be astute or ignorant, objective or self-serving, on point or off target, or some other characterization depending on one’s own paradigm, they are all nonetheless expressions of “demand” for audit theory to provide the comfort of a rational basis for research and practice activity.

Theories die a long, slow, and painful death. Their decline is asymptotic—

seldom reaching complete extinction. For example, part of the audit theory extant eighty or more years ago described audits in terms of their fraud-detection purpose and activity. This fraud detection view of the world was later suppressed in the auditing literature for several decades, and now it seems to be rising to prominence again. As theory elements fall into decline, they are accompanied by the people who accepted a particular paradigm. Even so, the people and their theories can never be completely discarded. As quoted from Kuhn by the Committee on Concepts and Standards for External Financial Reports [1977]:

Still more men, convinced of the new view's fruitfulness, will adopt the new mode of practicing normal science, until at last only a few elderly holdouts remain. And even they, we cannot say, are wrong [Kuhn, 1970, p. 159].

While a diversity of theories is welcome for the development of the field, proponents should not denigrate prior theoretical efforts. The "elderly holdouts" have no doubt contributed a platform for the new theorists (next elderly holdouts), and their contribution should be honored. After all, they may turn out to have been "right" in the first place. Perhaps the "elderly holdouts" for a fraud detection tint to the audit world view will yet turn out to be "right."

Paradigm Candidates

Very few titles make pretensions to a general theory of auditing, so the search for paradigm candidates included a perusal of research, symposium presentations, and other sources. In numerous cases, authors presented some aspects of audit theory without attempting to knit an analysis into a whole fabric of auditing. An example is Toba's "A General Theory of Evidence as the Conceptual Foundation in Auditing Theory" [1975]. His theory of evidence, as presented, is not comprehensive enough to qualify as a paradigm candidate. Others are more amenable to conceptual expansion, as will be shown later.

Another noticeable aspect of theory presentations is the authors' tendency to comment upon a very narrow band of audit interests without trying to comprehend the breadth of audit issues and problems. In contrast to writings about general theory (herein dubbed "macrotheory" signifying a comprehensive treatment of auditing), these authors dealt with "microtheory"—a concern with a model or theory of some particular decision problem set in an audit context. Examples abound in research reviews such as Felix and Kinney [1982] and Scott [1984].

The paradigm candidates which follow are the ones perceived to be amenable to some degree of generalization to a "theory of auditing." A theory ought to be broad enough to encompass a wide range of audit phenomena from auditor characteristics like competence and independence, to field work tasks of evidence-gathering and decision-making, thence to communication. The challenge is to determine to what extent the paradigm candidates differ, if at all, in the central characteristics of a paradigm—specification of problems of interest, empirical data domains, and research method tests and standards. The beginning point is the classic Mautz and Sharaf *Philosophy of Auditing* [1961].

The Inductive Theory of Audit Professionalism

The theoretical core of the *Philosophy of Auditing* is the organization of concepts and postulates. Mautz and Sharaf presented inductions about auditor qualities, field work, and dependence on accounting principles. In abridged form, their theory structure, which is embedded in their postulate statements, is:

Auditor Qualities

Concepts: Ethical conduct
Independence
Due audit care

Postulates: There is no necessary conflict of interest with management.
The auditor acts exclusively in the capacity of auditor.
Professional status imposes professional obligations.

Technical Aspects of Audit Work

Concepts: Due audit care
Evidence

Postulates: Financial statements are verifiable.
Financial statements are free from collusive and other unusual irregularities.
Internal control eliminates the probability of irregularities.
The past will hold true for the future.

Communication

Concept: Fair presentation

Postulate: Consistent application of GAAP results in fair presentation.

Their theory was inductive—based on their observations of audit practice. For all practical purposes, part of this observation involved cognizance of the official auditing standards. Indeed, even though the ten audit standards already existed, they can be shown to “flow from” the concepts and postulates. They can even be perceived as the *precepts* Mautz and Sharaf said they did not have time to pursue [1961, p. 246]. The Mautz and Sharaf theory formulation is a product of practice leading theory—which is not a condemnation, because theory must get a start somewhere.

Every theory is forever subject to examination and reformulation, and the Mautz and Sharaf theory is no exception. It was produced during a period of relative calm in the practicing profession before many other political, social, and economic events wrought change in the practice of auditing in the United States. In the light of such events, even a friend of the theory could not reproduce as explanations to students two of the basic assumptions (postulates), namely: “There is no necessary conflict of interest between the auditor and the management of the enterprise under audit,” and “The financial statements and other information submitted for verification are free from collusive and other unusual irregularities.” A textbook chapter on auditing theory and standards changed the former postulate to: “A potential conflict of interest *always* exists between the auditor and the management of the enterprise . . . ,” and the latter postulate was omitted entirely [Robertson, 1979]. These alterations were also inductions.

The important issue is not so much the endurance of the Mautz and Sharaf

formulation but whether it constitutes a paradigm supporting a useful theory of auditing, enabling people to generate research hypotheses and describe, explain, and predict audit phenomena. It has indeed been useful as a theory structure, but it has also failed in some respects.

Numerous identifications of problems of interest have sprung from the Mautz and Sharaf theory. Many, but certainly not all, research projects can be traced to its roots regardless of whether the researchers acknowledged them [Robertson, 1984]. One should not be surprised about the facility of the theory to point to problems of auditing. After all, it was derived by induction from audit practice. Nevertheless, it was induced from observations of *external* audit practice and independent audits of financial statements—producing the bias toward the “financial audit paradigm.” The Mautz and Sharaf theory is much more strained to produce identifications of problems in governmental and internal auditing. One can see clearly the differences and similarities in the management audit and performance audit definitions and objectives presented by Herbert [1979].

A great deal can be inferred from the Mautz and Sharaf theory about the empirical domain over which audit work and research can be applied. Various postulates touch the areas of auditor characteristics (e.g., independence, professionalism), field work (e.g., evidence-gathering, prediction), and reporting relative to generally accepted accounting principles. One area not emphasized is the economic and social forces that create demand and supply of audits. Mautz and Sharaf took the demand for, and the existence of, auditors largely for granted.

Very little can be seen in the theory about research models and methods or about tests and standards, although a good deal is said about practitioners’ work. Mautz and Sharaf apparently did not write the *Philosophy* with a primary purpose of directing academic and practical research methods. Thus, as a broad paradigm, Mautz and Sharaf’s formulation is not complete. As shall be seen later, other theory statements have more to say about models and methods, taking the identification of audit phenomena for granted.

Process Theory of Audits

Schandl attempted to integrate into one system the findings of semantic philosophy, communication theory, and the psychology of thinking and to apply them to the judgment (opinion formulation) process in auditing [1978, p. ix]. Although published in 1978, Schandl’s papers were available to members of the AAA Committee on Basic Auditing Concepts before its report (ASOBAC—A Statement on Basic Auditing Concepts) was issued in 1972. The two streams of thought have some points in common. They both presented broad definitions of auditing, purporting to encompass a wide variety of judgment activities. As mentioned earlier, the ASOBAC definition narrowed the field that Schandl opened wide. They both paid considerable attention to the investigative process. They brought into clear focus the importance of *assertions* as the beginning problem-recognition facet of audit decision-making.

Schandl also proposed a system of postulates—propositions which he took as self-evident. Briefly, his postulates were:

Purpose: Each audit has a purpose.

Judgment (opinion): Audit problems lead to decision conclusions.
Evidence: Evidence is required in the decision-making process.
Norms (criteria): Norms are required in the decision-making process.
Communication: Communication exists and is meaningful.

The difficulty with Schandl's theory is its level of generality. The postulates briefly stated above are not unique to auditing in terms of the independent, internal, governmental, operational, and other forms of auditing commonly practiced. Collectively, Schandl's postulates constitute the scientific method of inquiry developed in philosophy long ago. Significantly, Schandl truncated his presentation of postulates, saying: "Their number could be multiplied, as we could go deeper and deeper into the analysis of human mind and intellect. But we have to leave the rest of the postulates to the disciplines of philosophy and psychology." He left the theory of auditing at a macro level, and therein lies the source of complaint for many researchers who have followed. They have lamented the lack of theory, not about auditing, but about the applications of philosophy and (particularly) psychology in auditing. These are found "deeper and deeper in the analysis of human mind and intellect," to use Schandl's words.

Schandl's formulation appears to be too general to serve well as the theory flowing from an audit paradigm. One can use it to specify problems of interest in many investigative fields, not only those widely acknowledged as auditing. Along with mice in the vents and corpses in the lane, he illustrated audit phenomena, but extracting the audit content from the generality is tedious through his 212 pages. In the interest of efficiency, despite Schandl's disputes about differences, one can study ASOBAC and derive the spirit of the investigative process and the science of decision-making and obtain the incremental contribution to audit thought.

However, both Schandl and ASOBAC expanded the details of the empirical domain relevant in audits. They carved the place for assertions, norms (accepted criteria), and communication much more finely than did Mautz and Sharaf. They indeed added elements to the extant audit theory. Both works provided auditors/researchers more focus on the essential elements of audit decision-making that have now become embedded in AICPA and IIA auditing standards statements.

Neither Schandl nor ASOBAC had enough to say about "microtheory"—the level of concern with models and methods, tests and standards for particular audit decisions. (Notwithstanding Schandl's explanation of psychological schema and recognition of the role of clues (similar to "cues") in connection with the psychology of information [1978, pp. 38-55].) As a complete paradigm, Schandl appears to fall short on this dimension, and ASOBAC never pretended to contribute beyond the definitional/investigative process element.

Decision Theory View of Auditing and a Note on Game Theory

It may be an injustice to other authors to attribute a decision theory view of auditing to one, but with apologies to others, Felix [1974] presented such a view. Since it was in a brief paper, perhaps it should be called a "glimpse" instead of a "view"—certainly not a full-blown theory statement. A decision

theory view is more like a perspective on auditing and audit theory than a theory in its own right, but it has a significant contribution to offer.

In terms of a paradigm, decision theory has no global pretensions, at least not as presented by Felix. His presentation focused on applications in field work. Therefore, one will find no broad ability to specify the wide variety of problems of interest in auditing. Not much, if anything, is inferred about professionalism (e.g., independence, social responsibility) nor about communication in the context of information content for users.

The significant contributions of the decision theory “glimpse” are the expansion of the specifics of the empirical domain and the exposure of the family of models, methods, tests, and standards which can be applied in audit work and research. The domain is expanded with explicit recognition of alternative actions, their monetary or utility payoffs, and the probabilities (uncertainties) associated with them. Decision theory brings the economics of auditing into focus, although it usually leaves hard-to-quantify considerations (e.g., professionalism) as an afterthought. Conceptually, however, the entire scope of audit problems could be treated in a decision theory framework.

Game theory applications in auditing make contributions similar to, though potentially richer, than decision theory. The potential is realized in the recognition of the persona of the game players compared to the decision-theoretic game against passive nature [Fellingham and Newman, 1985]. While game-behavioral influences of auditors upon auditees, and vice versa, are not new, the formality of the game theoretic algorithm lends an elegance to thought and research. Like decision theory, however, the game theory/strategic view of auditing makes its major contribution in the areas of the empirical domain with explicit recognition of alternative actions, interactions, payoffs, and probabilities, and in the utilization of a particular algorithm. The game theoretic algorithm, like single-person decision theory, brings the economics of auditing into focus at the apparent sacrifice of professionalism considerations. However, one must rely upon other expressions of audit theory to identify the audit phenomena to which game theory might be applied. Decision theory and game theory do not identify these phenomena. They *accept* them as subjects for attention.

Social Mechanism Theory of Auditing

Scott's [1984] paper on the state-of-the-art of academic research in auditing did not actually present an audit theory. Nevertheless, he alluded to “an explosion in the theory of auditing,” “major theoretical approaches to auditing,” the “wide range of relevant theories,” and the view of the audit as a “social mechanism to enhance the process of contracting, thereby improving the operation of securities and managerial labor markets.” Actually, the “social mechanism theory” amounts to acceptance of the basic reason audits are demanded. In Scott's words:

Society's interests will be served if audits are efficient, in the sense of being available at least cost, and effective, in the sense of supplying relevant, credible information. Concern over efficiency looms large in the auditing literature. Formal concern over effectiveness is more recent, primarily because of the complexity of the topic [Scott, 1984, p. 153].

Scott was not the first to mention audits in the same breath as economics, efficiency, and effectiveness. (He was just more elegant with the “social mechanism” words.) Elsewhere, the demand for audits has been said to flow from the maxim of economic efficacy: “Audited information is more useful than unaudited information” [Robertson, 1984]. Wallace also described auditing as an economic service and offered several explanations for the demand for auditing (agency theory—the stewardship (monitoring) hypothesis, the information hypothesis, and the insurance hypothesis), as well as observations about costs and benefits and the incentives for supplying audits [Wallace, 1980].

Scott’s mention of a “social mechanism theory,” however, was not an expression of an audit theory. He was setting the stage for a review of research. The studies he proceeded to review dealt with other theories and other models applied in an audit context—statistical sampling theory, Bayesian decision theory, single-person decision theory, Brunswick lens model, and others. The point is that Scott, like others, related *audit theory* to the “microtheory” applications of various models and methods and their attendant empirical domains. He appears to have accepted a version of “macrotheory”—audit theory—that had already identified the important audit phenomena.

Notwithstanding the narrow focus of most of the studies he reviewed, Scott raised a “macrotheory” question at the end: “The basic theoretical question . . . is the extent to which firms’ information production decisions should be regulated.” As a normative matter, this issue may or may not be within the orbit of an appropriate audit theory paradigm. After all, not everything can be comprehended within “auditing.” As a social endeavor, auditing is affected, if not controlled, by other forces represented by political science, sociology, macroeconomics, and others. At some point, the outer boundary of the audit paradigm, and, hence, of audit theory must be drawn. Given this normative boundary issue, theorists ought to determine whether the normative question of information regulation is a matter for comprehension within an audit theory paradigm or a matter of public policy outside the orbit of auditing.

“Macrotheory” vs. “Microtheory”

People can debate the usefulness of audit theory for practice, echoing an earlier refrain: “Auditing is a series of practices and procedures, methods and techniques, a way of doing, with little need for the explanations, descriptions, reconciliations, and arguments so frequently lumped together as ‘theory’” [Mautz and Sharaf, 1961, p. 1]. The debate and the productive activity of practice and research has proceeded and no doubt will continue to proceed on two levels.

One is a global or all-encompassing “macrotheory” level that is very useful for identifying the important/interesting issues for audit practice. This level enables practitioners to have more than an *ad hoc* basis for various social-economic and professional interactions (e.g., expansion of attestation standards to representations other than financial statements, provision of consulting and operational auditing services for external audit clients, performance of police/detection work by internal auditors, interaction of public policy considerations with program evaluation by governmental auditors). It has little or nothing to

say about practice/research models, methods, tests, and standards. Macrotheory (e.g. Mautz and Sharaf, 1961; Schandl, 1978; ASOBAC, 1972) provides important insights for an audit theory paradigm.

The other level is the more practical “microtheory” that usually is presented as models, methods, and explanations dealing with audit field work activity. This may be called the “applied” area, and it seems that much audit research and theory development is concentrated in it. Ashton [1981] explained the high interest in applied research (high potential for short-run payoffs, support for the status quo) as a direct function of the fact that the largest sources of research funds and resources are from practicing organizations—accounting firms and professional associations—whose goals are application-oriented. Hence, KPMG Peat Marwick [1987] reports that fifty-nine percent of its Research Opportunities in Auditing (ROA) projects had prospective implementation in five years or less. Perusal of research descriptions in the ROA reports shows an applied/practical bias in projects whose implementation may be considered beyond the five-year horizon. The theory associated with the applied/micro level tends to be expressed as the “theory of X *in* an audit context,” where X can be statistics, behavioralism, strategic games, and the like.

This concern with “microtheory” and explanations of field work decision processes permeates audit research—in search of “theories” that explain or improve on-the-job techniques and behaviors. The more recent laments about lack of theory almost always refer to a particular area of concern for applications *in* auditing, not for auditing as a broad discipline.

Further reflection sheds more light on the state of audit theory and the paradigm power of “macrotheory.” The global theories (e.g., Mautz and Sharaf taken as a whole) are theories *of* auditing that set broad parameters for the field. They can help in many ways to channel the direction of auditing scholarship. Nevertheless, they are not complete paradigms because they do not attempt to specify empirical domains very precisely, nor do they have much, if anything, to say about research models, methods, tests and standards. Macrotheory sets the stage for auditing, and thus for audit research, but it does not specify how applied research can be guided and executed.

Microtheory, on the other hand, appears to be most concerned with a more operational, practical level. Practitioners and researchers want to discern underlying theory for applications *in* auditing. Hence, applied research and development work starts with theory development such as applications of statistics *in* auditing, behavioral theory *in* auditing, decision theory *in* auditing, game theory applied *in* auditing, and so forth.

All audit theories, both macrotheories and microtheories, suffer from the frailties of construction by induction and observation of practice. Mautz and Sharaf freely admitted their reliance on observations of practice. Other theoretical points of view, such as decision theory applied in auditing, may start with a normative model, but then people observe the anomalies and try to speculate about (a) altering the model to fit observations, or (b) indoctrinating the auditors to change their decision approaches to fit the model. The former action—altering the model—represents a beginning in normative science but a default to induction. No amount of induction can tell people what auditing *should be*. Such conclusions are normative matters that quickly interfere with the

larger worlds of public policy (politics), economics (practitioners' and companies' profit motives), and sociology (user perceptions and demands).

Audit theory, having its anchor in the practice of auditing, will probably always experience wide swings from times when global concerns are highly important to times when field applications recapture theoretical attention. The primary impediment to developing an audit theory paradigm, complete at all levels, is the fact that auditing arises only by human action. It has no independent existence in physical nature like gravity and friction. Hence, prescriptions (normative theory) about audit purposes and field activities will continue to be difficult, if not impossible to "prove," and certainly will be disputed by others' differing prescriptions.

The "macrotheory" and microtheory" spheres of interest can coexist, and both can be very useful for scholarship, empirical research, practice, and audit policy. It may be that the current state of audit theory is that the "macrotheories" provide much of the identification of relevant audit phenomena, while the "microtheories" provide most of the views of empirical domains and research tests and standards. Taken together, they constitute the present state of the audit theory paradigm.

Appendix

Theory Complaints

Currently, there is very little available in the professional literature that can be described as auditing theory [Mautz and Sharaf, 1961].

In their *Philosophy of Auditing*, Mautz and Sharaf attempt the development of a theory of auditing. Regrettably, this work has not produced the scholarly inquiry which the authors hoped would follow from it [Anderson, Giese, and Booker, 1970].

Events since 1969 have shown the need for a comprehensive theory of auditing, including the philosophical and psychological foundations. . . . In no other discipline can we find less literature in the last 150 years than in the field of auditing [Schandl, 1978].

Someone looking to the recorded auditing research should notice that a complete, logical and empirically defensible theory that explains the auditor's existence in an economy is not present. The necessary conditions for a solution to all auditing problems have not been established in a theoretical structure which is shown to be consistent with the data from the world around us [Hamilton, 1978].

Accountants and auditors . . . have for their work, as yet, no generally accepted conceptual framework or foundation by reference to which agreed objectives can be established and ordered, and progress towards them monitored [Kitchen, 1982].

Although interest in auditing research has increased substantially over the last ten years, no audit theory has been developed to support a coherent research effort. Mautz and Sharaf (1961) and Schandl (1978) developed theories of auditing, but their works provided little assistance in directing auditing research. Peat, Marwick, Mitchell & Co. (1976) in *Research Opportunities in Auditing* identified critical auditing areas for future research but gave no overall organizing theme [Bamber and Bylinski, 1982].

Auditing is not yet at the point where it can be conceptualized in terms of a unified theory [Scott, 1984].

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