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The Linguistic Relativity Hypothesis Applied to Big 5(4) Public Accounting Firms' Assessments of Client Internal Controls

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It has been increasingly reasoned that language and organizational culture mediate between independent observers and the organizations they are trying to understand. We apply the linguistic relativity hypothesis and interpretive cultural anthropology to probe two discursive styles – metonymy and synecdoche – that may be used by the Big 5 (and following the collapse of Arthur Andersen, Big 4) public accounting firms to describe the internal control systems of their clients. Based upon a test instrument distributed to audit teams and interviews, we find that the more "mechanistic" audit firm cultures employ metonymy, while "organic" audit firm cultures employ synecdoche. Implications are explored.

Key words: Linguistic relativity hypothesis, organizational culture, discursive styles, metonymy, synecdoche, social constitution of reality, internal control assessment, Sarbanes-Oxley Act

My administration pressed for greater corporate integrity. A united Congress has written it into law [as the Sarbanes-Oxley Act]. And today I sign the most far-reaching reform of American business practices since the time of Franklin Delano Roosevelt.
George W. Bush, 2002

Introduction

Contemporary society is awash in hyperbole that we are following the information highway across the information bridge into the information age and served by an array of knowledge experts (Chiapellow and Fairclough 2002:185; Fairclough 2003:4; Zuboff 1988). Knowledge has, in turn, become "a strategic resource of social power and control" leading to the perception that "knowledge work and knowledge workers are now key issues" (Blackler, Reed, and Whitaker 1993:851), and that "expertise is one of the primary arenas in which struggles to control the organization and management of work are fought out" (Reed 1996:574). Accordingly, the nature of knowledge, expertise, and professional endeavor, especially within the public accounting profession, have emerged as urgent research issues (Abbott 1988:235), as well as the discourse processes implicated in the social construction of professional endeavor (Fairclough 2003).

Orthodox analyses of organizations traditionally treat the focal organization as independent of the observer who is seeking to delineate, describe, and make it coherent. The traditional goal of the observer is to build a better correspondence between observations and the objective reality of the organization. This "correspondence theory" of truth has been increasingly challenged, however, based on the argument that the perspective of the observer is seen as influencing the understanding of the organization gleaned from analysis as much as does the organization itself (Lakoff and Johnson 2003:185-188; Manning 1979).

One product of this latter, or "perspectival view," is a research focus on one element common to all social activity—language—and more specifically, on the way in which language mediates between a focal organization and observers' perceptions of it (Burke 1962; Manning 1979; White 1978). White (1978), for example, stated that language may be seen as the "structure of consciousness" with which individuals seek to describe reality. This position may be seen as harmonious with the "linguistic relativity hypothesis" (Bernstein 1958; Dittmas 1976; Fishman 1960, 1968; Gumperz 1996; Lakoff 2002; Lucy 1992; Pinker 1995; Rosch 1977; Sapir 1929; Stroinska 2001; Thompson 1984;

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Ulijn and Verweij 2000; Whorf 1956). This hypothesis posits that the language used by people shapes their perceptions of reality, and consequently impacts their behavior. More specifically, Whorf (1956:212-214, emphasis added) reasoned that "we dissect nature along lines laid down by our native languages...We cut up nature, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way—an agreement that holds throughout our speech community and is codified in the patterns of our language... *All observers are not led by the same physical evidence to the same picture of the universe, unless their linguistic backgrounds are similar.*"

Sharing similar concerns, the focus of interpretive cultural anthropology is to address "the diversity of ways human beings construct their lives in the act of leading them" (Geertz 1983:16). Here, language use is seen as pervasively shaped by and shaping of a local culture. In turn, organizational theorists (e.g., Alvesson 2002; Martin 2002; Meek 1988) have reasoned that organizational culture is something produced and reproduced over time, influenced by and influencing of their members' use of standard operating procedures, formal organizational structure and technology in the social constitution of reality.

The purpose of our paper is to adopt a trans-disciplinary approach (Chiapello and Fairclough 2002; Fairclough 2003), which spans the linguistic, interpretive cultural anthropology, and auditing disciplines, to empirically examine the language used by Big 5(4) public accounting firm members to describe their clients' internal control systems as now required under section 404 of the Sarbanes-Oxley Act (SOX) of 2002. The remainder of our paper is organized into five sections. In the first section, the linguistic relativity hypothesis is discussed in more detail with reference to the two discursive styles we examine—metonymy and synecdoche—as is interpretive cultural anthropology; after discussing the "audit cultures" of the Big 5(4) firms, a central research question is derived. The second section describes our research methods. Section three provides a brief history of the auditor's assessment of client internal control systems ending with the Sarbanes-Oxley Act of 2002. Empirical analyses are presented in section four. Finally, we explore research implications.

Theoretical Scaffolding

It has increasingly been recognized that discourse analysis may be meaningfully extended by taking a trans-disciplinary approach, particularly when examining such radical changes in contemporary society as the rise of the knowledge society ministered by knowledge professionals. According to Fairclough (2003:16; Chiapello and Fairclough 2002:186), within this approach, "perspectives and categories from outside textual analysis or discourse analysis can be operationalized as ways of analyzing texts which can enhance insight into the textual aspect of social practice, processes, and relations which are the focus of the particular research project." Within our project, we will examine the "social practices, processes, and relations" of Big 5(4) public accounting firm members as they evaluate the internal control systems of their clients. By using the "perspectives and categories" drawn from the linguistic relativity literature, specifically the discursive styles of metonymy and synecdoche (White 1978), interpretive cultural anthropology (Geertz 1983), and the body of work on audit firm philosophies (Cushing and Loebbecke 1986) or cultures (Carpenter, Dirsmith, and Gupta 1994), we hope to gain insight into the linguistic facets of auditors' assessments of client internal controls as shaped by their own firm's culture.

Two Styles of Discourse

The contrast between those subscribing to the "correspondence theory of truth" and the "perspectival" schools of thought has been succinctly summarized by White:

> The dream of a value-neutral language for the human sciences was inspired by the success of the physical sciences in applying stipulated languages and mathematical protocols to their data. And this had an important effect on the development of attitudes within the human sciences with respect to the problem of language in general. It had the effect of concealing to the practitioners of the human sciences the extent to which the very constitution of their field of study was a poetic art, a genuine "making" or "invention" of a domain of inquiry, in which not only specific modes of representation are sanctioned and others excluded, but also the very contents of perception are determined. (1978:252)

Within our field study of the Big 5(4) public accounting firms, we applied the linguistic relativity hypothesis in order to understand the language used by the firms to describe their clients' internal controls. We focused on the styles of discourse used by the firm members. Styles of discourse, or tropes, are viewed as stylistic means by which language constitutes a social reality. From among the various tropes that have been identified, we examine two—metonymy and synecdoche (Burke 1969; Manning 1979; White 1978).

Metonymy (literally, name displacement) is the most commonly used discursive style employed in analyzing and describing organizations (Manning 1979). This approach views the whole of the organization as being revealed by its parts, e.g., hierarchical levels, standardized operating procedures, codes of ethics, functional specializations, etc., or in our case, internal control systems. These parts are preferably concrete, analytical, and quantitative in nature so that they can be observed in an "objective" manner, and are consequently seen as having primacy in faithfully representing an organization's reality. Thus, the organization is thought to be represented by its "harder," more tangible parts (Manning 1979). Metonymy has been characterized as "mechanistic" in that there is a focus on discrete parts. Thus, phenomena like organizations are seen as machines, where further inquiry yields more parts, as well as providing insights as to how one part relates to another. Debate then arises over which part truly distinguishes and best characterizes the whole, and thus arises as the champion part. There is an emphasis on isolating a causal chain among parts leveraged on champion parts. Metonymy is generally seen as a dominant discursive style in that it offers the greatest promise of developing an integrated set of laws that may be built piece by piece (Burke 1962; White 1978).

Synecdoche involves a movement in the opposite direction, toward integrating apparently individual phenomena into a whole system that is seen as being greater than the sum of its parts (Burke 1969; White 1978:73). The focus of this discursive style is on achieving knowledge through integration, while observing raw facts or parts of a system is relegated to a subordinate position. There is greater acceptance of more qualitative, intangible parts as long as they foster integration. In turn, using the synecdoche discursive style leads an observer to describe the organization as a living system. Thus, synecdoche may be seen as being more "organic" in character (White 1978).

White (1978:72) argued that not only do such discursive styles as metonymy and synecdoche influence what are seen as "facts," but also the meanings attributed to those facts through their application (see Manning 1979; Stroinska 2001). It is for these reasons that, although one discursive style cannot win an argument with a different style, it is possible to better understand the manner in which a context is socially constructed by contrasting one discursive style with another.

Typically, the perspectival view has been applied to probing *researchers'* understanding of organizations. But, many other observers of organizational action exist, among them the independent *auditors,* who are charged with evaluating the fairness of a client's financial statements, and soundness of its internal control system. Although not specifically embracing the perspectival view or the linguistic relativity hypothesis, there has been an emerging body of scholarly auditing literature that has challenged the orthodox, correspondence theory of truth viewpoint. For example, Power reasoned that "audit evidence is not just 'out there' [faithfully representing an objective client reality], but must be constructed to count as evidence within this system of audit knowledge.... Audit plays a decisive role in constituting the environment of cues itself" (1996:291). Power (1997:6-7) established a distinction between the programmatic and operational elements of auditing. At the programmatic level, broad goals and policies are formulated ostensibly to serve societal needs, but necessarily contain some vagueness so that they may reach into an array of areas. Audit operations, in contrast, are more concrete in nature, and involve such elements as checklists and standard operating procedures which may eventually become formalized in the form of professional codes and frameworks so that the audit process may be documented. But, because of inherent programmatic vagueness, practitioners may develop different operations to fulfill goals, thereby setting up play in practices that in our interpretation may be influenced by a firm's culture.

We focus on the manner in which the discursive styles of metonymy and synecdoche are differentially applied by Big 5(4) public accounting firms as shaped by their organizational cultures. Traditionally, the auditing literature has predominantly treated the auditor, who seeks to understand, delineate, describe, and make coherent the client with respect to financial statement assertions, as wholly independent from the client. It follows that the purpose of auditing standards, and indeed auditing research, has been to build a better correspondence between audit evidence and the "objective" reality of the client (AICPA 2007). But, beyond this traditional boundary, philosophically, the auditor and the client may be seen as inextricably bound together by language. Rather than seeing an audit engagement as a series of technical parts, it may be informative to view it as a social enterprise in which language mediates between an audit firm and its clients in the sense that "all observers [auditors] are not led by the same physical [audit] evidence to the same picture of the universe [assessment of a client's internal control system] unless their linguistic backgrounds [styles of discourse] are similar" (Whorf 1956:214).

Interpretive Cultural Anthropology

Interpretive cultural anthropology "conceives of human thought [or in our case, auditor judgments] as a collective product, culturally coded and historically constructed" (Geertz 1983:14). According to Geertz (1973:5), "man is an animal suspended in webs of significance he himself has spun. I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law, but an interpretive one in search of meaning."

Geertz (1983:153) reasoned that an array of such human cognitive attributes as cognition, motivation, and memory are more than merely psychological characteristics interior to the individual, but rather "are themselves, and directly, social affairs" determined by the individuals' external, local culture. In turn, "the interpretive study of culture represents an attempt to come to terms with the diversity of the ways human beings construct their lives in the act of leading them" (Geertz 1983:16). Such an interpretive study may be directed at developing an ideational understanding of organizations by examining such aspects of their interpretive structures as their symbols, myths, customs, and rituals, through which a wide array of actions and events become meaningful to their members (Alvesson 2002; Martin 2002; Meek 1988).

According to a social constitutionalist perspective, organizational culture is viewed as something that an organization *is* that gradually emerges and takes shape as a consequence of the social interactions among its members, eventually producing shared symbols, language and meanings. Because culture is produced by social interaction, it cannot be unilaterally created and manipulated by an organization's managers (Alvesson 2002; Meek 1988:462-465).

Within our study, we will focus on understanding how auditors form specific types of judgments as to clients' internal controls as a rhetorical process influenced by their firms' cultures. Our theoretical scaffolding consists of interpreting literature on these firms' audit philosophies as suggestive of their discrete cultures. We view these philosophies not as concrete, disembodied, and disconnected from human auditors, but as interpenetrated with how these human beings perceive and characterize their immediate social reality—the client engagement—using the unique discursive style of the firm.

Big 5(4) Audit Firm Philosophies/Culture

Within the auditing literature, a concern for audit philosophy, as expressed in audit policy manuals, has emerged over the last twenty years. For example, Cushing and Loebbecke (1986) dissected the in-house audit policy manuals of 12 large public accounting firms and found that the firms varied according to how "structured" their audit methodologies were. Based upon earlier theoretical formulations of the mechanistic vs. organic audit (Dirsmith and McAllister 1982), they categorized the firms as highly structured, partially structured, and unstructured. They described highly structured or mechanistic firms as placing a strong emphasis on pre-engagement planning, the explicit definition of staffing responsibilities for each audit, the reliance on specialists, the quantification of audit risk during each audit, and a shift of audit decision making discretion from the individual auditor toward the central firm. By contrast, unstructured or organic firms emphasized pre-engagement planning and the use of detailed internal control questionnaires, but the remainder of their audit processes was not described in any detailed, integrated, quantitative, "standardized" way. In a word, such firms were more judgmental and organic in character.

Kinney (1986:73) proposed a theory to explain how members of the Auditing Standards Board (which the profession then charged with developing auditing standards) voted, hypothesizing that "[T]he audit firms' votes are a function of their use of a structured audit technology." Prior to mergers among the then Big 8 firms, Kinney asked the Auditing Standards Board members to classify the firms they represented with regard to how structured or unstructured their audit approaches were. He used this evidence to develop the following classification scheme, which guides some aspects of our own empirical work: Structured—Deloitte, Haskins, and Sells (DHS&S); Peat, Marwick, Mitchell, and Co. (PMM); Touche Ross (TR); and two smaller firms; Intermediate—Arthur Andersen (AA); Arthur Young (AY); Ernst and Whinney (E&W); two non-Big 8 firms; and one small firm; and Unstructured—Coopers and Lybrand (C&L); Price Waterhouse (PW); and nine small firms. Kinney then tabulated the Board's ballots for a three-year period. He found that firms with relatively structured audit methodologies tended to favor proposals that included relatively technical standards, which added structured guidance to auditors.

Carpenter, Dirsmith, and Gupta (1994) saw audit policy manuals and Audit Standards Board voting behaviors as being shaped by audit firm culture. Describing structured firms as having a "mechanistic culture" and unstructured firms as having an "organic culture," they applied Kinney's classification scheme to examine auditor materiality judgments pertaining to financial statement disclosures, and found that they were dramatically influenced by their respective audit firm cultures. Similarly, Dirsmith and Williams (1988) and Dirsmith and Haskins (1991) also examined audit firm cultures and found that they significantly influenced the pattern of client earnings announcements and inherent risk assessments, respectively. Combined with the current study, this body of work suggests that audit firm culture significantly impacts all four phases of the audit—planning, internal control assessment, evidence gathering and evaluation, and audit reporting (for early formulations of mechanistic and organic concepts see Burns and Stalker 1961; Hickson 1966). We, in turn, will apply Kinney's classification scheme of audit firm cultures (for a related literature review see Bowrin 1998 who concluded that Kinney's classification scheme has proven robust across a number of audit firm activities for at least ten years) amended for mergers among the firms (noteworthy, there have been no mergers across cultural types within the United States).

Research Question

Integrating the literatures on discourse, organization culture and audit firm culture, it may be reasoned that the different discursive styles used by the firms would moderate between an audit firm and specific clients by influencing individual auditor perceptions of what's thought to be useful in evaluating client internal controls. Thus, a single, central research question may be expressed: Do auditors from mechanistic audit firm cultures employ a discursive style of metonymy, which would incorporate a wider variety of client "parts" and isolate as "champion" more concrete and quantitative parts, than auditors from organic audit firms cultures that employ a discursive style of synecdoche?

Research Methods

We gathered evidence pertaining to our central research question by means of a five-phase field study. In Phase I, interviews were conducted with practice-office audit partners of the now Big 5(4) public accounting firms concerning their firms' assessment of client's internal control systems. In Phase II, we obtained both publicly available and proprietary in-house literature relating to understanding client organizations as typically described in the firms' audit manuals, and identified those client dimensions concerned with assessing internal controls. Furthermore, we supplemented this data with information from several popular auditing textbooks, several relevant United States Securities and Exchange Commission (SEC) pronouncements, and several American Institute of Certified Public Accountants (AICPA) auditing standards pertaining to assessing internal control; this material is integrated into the section briefly describing the history of internal control. Based upon the analysis of this archival material, we isolated 55 preliminary internal control dimensions.

In Phase III, during interviews lasting between one and two hours, we discussed these 55 items with national office partners representing the firms, who carried such titles as Director of Auditing or Director of Audit Research. These interviews helped us refine our list of 55 items to 48 final client dimensions for the empirical testing.

In Phase IV, we developed, pre-tested, and distributed the research instrument. The instrument was pilot tested with 15 subjects participating in no other phase of the study. The instrument was assessed for its ecological validity, clarity of instructions, and comprehensiveness of pertinent client items, and appropriate modifications were made (the original test instrument used in our work was originally developed and reported by Haskins 1987).

The final instrument described each of the 48 client dimensions and asked participants to rate each dimension's relevance, for the specific client they were then auditing, in a specific client's control environment. We randomly ordered the 48 items when they were presented to each subject and we used a five-point, Likert-type scale to solicit responses.

A coordinating partner within each participating audit firm office distributed the research instruments to the audit team members, with appropriate real-world client designations noted, but kept unknown to us because of the concern for client confidentiality. Collectively, the firms comprising the Big 5(4) firms that participated in our study (the now defunct Arthur Andersen, Deloitte and Touche, Ernst and Young, KPMG, and PriceWaterhouseCoopers) audit over 98 percent of companies listed on the New York Stock Exchange as well as most major universities in the United States (Who Audits America 2003); we did not include the smaller firms appearing in Kinney's (1986) classification scheme because of the dominancy of these 5(4) firms, although our work can be extended to smaller firms in future research. Overall, 228 test instruments were distributed to potential test subjects with 146 usable instruments being returned, yielding a 64 percent response rate and an average time to complete of 2.1 hours; an analysis of offices having virtually a 100 percent return rate with offices having a lower response rate revealed no systematic differences in responses to the questionnaires thereby suggesting that a response bias did not exist. The subject pool represented all four traditional ranks comprising an audit team and consisted of 45 partners, 22 managers, 43 seniors, and 36 staff assistants.

As is obvious from inclusion of Arthur Andersen participants, whose firm fell with the collapse of Enron and WorldCom, we distributed our questionnaire before passage of SOX. However, the 48 client internal control dimensions we examined are very harmonious with the Treadway Commission (1987) and Commission on Sponsoring Organizations (COSO) frameworks predominantly used as the "specified" framework for documenting SOX compliance (Arens, Elder, and Beasley 2007; Sarbanes-Oxley 2002). We will consider efforts by the firms to re-engineer their audits processes, as well as their cultures and business models, in response to SOX in our concluding remarks.

Finally, in Phase V, subsequent to both the collection of our quantitative evidence in Phase IV and the passage of SOX, we conducted on-going interviews with practice partners and managers, and administrative partners to gain impressions of initial firm efforts to re-engineer their audit processes and indeed audit cultures following their efforts to re-engineer their business models. These observations are integrated within implications section.

A Brief History of Internal Control Evaluation

The purpose of client internal control systems is to prevent material misstatements in their financial statements released to the public, and to ensure their detection when they do occur (AICPA 2007). The auditing literature has long recognized the importance of client internal controls in conducting audits. In 1912, for example, Montgomery observed that auditors must possess a thorough understanding of client control systems. The 1936 pamphlet, *Examination of Financial Statements by Independent Public Accountants*, viewed the audit as being influenced by a client's system of internal controls. This pamphlet gained force from the major McKesson and Robbins fraud of 1938 after which the SEC started mandating the auditor's review of clients' internal control systems (Bealing, Dirsmith, and Fogarty 1996). Such views were reinforced by the American Institute of CPAs' *The Auditor's Study and Evaluation of Internal Control* (AICPA 1972), as well as a variety of other professional auditing pronouncements, which have been incorporated within current standards (AICPA 2007).

The 1985 National Commission on Fraudulent Financial Reporting was especially prominent among the profession's efforts to delineate internal control. This Commission was formed after a spate of major lawsuits against the then Big 8 public accounting firms and Congressional scrutiny of the profession (*Wall Street Journal*, WSJ 1985 a,b; Palmrose 2000), similar to events surrounding passage of Sarbanes-Oxley. The Commission developed an integrated internal control framework containing five internal control components: 1) control environment, 2) control activities, 3) control risk assessment, 4) control system monitoring, and 5) information and communication. Control environment—the focus of our empirical work—was identified as the key "umbrella" concept and was organized into further subcomponents: integrity and ethical values; commitment to competence; board of directors and audit committee participation; management philosophy and operating style; organizational structure; assignment of authority and responsibility; human resource policies and practices (Arens, Elder, and Beasley 2007; COSO 1992). This framework quickly became authoritative and was subsequently adopted by the Commission of Sponsoring Organizations (COSO 1992)—comprised of representatives from five financial reporting institutions in the United States (the American Accounting Association, the AICPA, The Financial Executives Institute, the Institute of Internal Auditors, and the Institute of Management Accountants)—as representing a viable approach to developing, testing, documenting, and reporting on internal controls. This framework also served as the backbone of public accounting firms' approaches to evaluating internal controls.

Throughout all of the profession's efforts to delineate internal control, the purpose of the auditor's evaluation has remained the same—to assist the auditor in better planning the audit, e.g., where controls are weak, more testing of a client's financial balances is called for. Thus, internal control assessment was intended to serve primarily the auditor, for no auditor report on internal control was normally to be issued to the investing public.

Due largely to the Big 5(4)'s growth of consulting practices that threatened their independence from the corporations they audited, as well as the profession's re-engineered audits to take a more risk-based approach to include assessment of control risk (Covaleski, Dirsmith, and Rittenberg 2003), the accounting profession came under increasing criticism during the late 1990s, particularly by the SEC (PAR 1999:2).

Despite these criticisms of the risk-based approach, an AICPA Panel released a report in June, 2000 that "found that the audit profession and the quality of its work were fundamentally sound" (Journal of Accountancy 2000:21). It also supported the Big 5(4)'s adoption of a risk-focused audit: "The Report's boldest recommendation is to require firms take an even more aggressive, risk-based look at audits" (PAR 2000a:4). The result of the transformation of auditing into a risk-based approach was to render it both more efficient and more of a commodity (Mason 2000). Recent evidence, however, has supported the SEC's contentions, indicating that the risk-based auditing methods "make it almost impossible for auditors to catch a client's highest level executives cooking the books" (Wall Street Journal (WSJ) 2002a: C1).

Subsequently, the SEC proposed extensive new regulations on June 27, 2000 that would engender a restructuring of the accounting profession (Mason 2000). Among the various provisions, the regulation would prohibit firms from simultaneously performing audit services and 10 different categories of non-audit services, including such consulting services as internal control system design and implementation.

Following four days of hearings and continuing pressure from the profession and United States Congressional members for the SEC to substantiate the need for stricter regulations (PAR 2000a, b; WSJ 2002a), the SEC unanimously passed a substantially weakened set of rules, for the most part reaffirming previous SEC and AICPA standards that did not prohibit internal control system consulting services.

Despite the apparent victory by the Big 5(4) in preserving their ability to perform multiple services for their clients in the late summer of 2001, things quickly unraveled with the collapse of Enron (the third largest bankruptcy in United States history) involving an estimated $75 billion loss in market value due in part to $3.8 billion in financial misstatements (Weiss 2002), and questions as to the efficacy of its audit and eventual demise of its external auditors—Arthur Andersen (the largest failed professional services firm in United States history; see Palmrose 2000 for discussion of lawsuits, some for hundreds of millions of dollars, against all of the Big 5(4) firms). The Enron debacle was quickly followed by such celebrated failures as Andersen's client WorldCom (the largest bankruptcy in United States history; WSJ 2002b, c; Klein 2002a), with more major corporations restating financial statements than ever before (WSJ 2002c), and 18 of the top 20 litigation settlements in 2001 entailing accounting misstatements (Russell 2002). Such systematic problems have, in turn, created an "accounting crisis" associated with trillions of dollars of stock market decline that has been described as the largest drop since the 1929 crash (Nocera, et al. 2002, MacDonald and Kruger, 2002 a,b).

The United States Congress subsequently passed legislation designed to regulate the accounting profession by a "landslide vote in both houses" (PAR 2002b:4), and was promptly and enthusiastically signed into law by President Bush (WSJ 2002e:A4). Key provisions of the Public Company Accounting Reform and Investor Act of 2002 (Sarbanes-Oxley 2002), colloquially known as SOX, include prohibition of 14 specific non-audit services including internal control systems design and implementation.

Important for purpose of our analysis is Section 404 of SOX. This section requires client management to: state its, not the auditors', primary responsibility for maintaining adequate internal control over financial reporting; assess the effectiveness of internal controls in preventing financial statement misstatements; and identify the framework used for making this assessment, which for most publicly traded companies is the Treadway/COSO framework (that has been identified in AICPA auditing standards and SEC literature as appropriate and is the focus of our study). The external auditor for the first time is required to evaluate their client management's public disclosure and issue an attestation report to the public on management's internal control assessment (see PCAOB 2003). The widespread attention accorded SOX is suggested by a GOOGLE search conducted on October 31, 2006 that revealed 5,840,000 "hits" to this legislation.

It is against this technical/social/political backdrop that we apply the linguistic relativity hypothesis. The "chain of events" (Fairclough 2003) described suggests a basic irony inhering in the internal control concept. On the one hand, the accounting profession has proceeded to articulate it as a merely technical construct which in a sense has relied on metonymy as a favored discursive style. Here, it has identified effective internal control as a champion part of an organization's efforts to govern the resources entrusted to management by shareholders. This champion part is, in turn, organized into a series of subparts—control environment, control activities, risk assessment, monitoring, and information and communication—each of which is again organized into a series of sub-subparts, and then a local champion part—control environment—has been isolated. Moreover, professional standards (AICPA 2007; Arens, Elder, and Beasley 2007) indicate that it is only necessary for auditors to evaluate "key controls" every year, and that lesser controls need only be evaluated on a rotating basis if at all. In essence, the profession has derived various categories of understanding that "dissect nature along lines laid down by our native [professional] languages.... We cut up nature, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way—an agreement that holds throughout our [professional] speech community and is codified [within the Sarbanes-Oxley Act] in the patterns of our language" (Whorf 1956:212).

On the other hand, the societal/political events presaging them at the various inflection points (e.g., the McKesson and Robbins fraud in 1938 and the collapse of Enron, WorldCom, and Arthur Andersen in the early third millennium) suggest the social/political, as opposed to technical facets of internal control. The press of events, and the lethal litigious environment faced by the Big 5(4) (Palmrose 2000), suggest a context supportive of a "correspondence theory of truth," in which a universal framework has been identified (i.e., COSO) that builds a close correspondence between auditor observations and the ostensibly objective, economic reality of client organizations. And yet, given the sociopolitical dynamics at play, we believe that Big 5(4) audit firm cultures may potentially influence the discursive styles used by audit team members in coming to terms with what is the client's "reality," whether is it objective or is subjective and socially constructed in character. Thus, the public accounting firm context offers a unique opportunity for examining the effect of language in socially shaping professional endeavor.

Data Analysis and Results

We addressed our central research question with a two-step process. First, we factor analyzed the control environment observations we obtained from participants to organize the 48 items into closely related components. We used factor analysis because, consistent with our focus on language, we wanted to minimize our own categorical thinking and to maximize the thinking the participants used in putting the components together as they assessed client internal control systems. A principal component, exploratory factor analysis with varimax rotation was used (this contrasts with Haskins' 1987 analysis that introduced the original test instrument and which used oblique rotation: although our work uses Haskins' instrument and reports his means, varimax rotation was used and is more parsimonious and consistent with later work on audit firm culture, e.g., Dirsmith and Haskins 1991). Only factors having Eigen values greater than or equal to 1.5 were selected for analysis. The cumulative variance explained by the nine factors was 65.9 percent. Within factors, all risk attributes with loadings greater than or equal to .3 were considered significant (Kerlinger 1973; Kim and Mueller 1978). We present the factor analysis results in Table 1, Panel A. Here, we list the nine factors isolated, and, within each factor, control environment attributes are listed in order of the overall importance attributed to them by participants. Next, we assigned generic descriptive titles to each factor based on extant auditing standards and the firm audit manuals in order to facilitate discussion.

Second, given the ordinal nature of our measures, we conducted non-parametric, chi square analyses on the control environment perceptions attributable to each factor presented in Table 1, with the audit firm cultures—mechanistic firms (KPMG and Deloitte & Touche), intermediate firms (Arthur Andersen and Ernst & Young) and organic firms (PriceWaterhouseCoopers). Preliminary analyses preserving the three way split, mechanistic firms combined with intermediate firms vs. organic firms, and mechanistic firms vs. intermediate combined with organic firms, revealed that the key split occurred between a combination of organic plus intermediate firms versus mechanistic firms consistent with prior research on audit firm culture (e.g., Carpenter, Dirsmith, and Gupta 1994; Dirsmith and Williams 1988); these results appear in Table 2. In addition, to provide further descriptive detail, we present chi square results for individual control environment attributes found to be significantly related to audit firm culture in Panel B of Table 1.

The results presented in Table 2 strongly support our research question regarding the audit firms' mechanistic versus organic culture with respect to the discursive styles they use, although not to a significant extent across all control environment factors. That is, an audit firm's culture appears to be associated with firm members' use of audit language expressed in terms of metonymy and synecdoche in assessing a client's control environment. This association, in turn, suggests that the language used by an audit firm does indeed mediate between an individual auditor and a specific client. More specifically, Table 2 suggests that three of the nine factor groupings are significantly different across the firm cultures, in particular factors #5 (Budgeting Process, $p<.026$), #7 (Internal Auditing, $p<.053$), and #8 (Separation of Transaction Authorization, Record Keeping, and Asset Custody functions, $p<.015$). For each of these three factors, and based upon a comparison of the appropriate mean measures, auditors from mechanistic firms view these factors as being more important than those from organic and intermediate firms. Noteworthy, all six of the other factor groupings were also rated as more important by auditors from mechanistic than those from organic firms, though not statistically significantly so. It, therefore, appears that auditors from mechanistic firms are incorporating more component "parts" of clients in assessing their control environments, and that factors #5, #7, and #8 are seen as the "champion parts" relative to auditors from organic/intermediate firms (this finding is amplified for factors #7 and #8, whose sub-parts were among the single items rated as "most important" by participants). This pattern suggests a discursive style of metonymy. It is noteworthy that all three of these factors also tend to be more quantitative and concrete in character (e.g., budgeting is obviously more quantitative in character, while separation of functions has long been articulated as the cornerstone of effective internal control; AICPA 2007), thus further suggesting a discursive style of metonymy. These results are also corroborated by individual attribute results presented in Table 1, Panel B, with mechanistic firm auditors favoring more mechanistic, structured parts (attributes 2 and 33) and organic firm auditors favoring more organic, humanistic parts (attributes 7—which was very

Table 1. Internal Control Environment Factors

Control Environment Attributes (numbered listing indicative of overall, descending, rank order of importance) [factor loading]	Panel A Importance Rating Mean	Std. Dev.	Modal	Panel B Chi Square
FACTOR 1: Top Management Characteristics				
6. Existence of factors that might motivate managers to circumvent or override existing controls (e.g., tight credit, low working capital, bonus plans, need to meet forecasts, decaying industry, etc.) [.622]	2.16	1.04	2	
7. Compulsion on the part of the client's top executive management for reporting the most favorable financial picture [.582]	2.17	1.09	2	10.41* M<I,O
9. Extent of knowledge on the part of the client's controller concerning FASB and SEC (where appropriate) guidelines [.677]	2.26	.98	2	
12. Reputation of client's top, executive management for taking unusual business risks [.792]	2.53	1.07	2	
14. Extent of turnover in the client's top, executive management positions and the reasons for it [.679]	2.61	.99	2	
25. Appropriateness of the client's action in response to the Foreign Corrupt Practices Act of 1977 [.513]	3.10	1.14	3	
26. Extent to which native personnel managing the client's foreign operations are allowed to exercise their discretion in financial reporting decisions [.585]	3.12	1.24	3	
27. Appropriateness of the client's chart of accounts [.513]	3.14	.98	3	
34. Incompatibility (if any) of centralized client management over decentralized operations [.405]	3.37	1.16	3	
45. Extent of a client's monitoring of its competition [.583]	3.83	1.02	4	
FACTOR 2: Personnel Policies and Procedures				
23. Extent to which the client's top, executive management is dominated by one or a few individuals [.477]	2.92	1.01	3	
35. Extent to which client investigates backgrounds and references of new employees whose work relates to financial reporting process [.702]	3.38	1.02	3	
40. Appropriateness of client training programs for new or promoted employees whose work relates to financial reporting process [.635]	3.58	.99	3	
42. Adequacy of client planning for staff needs in regard to employees whose work relates to financial reporting process [.517]	3.67	.97	3	
43. Existence of client programs for ongoing evaluation of employees whose work relates to financial reporting process [.801]	3.71	1.03	3	
47. Appropriateness of the information bases used in determining raises and promotions for client employees (management and staff) whose work relates to financial reporting process [.558]	4.15	.96	5	

48. Appropriateness of the information bases used in determining raises and promotions for client employees (management and staff) whose work is not directly related to financial reporting process [.474]	4.26	.90	5	
FACTOR 3: Financial Reporting System				
15. Effectiveness of coordination among related functions for financial reporting purposes (e.g., sales, accounting, and production) [.759]	2.62	1.13	2	
17. Appropriateness of separate accounting systems for each of the client's diversified business endeavors (e.g., a client might have a mining division and a banking division) [.616]	2.68	1.29	2	
28. Accessibility of supervisors to employees, both of whose work is related to the financial reporting process [.426]	3.16	.95	3	8.66+ M<I,O
31. Congruency of responsibility with authority for the client's employees whose work is related to the financial reporting process [.618]	3.27	1.02	3	
32. Manageability of the workloads of client personnel whose work is related to the financial reporting process [.476]	3.29	.93	3	
44. Compatibility of the client's formal organizational structure with its organizational goals [.527]	3.80	1.02	5	
FACTOR 4: Board of Directors and Code of Ethics				
19. Manner in which recommendations of internal and external auditors have been dealt with in the past [.704]	2.77	1.01	3	
20. Conscientiousness of the audit committee in the execution of its duties and responsibilities [.489]	2.77	1.19	2	
36. Qualifications of the members of the board of directors [.714]	3.38	1.14	3	
37. Qualifications of the members of the audit committee [.472]	3.42	1.14	3	
39. Effectiveness of client's communication of formal codes of conduct [.472]	3.46	1.06	3	7.98+ M<I,O
46. Compatibility of the client's informal organizational structure with its organizational goals [.594]	3.90	.92	3	
FACTOR 5: Budgeting Process				
21. Adequacy of a client's analysis of budget variances [.786]	2.78	1.06	3	
24. Adequacy of the client's budgetary process in covering all units or functions [.822]	3.00	1.10	3	
33. Adequacy of the process by which operating budgets are revised [.746]	3.35	1.12	3	7.92+ M>I,O
FACTOR 6: Financial Reports				
10. Promptness with which errors in internal financial reports are detected and corrected [.600]	2.35	1.03	2	
11. Potential for errors in internal financial reports [.791]	2.50	1.08	2	7.93+ M<I,O
13. Effectiveness of internal financial reports in adequately highlighting, identifying, or isolating problems [.734]	2.55	1.01	2	
16. Inferences that can be drawn concerning relationship between prior audit adjustments and competence of the relevant personnel [.675]	2.68	.94	3	
41. Relevance of an internal financial report to person receiving it [.452]	3.66	1.07	3	

FACTOR 7: Internal Auditing				
5. Appropriateness of the internal audit staff's assigned duties, responsibilities, and lines of reporting [.690]	2.15	.98	2	
8. Effectiveness of internal audit in reporting detected deficiencies [.687]	2.20	1.02	2	
18. Effectiveness of the client's policies and procedures manuals in regard to the financial reporting process [.657]	2.69	.87	3	
FACTOR 8: Separation of Transaction Authorization, Record Keeping and Asset Custody Functions				
1. Existence of an appropriate policy for authorization of transactions [.764]	1.68	.69	1	
2. Proper segregation of duties among client employees whose work is related to the financial reporting process [.401]	1.70	.76	1	15.18** M>I,O
3. Effectiveness of general EDP controls [.612]	1.78	.81	1	
4. Effectiveness of physical safeguards over records and assets [.797]	2.03	.94	2	
29. Appropriateness of client policies and practices of required vacations and rotation of duties for employees whose work is related to the financial reporting process [.543]	3.17	1.01	3	
38. Extent of client bonding of employees handling cash, securities. [.535]	3.42	1.15	4	
FACTOR 9: Timeliness and Review of Internal Reports				
22. Timeliness with which financial managers receive the information that they need [.463]	2.91	.92	3	
30. Extent to which the client's line personnel (i.e., operations) review internal financial reports [.627]	3.20	1.12	3	

M = Mechanistic Firms; I = Intermediate Firms; O = Organic Firms; **$p \leq .01$ *$p \leq .05$ +$p \leq .10$

important in the case of Enron—11, 28, and 39—which again was important in the case of Enron).

Implications

Rather than treat auditing as a series of technical procedures, with official standards and audit firm manuals supporting these procedures, by adopting a trans-disciplinary orientation (Fairclough 2003), the current analysis suggests that one can usefully study auditing in terms of the various discursive styles used within the different audit firm cultures (Whorf 1956). Chiapello and Fairclough (2002:207; see Fairclough 2003:9) concluded that discourse analysis may be used to "subject to debate what presents itself as given and obvious, and to expose to critique all the social agencies which impose themselves on people, in order to enhance democratic debate." Geertz similarly observed that:

> Culture, here, is not cults and customs, but the structures of meaning through which men give shape to their experience; and politics is not coups and constitutions, but one of the principal arenas in which such structures publicly unfold. The two being thus reframed, determining the connection between them becomes a practicable enterprise, though hardly a modest one. (1983:312)

Far from being a philosophical concern disconnected from practice, Big 5(4) firms have continued to conduct audits. But, as mandated by SOX, what is the cure for bad auditing? More auditing. Fueled in part by the provisions of its section 404 relating to the review of client internal control systems, revenues of the public accounting firms were up 37 percent in 2004 (Cheney 2004). Administrative partners reported in our discussions that their firms have consequently been experiencing a "double spike busy season"—the one at year end during their traditional financial statement testing, and another for their mid-year internal control evaluations. They also reported that their firms expect to grow 15 percent per year over the next few years. Thus, the provisions of SOX are not simply "neutral" and "technical" means of making corporations transparent, but also an economic engine serving the interests of the public accounting profession (see White 1978:252).

The Sarbanes-Oxley Act of 2002, especially section 404 concerning internal control systems, ostensibly regulates

Table 2. Audit Firm Culture Comparisons

Intermediate + Organic Firms vs. Structured Firms

Factor	Chi-square	Prob.
1	7.09	.131
2	3.86	.426
3	6.39	.172
4	6.15	.188
5	11.07	.026
6	4.07	.397
7	9.34	.053
8	12.32	.015
9	4.62	.329

auditors and their clients to make their inner workings more "transparent," or more "parts" visible to external constituents, and to convey a sense of comfort to the public that they are being objectively run and evaluated in a quasi-scientific manner by a neutral party—the auditor. It thus relies on a discursive style of metonymy by stressing the tangible, the concrete, the documentable aspects of public companies. It proceeds by implying a "correspondence theory of truth," wherein audit evidence is marshaled to faithfully represent the purportedly objective, economic reality of these companies. This imagery contrasts with our empirical findings, presented in Table 1, Panel A, and Table 2, that auditors' evaluation of internal control remains a rhetorically constructed and influenced social process.

More specifically, the results depicted in Table 1, Panel A, and Table 2 provide support for the linguistic relativity hypothesis (Bernstein 1958; Dittmas 1976; Fishman 1960, 1968; Lucy 1992; Rosch 1977; Stroinska 2001; Ulijn and Verweij 2000). Once more, this hypothesis posits that there exists a reciprocal interdependence among language, perceptions, and behavior, wherein each is socially produced and reproduced in interaction with the others. We observed significant relationships between audit firm culture (Carpenter, Dirsmith, and Gupta 1994; Geertz 1973, 1983), expressed in terms of the discursive style of metonymy for mechanistic audit firms and synecdoche for organic and intermediate firms (Manning 1979; White 1978), and three of nine client control environment factors. To the extent that the firms themselves vary in terms of the discursive styles employed within their proprietary audit manuals (Cushing and Loebbecke 1986), they appear to systematically influence auditor perceptions in assessments of their clients' internal controls.

Consistent with Manning's (1979) and White's (1978) shared position that metonymy tends to be the predominant form of discourse in Western society, our review of regulatory, AICPA, and audit firm textual material, and a study of auditor perceptions, revealed that the dominant style of audit discourse appears to be metonymy. Herein, audit discourse reduces a client organization into a series of parts, and mediates between the individual auditor and the client. It conveys a sense of certainty, of objectivity, and of orderliness. This style is, in turn, characterized by a tendency for further study to yield more parts, and then, even more parts of parts, and a focus on isolating champion parts thought to be most revealing of the client organization—the so-called "key controls" that should be evaluated by the auditor every year (AICPA 2007). These parts tend to be more concrete and quantitative in character (Table 1, Panel B, and Table 2). Implications arising from such a perspective generally include questions about whether or not the right "parts" are included in the discourse, whether one part may be overly subordinated to another, or whether developing an even finer-grained knowledge of component parts, or even of different parts, may be desirable. Far from being of abstract, academic concern, in the case of Enron, for example, the "part" driving the debacle appears to have involved top management and board of directors characteristics and processes (Table 1, factors #1 and #4), factors not emphasized within the discursive style of metonymy. In addition, it appears driven by our concepts 7 ("compulsion on the part of client's top executive management for reporting the most favorable financial picture") and 39 ("effectiveness of client's communication of formal codes of conduct") that our results suggest were emphasized by organic firms using a discursive style of synecdoche rather than metonymy.

By contrast, and consistent with White (1978) and Manning (1979), synecdoche exhibits a more systemic, organic character. More specifically, synecdoche points to a possible overemphasis on parts within the auditing literature. That is, by focusing on parts, and parts of parts, by drawing linkages among parts, and by isolating champion parts, the extant public and proprietary auditing literature perhaps overlooks the organic whole. What may be lacking in the continuing articulation of auditing in the form of such regulations as SOX and standards, is such a holistic perspective.

In a certain sense, given the dramatic changes that have confronted the public accounting profession since the demise of Enron, WorldCom, and Arthur Andersen, and the passage of SOX, it may be that our empirical observations, which were collected before these events occurred, have become dated. Somewhat before and accelerating since 2002, the Big 4, now sometimes described as the "Final 4," have been engaged in re-engineering their business models, audit processes, and even audit firm cultures. Concerning the first re-engineering effort, as described in the section describing the history of internal control, four of the Big 5 had divested themselves of their consulting practices due in part to pressures that they might potentially impair the independence of their audits, and in part make money. In turn, SOX placed further prohibitions on what other services, such as the design and implementation of internal control systems, are prohibited by a public corporation's auditors. As a result, the remaining audit firms, as described by interviewees and extensive press coverage, had to redesign their business models to remain viable in the new environment. Part of this entailed refining their evidence gathering processes in order to make them more efficient and profitable (discussed below), and part of it involved extending other non-prohibited, and even complementary, services such as "forensic auditing," one primary purpose of which is to detect fraud (WSJ 2006a, b; Global Public Policy Symposium 2006). It may well be that such business model re-engineering efforts would impact the cultures of the firms, although extant research has demonstrated that the firms have had limited success in centrally orchestrating a change in business models and performance appraisal practices.

As noted, during the first wave of conforming to SOX section 404 provisions, the firms' revenues increased by 37 percent in one year. Interviewees suggested, however, that this increased work had proven to be a double-edged sword. On the other side of earning more money, the costs involved the extremely heavy workload that came with the increased work, the extra training effort that was required, and a lowering of morale because of the workload and relative ambiguity of what was to be considered sufficient, competent audit evidence concerning internal controls, as well as how it was to be documented. As a result, interviewees reported that each of the four firms were continuing to retool their internal control assessment processes, largely by standardizing these procedures, and have met with success. By implication, consistent with Cushing and Loebbecke's (1986:41) observations that regulation and the fear of litigation would favor inducing more audit structure, it may well be that the firms' audit process re-engineering efforts would push their audits toward more structure, with a favored discourse of metonymy, and may result in intermediate and organic firms becoming more mechanistic in their cultures. However, there do exist countervailing forces (Klein 2002a:38; Mason 2002;WSJ 2006a). Here, a former Arthur Andersen partner, who had migrated to a remaining Big 4 firm, advocated a return to a more traditional audit approach, relying on labor-intensive audit tools as opposed to risk-based approaches. An administrative partner, as well as a senior manager, however, countered that there was a growing need for auditors to become "proactive" and "pre-emptive" in their audit approach. Because such "hard assets" as buildings and equipment were becoming increasingly immaterial relative to such "intangibles" as patents and copyrights that figured more prominently in being "value-drivers" for clients, they reported that if you "waited for the outputs of decisions"—the transactions and their documentation—"it would be too late," that "last year's working papers are a poor indication of what should be done this year." Instead, they reported that auditors had to focus on providing "inputs" to transactions by having "a seat at the table for every piece of the deal" before the transaction was entered into, where the auditor would ask, "What's your strategic objective and how do you plan to achieve it?" Testing had to progress, they asserted from "retrospective to real-time auditing," possibly yielding less documentation. While such elements of auditing as the assessment of internal control assessments can play a role in a real-time setting, it may be necessary for auditors to move beyond the quantified risks to add value to the client. Such real-time audits were not intended for some distant future, but rather, the firm members reported the current application of such an audit orientation in such technology-rich environments as internet banks that have no "bricks and mortar" (i.e., hard assets such as buildings), or even hard cash (i.e., since it exists in electronic form; see Global Public Policy Symposium 2006).

One administrative partner went on to speculate that the performance of such preemptive audits, etc., combined with sociolegal forces, is purportedly reversing prior trends and rendering the contemporary audit a "non-commodity"—i.e., a service that is anathema to the routinized, standard operating procedures of a structured audit approach. The second force she described as an "audit risk"—not of the auditor, but that of the client who could ill-afford a defective audit and a threat to the credibility of its financial statements that this would occasion. She asserted that clients cannot afford to have commodity-like audits performed. In any event, while firm efforts to re-engineer their audit processes may employ a discourse of metonymy and pressure the firms to a more mechanistic culture, other forces in the information age may compel use of a discourse of synecdoche, with attendant pressures to become more organic.

Interviewees suggested that the firms are also engaged in trying to more directly modify their firm cultures. For example, one senior manager described his firm's efforts to have an external consultant specifically re-engineer his firm's culture. He indicated that the consultant had conducted an in-house continuing professional education session wherein he tried to engender within the senior managers in attendance an "I'm okay, you're okay attitude" so as to develop mutual trust and respect among firm members confronting tumultuous events. The interviewee indicated that the session was a complete failure marked by strong cynicism by his firm members. A regional managing partner at another firm indicated that partners in his firm "pined for the good old days of a culture of partnership," but cautioned that what they longed for really didn't exist in the past. He indicated, though, that he was engaged in trying to improve what he called a "horizontal sense of partnership" or "concentric circles of partnership" by trying to tighten the social bonds or "circles" among partners, in part by bolstering "shared values" that he believes had eroded as a consequence of the prior commercialization of practice and the firm debacles; and a "vertical sense of partnership" by shortening the distance between practice partners and the "guys at the top." These efforts were not being outsourced to consultants, but by partners themselves who were well-versed in the cynicism that exists within the firms. In any event, the regional managing partner reported that it was very hard work, and that the "mere act of talking about the issues tended to improve the sense of partnership."

The observations gleaned from our interviews are consistent with the interpretive cultural anthropology literature: While the Big 4 may attempt to re-engineer their cultures, and by this effort imply the importance of culture because it is produced and reproduced over time by social interaction, culture cannot be unilaterally and created nor modified by an organization's central administration (Alvessson 2002; Meek 1988:462-465). Consequently, such elements of formal organization structure as the business models used by the Big 4 firms, as well as the audit procedures they develop and use in response to such new regulations as SOX, may not be the crystallization *of* culture, but rather are interpenetrated *with* culture (Ulijn and Verweij 2000:217), which cannot be unilaterally controlled by administrative partners. It thus may well be that the concepts of the mechanistic and organic audit firm cultures, voiced by the discursive styles of metonymy and synecdoche, respectively, may still have traction in understanding the social dynamics of the Big 4.

Still the issue of whether or not these metaphors are dated remains. On this theme, Morgan (2006; see Lakoff and Johnson 2003) observed that metaphors tend to illuminate certain aspects of a phenomenon of interest, while other features of the metaphor must be suppressed as undermining the insights that may be gained through their application. For example, in describing a prize fighter as being like a tiger, one might think of the fighter/tiger's strength, ferocity, stealth, and guile, while the qualities of being orange with stripes, four legs, large teeth, and a tail are suppressed. For us, in applying the metaphors of machine and organism, questions arise not only of what is illuminated and suppressed by their application, but also about what other metaphors may be applied that may illuminate different aspects of the phenomena of interest, especially where those phenomena may be evolving, such as the firms we studied through their re-engineering efforts. For example, as noted above, one regional partner indicated that his partners desired to return to a "culture of partnership." Despite his reservations about this culture's existence, what might this culture entail and what would the firm be returning from—a culture of commercialization and commodification (Abbott 1988; Reed 1996)? The point is that there may well exist other metaphors beyond the machine and the organism that may unveil alternative features of the socially constructed reality that is public accounting. While Morgan (2006) observed that the metaphors of machine and organism have proven particularly durable and even dominant over time and in different settings, and hence may still be applicable in the public accounting social milieu, he also proposed a number of other metaphors that are worthy of being applied to contemporary organizations. Among the various metaphors discussed, we believe four offer considerable promise. First, with the rise of the global, 24/7 mode of operations, new "species of organisms" may arise to cope with this fluidity, thus suggesting that the organic metaphor itself may be evolving. Second, organizations may be seen as "brains" in that they learn and self-organize in response to environmental change—in our case, the firms are actively engaged in re-engineering their audit processes, business models, and cultures with uncertain results. Third, organizations may be seen as "political systems" that experience the exercise of vested interests, conflict, and power—in our case, the resistance and transformation of sought for changes in audit processes, business models, and cultures. Fourth, organizations may be seen as "flux and transformation" in which they experience unfolding logics of change—in our case, as societal expectations of professional practice morph, as evident in the Sarbanes-Oxley Act. How do the firms seek to transform themselves? As concluded by Morgan (2006:6-7), "In approaching the same situation in different ways, metaphors extend insight and suggest actions that may not be possible before…and lead to new metaphors, creating a mosaic of competing and complimentary insights."

Despite questions as to whether the mechanistic and organic metaphors remain fully applicable, or whether other metaphors and discursive styles may have more traction in a rapidly changing environment, we believe that the basic theme of this paper still holds—that the seemingly technical craft of auditing may be fruitfully seen as a poetic act in which audit practices are socially invented and rhetorically influenced processes.

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