

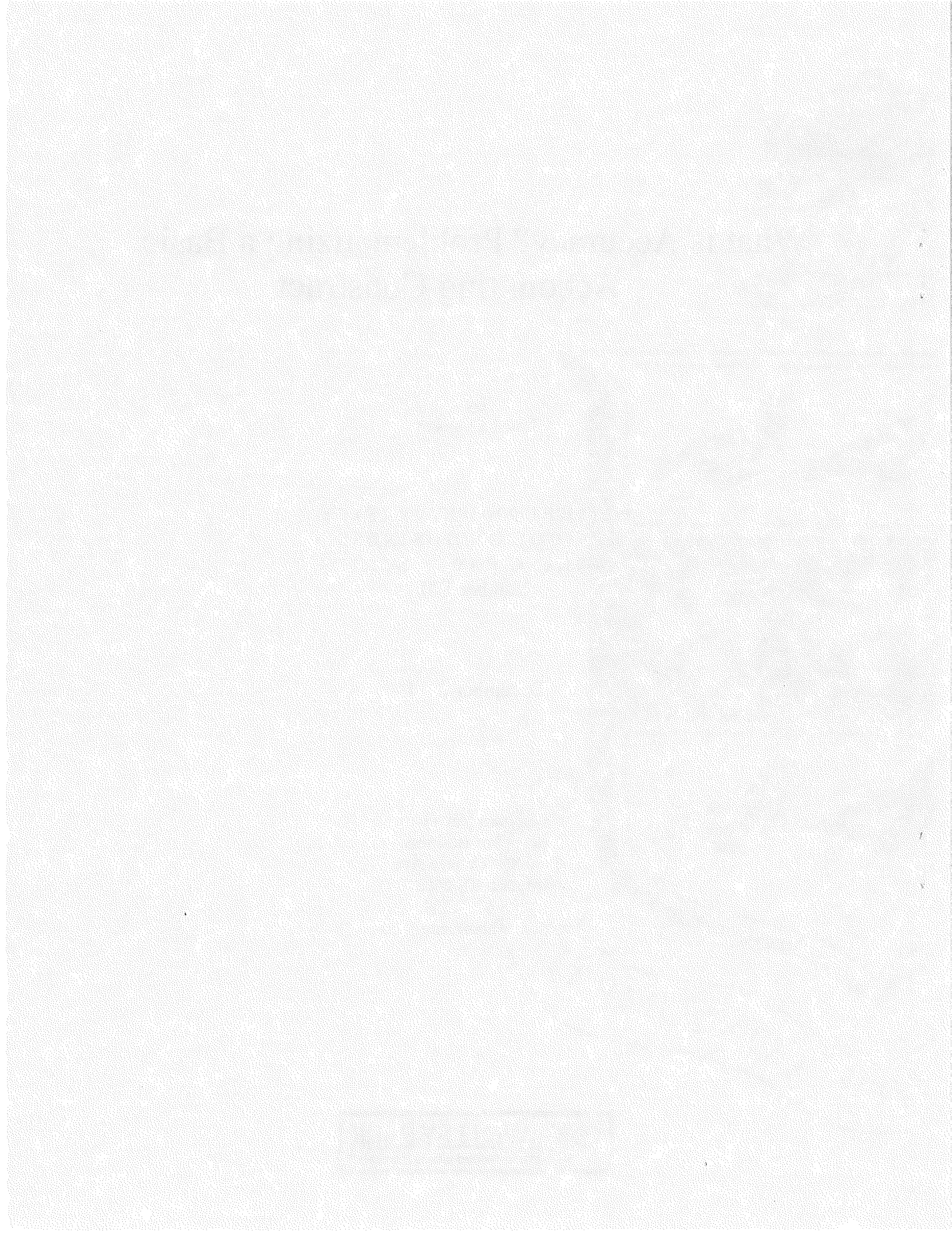
What is Accuracy? Problematizing a Basic Accounting Construct

By
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Accuracy, Materiality, and Fairness in Accounting Practice

Section 302 of the U.S. Sarbanes-Oxley Act 2002 (SOX 302) requires financial officers to affirm that financial statements are accurate, complete, and supported by adequate internal controls relating to public disclosures. This paper focuses primarily on the 'accuracy' portion of the certifications. Marden, Edwards, & Stout (2003) emphasize that even before SOX 302 management was required to sign their representations to auditors and many companies already included voluntary management responsibility letters in their financial statements. Thus, SOX 302 does not originate management's onus for the accuracy of financial statement assertions. By asking for signatures and adding specific fines SOX 302 adds a certain *gravitas* to the existing requirements, but the main thrust of SOX 302 seems to be shifting the focus of blame as contrasted with adding substantive duties or public protections.

In addition to certification of accuracy under SOX 302, defense contractors must present disclosure statements of their cost accounting practices which are current, accurate, and complete (DCCA 8-206b 2013). While the adequacy of descriptive disclosures is difficult to assess a priori, the language below suggests that the underlying intent of the requirement for accurate, complete disclosure is to avoid trouble and cost for the regulator.

Vague, ambiguous, and contradictory descriptions of the contractor's cost accounting practices may hinder subsequent compliance audits, cause disputes and litigation between contracting parties, and ultimately result in additional cost to the Government. Consequently, the auditor should carefully evaluate the described practices for specificity and clarity. Clerical accuracy is also a requirement for the Disclosure Statement. Therefore, the auditor should verify whether the contractor has checked the appropriate boxes, inserted the applicable code letters, omitted any questions, etc. (DCCA 8-206-b(2) 2013).

Accuracy and completeness are related to constructs for 'true and fair' presentation and 'materiality'. The phrase 'true and fair', like accuracy, seems to suggest that there must be a correct accounting presentation. The term materiality suggests that a certain margin of deviation from an ideal standard is allowed for good cause. The concept of accuracy implies that financial statements and related disclosures should correspond with some model of accounting truth. Accuracy, materiality, and fairness are common themes in practice literature that should be examined prior to look at underlying truth issues.

Accuracy

One of the main purposes of Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) conceptual frameworks is to communicate with accountants and users as to the meaning of common terms relevant to users of external financial accounting reports. FASB Concepts Statement No. 8 (CON8 2010) revises its former Chapter 1, *The Objectives of General Purpose Reporting* and Chapter 3, *Qualitative Characteristics of Useful Financial Information* into a single document. Accuracy is not one of the primary terms used to define the objectives or preferred qualitative characteristics of accounting data by the FASB. To the contrary, CON8 emphasizes that "general purpose financial reports do not and cannot provide all the information that existing and potential investors, lenders, and other creditors need" (CON 8, Chapter 1, p. 2), particularly in light of the fact that "users have different, and possibly conflicting information needs and desires" (CON8, Chapter 1, p. 2) and because "financial reports are based on estimates, judgments, and models rather than exact depictions" (CON8, Chapter 1, p.3). Yet, when CON8 describes the concepts of faithful representation it says that depictions

should be *complete, neutral, and free from error*, but immediately emphasizes that perfection is seldom, if ever, achievable (CON8, Ch. 3, p. 17); further adding that faithful representation does not mean accurate in all respects and that faithful representations do not necessarily result in useful information (CON8, Ch. 3, p. 18).

Materiality

Materiality is defined in CON8 as follows:

Information is material if omitting it or misstating it could influence decisions that users make on the basis of the financial information of a specific reporting entity. In other words, materiality is an entity-specific aspect of relevance based on the nature or magnitude or both of the items to which the information relates in the context of an individual entity's financial report. Consequently, the Board cannot specify a uniform quantitative threshold for materiality or predetermine what could be material in a particular situation. (Chap. 3, QC11)

This definition relates materiality to the specific context of an entity, but provides little guidance as to how the contextual qualities should be assessed. Research on materiality under prior conceptual frameworks and practice materials demonstrates wide differences of interpretation and application of the materiality construct (Reininga 1968; Pattillo & Siebel 1974; Ward 1976; Moriarty & Barron 1976; Firth 1979; Jeffries 1981; Jennings, Kneer & Reckers 1984-85; Jennings, Kneer & Reckers 1987; Vorhies 1995; Power 1997; Roberts & Dwyer 1998; Iskandar & Iselin 1999; Iselin & Iskandar 2000; Brennan & Gray 2005).

Edgley (2014) emphasizes the plurality of views on materiality by looking at the genealogy of the concept noting that the accounting term is used in United Kingdom (UK) legal cases as early as the 1860s and in late 19th century in British audit instructions. But earlier still, the term was tied to the metaphysical concepts of material as opposed to immaterial. Denoting a referent as "material" was to create an aura of substance or importance (Edgley 2014, 257). Edgley (2014) goes on to explore materiality as being tied to seven distinct metaphors: 1) Social or legal responsibility, 2) Cost-benefit solution, 3) Reification of expert knowledge or technique, 4) Object of scientific knowledge, 5) Rule of thumb or benchmarks, 6) Risk management, and 7) Shield or shooting target. These might be condensed to three areas of concern: 1) Responsibility, 2) Pragmatism, and 3) Camouflage. Disclosing major or material items is within the realm of management and auditor responsibility, but slight deviations might be allowed either as pragmatic cost/benefit measures or to camouflage true results.

Fairness

The concept of materiality is often tied to the concept of fair presentation, or "true and fair" presentation as it is called in some countries. The idea of fair presentation seems to presume an inherently correct target or ideal from which materiality allows a little pragmatic wiggle room. To think about what that target might be, one might explore two distinct questions about fairness: 1) Fair to whom? and 2) Fair in what way? The question of "To whom?" is especially significant in light of the Conceptual Framework's assertion that different users have different information needs (CON8, CH1, p.). While the conceptual framework tends to emphasize current or future investors or creditors, short term and long term creditors and investors might have very different needs. Labor unions and retirees needs, which are not emphasized in the Conceptual Framework but have become central issues in recent

municipal bankruptcies (Street 2014), might be at odds with those of creditors and investors. In order to talk about the manner in which something is fair, it would seem to be important to make explicit the criteria used to make value judgments between the relative rights of the potential parties involved. This is particularly problematic for general purpose external financial statements which are intended to serve a wide audience of both current and unspecified potential users. Williams (1987) argues that a failure to formally recognize fairness as an accounting objective is a significant weakness of the FASB Conceptual Framework.

A tautological approach to specifying what is fair is to say that 'fair' means merely following the rules established by authoritative bodies subject to management's interpretation, but the courts have not affirmed that view. Zeff (2007) reviews the history of the clauses 'present fairly' and 'in accordance with generally accepted accounting principles' (GAAP) in the American standard audit opinion. Sometimes the word in the evolving auditing standards seem to imply that 'present fairly' and 'in accordance with GAAP' are the same thing, but the 1969 *U.S. vs. Simon* (commonly known as the Continental Vending case) and Securities Exchange Commission (SEC) rulings in 1975 and 1976 held that there is a burden to go beyond the specific rules in order to prevent financial statements from being misleading. Zeff (2007) maintains the SOX 2002 language was specifically chosen to emphasize that preparers should not be allowed to hide behind GAAP as a substitute for intrinsic or common sense qualities of fairness. Therefore, when GAAP is not used as a criterion for determining financial statement fairness, it would seem that the unspecified alternative criteria would be critical to the determination of what constitutes fair and accurate financial statements. Yet those criteria, while deemed the responsibility of management under SOX 2002, are essentially a black box. Management has a duty to assess whether disclosures are adequate to prevent misleading even unknown parties under threat of fines, jail, and lawsuits, but it is not clear what criteria should be used. Therefore, one might conclude that financials disclosures are deemed accurate and complete because management says they are after weighing the risk that litigants may find subsequent evidence otherwise.

Accuracy Issues in Cost and Management Accounting

Prior to the Great Depression and briefly after the release of the first attempts at standardized accounting principles, some prominent academicians expressed doubt about the wisdom of developing rigid rules for external reporting which were prescient of modern day calls for a more principles based approach to accounting. E. B. Wilcox (1941, 76) noted that constructing a rules based framework for accounting imposes a "Euclidean rigidity, which fails to recognize the looseness inherent in the subject, but which develops its own looseness or contradictions, in artificial places." Wilcox's hints at the ontological and epistemological weakness of accountants' early standard setting efforts when he argues that

"the authors of "An Introduction to Corporate Accounting Standards" [the first attempt at accounting standards] have been builders when they should have been discoverers, and that they did not discover enough of their field before they attempted to build a house on it.(p. 77)

He goes on to note that

“I have never seen a manufacturing concern, nor do I ever expect to see one, producing more than one article, in which there is any such thing as an actual cost of a single item of finished product.” (p. 80)

While Wilcox recognized that there was really no such thing as a single objective cost of anything, for external report purposes some accounting practitioners, academics, and government regulators felt there might be some value to limiting financial accounting choices to achieve greater comparability. The American Accounting Association sponsored a lengthy monograph by Thomas (1969) which used detailed economic models to demonstrate that all allocations, which are the heart of cost accounting, are incorrigible or inherently controversial. This was followed in 1985 by Devine’s work which emphasized that all allocations are ‘impossible’. Though some allocations must be used for tax or external accounting purposes, joint costs by their very nature cannot be matched and attached to cost objects except through a procedure which is mutually acceptable by parties to achievement of specific goals or objectives. Fixed costs are particularly difficult to attach to specific products because per unit costs vary with output. Output in turn is influenced by prices which are influenced by perceptions of unit costs.

In cost or management accounting, where the rules of GAAP are much less likely to be seen as a definitive criterion of fairness, allocation of joint costs poses a significant challenge for arriving at appropriate representations of accounting truth and fairness. While mainstream cost accounting literature once considered all joint cost allocations as incorrigible, i.e., incapable of being assigned in a noncontroversial manner, modern cost and managerial accounting textbooks from major American publishers often make broad claims that certain accounting methods are more accurate than others. These claims can only be valid if accuracy means absence of errors from some objective standard of truth. For overhead items, claims to objective allocations can only be valid if pools of overhead costs have been divided in a manner that reduces the level of fixed, joint, and interdependent costs. Whereas articles by early proponents of Activity Based Costing and related techniques make claims that modern detailed methods of allocation better separate fixed and variable costs thereby producing ‘more accurate’ costs and/or motivate future cost reduction (Johnson 1988; Cooper & Kaplan 1988a&b, 1991; Kaplan 1989; Berlant, Browning & Foster 1990). Later critiques, sometimes by the same authors, suggest that the dividing line between a fixed and a variable cost is highly problematic in practice (Kaplan 1994, 253; Kaplan 1991, 135; Kaplan 1992, 59) and question the cost/benefit of ABC type innovations in light of the greater likelihood of success stories coming to light than failures (Johnson 1992; Lindahl 1997, 64). For example, in contrast to the first wave of articles extolling the benefits of ABC for cost accuracy, Cooper & Kaplan (1991) claim that managers should “refrain from allocating all expenses to individual units” (p. 130), “costs are not intrinsically fixed or variable” (p. 135), and by 1992 Kaplan was saying that ABC is “not an attempt to get more accurate fully-allocated unit costs” (p. 59) while Johnson (1992, 26) notes that

As someone who helped put the activity-based concept in motion, I feel compelled to warn people that I believe it has gone too far. It should be redirected and slowed down, if not stopped altogether.

Jones & Dugdale (2002, 156) suggest that the popularity of ABC installations depends less on the questionable ‘truth’ of greater accuracy than on the symbolic value of selecting the most up to date or modern technology, however black-box it may be, as promoted by prestigious consulting partners.

The Ontology and Epistemology of Truth

Ontology can be thought of as the study of whether something exists. Epistemology refers to the methods we use to verify or understand objects that exist and the inherent strengths or limitations of those methods. The beginnings of ontology are often traced to Aristotle's use of the word *metaphysica*, literally beyond the physical, to refer to the study of entities in their capacity of 'beings' or 'things'. Ontology can be thought of as having four dimensions: 1) categorization, 2) truth or falsity of the categorization, 3) self-existence as opposed to existing only in connection with other entities or events, and 4) potentiality as contrasted to movement or finished presence. While the modern concept of metaphysics as used in popular culture may conjure up religious or other world views, ontology's actual focus is on understanding the nature of phenomena which is quite relevant to the accounting profession. In ontology the focus is on categorizing items that are hypothesized to exist. When accountants define categories such as assets, liabilities, revenues, and expenses as they do in conceptual frameworks of the profession, they are inherently dealing with questions of ontology. Epistemology can be thought of as the study of the methods and the limitations of the methods used to measure items appearing in the chosen categories. Thus, practicing accountants and auditors are inherently involved in basic issues of ontology and epistemology. Determining whether an item has been properly measured and categorized involves verifying or falsifying truth claims. Accountants are generally measuring phenomena that have no inherent self-existence, but arise in the context of dynamic relationships. Because accountants are primarily measuring the potentiality of asset stores and dynamic rather than finished phenomena, truth claims for accounting are likely to be particularly complex.

A vast philosophical literature focuses on the basic nature of truth. Some methods that philosophers propose for determining if a category of knowledge is true include: 1) Correspondence, 2) Coherence, 3) Pragmatism, and 4) Realism. Correspondence schools of thought arose in the early twentieth century as a response to classic philosophical treatments that viewed propositions as true if they are identical to the facts. Correspondence theorists argue that facts cannot be completely identical with their referents because facts are themselves separate entities (David 1994). Thus facts will not be identical to, but should have a mirroring resemblance to the underlying measured construct. Coherence schools argue that beliefs can only be true if they are part of a systematic body of beliefs explaining and encompassing the whole of reality; thus personal, fragmented world views are an inherent limitation even when there is objective correspondence between a measurement and the underlying object (Joachim 1906, p. 76). Pragmatists are concerned with the practical end value of a measurement or categorization and posit the best test of truth is the relationship with subsequent experience (James 1907). Realism vs. anti-realism is an additional consideration that can be added to the basic views of correspondence, coherence, and pragmatic schools of thought. In realism the assumption is made that there does exist an objective world reality that we are trying to measure and the truth of our measures must be bivalent – either true or false with no indefinite area of gray (Dummett 1991). Anti-realism makes no claim that what is measured objectively exists and suggests that results could be partial depictions of truth rather than wholly true or false.

While some schools of philosophy confine their focus to truth claims in a static environment, other social theorists have weighed in on the dynamic nature of truth. While pragmatists would say that a rosy income statement is truthful if the stock market confirms the numbers, Giddens' (1984) structuration theory suggests that businesses and accountants surely must realize that accounting measures not only have correspondence to historical facts but under certain conditions may have the ability to effectuate a desired rosy stock market price.

While it is rare for modern American practice literature and textbooks to focus on dimensions of ontology, epistemology, or truth, social reality and accounting representation occasionally appear as topics of debate. MacNeal's 1939 monograph on *Truth in Accounting* lambasted other practitioners for

sticking to traditional historical cost that only recognizes realized income, arguing that excluding changes in market values of assets is misleading to small investors. Zeff (1982) suggests that while MacNeal's ideas were ahead of their time, his choice of intemperate, pejorative language may have been detrimental to gaining acceptance from fellow practitioners. Thomas (1974), Heath (1987), Sterling (1988), and Macintosh, Shearer, Thornton & Welker (2000) argue that accounting concepts like income and equity do not represent any empirical reality. Mattessich (1995, 2003) holds that this is not entirely true, but maintains that one needs a keen eye to distinguish accounting constructs that are not backed by phenomena from those that are. In developing his conditional normative accounting methodology sometimes called an 'onion' model of reality, Mattessich (1995, 274-275) argues that empiricism can focus on subjective social and psychological constructs in addition to objective, physical measures. Searle's (1995) monograph on social reality maintains that even apparently precise measurements of ontologically objective constructs are more accurately viewed as subjective when the indeterminate nature of money valuations is considered. This leads Mouck (2004, 535) to conclude that any precision in accounting can only be assessed in reference to the 'rules of the game', i.e., truth is whatever the authoritative bodies say it is.

Bandura (1996) argues that even non-observable human mental constructs can play a significant role in subsequent economic outcomes. Archer (1998) and Sunder (1997) suggest that accountants pay insufficient attention to the reflexive relationship between accounting numbers, the rules of the game, and social ends. Morgan (1988) sees accounting as dialogue rather than objective truth, while Young (1994) provides evidence that regulators have shifting views of what constitutes "right" accounting depending on their shifting regulatory motivations, but never seem to question the assumption that accounting can be made "right". Moore (2009) similarly argues that the accounting profession seems to cling to the myth of a definitive bottom line in spite of abundant evidence of inherent problems and paradoxes that defy efforts at crafting universal rules or principles for financial statement presentation.

Language and Legitimation

Governments exist through legal authority contingent on perceptions among constituents that the organizational structures operate in good faith for public purposes. In order to maintain legitimacy, governments must preserve at least a perception that market structures are operating in a stable, reliable manner. In issuing SOX 302 (2002), the SEC Staff indicated that the purpose of the certifications was to restore investor confidence in the periodic disclosures from public companies. Habermas (1975) posits that in the short run governments are more concerned with effecting the appearance of legitimacy, i.e., legitimation, than with truly being legitimate. With elected officials and their administrative appointees operating within a short time horizon, symbolic acts of legitimation are common in the government's relationship with constituents. Lehman (2006) sees the use of indefinite, but seemingly precise terms as evidence of Habermas's hypothesis that accounting numbers serve as tools of legitimation whether they refer to objective facts or not.

Porter (1995) maintains professions that use numbers to carry out their social roles tend to be endowed with a presumed, though refutable, claim to objectivity. The language of mathematics being highly structured and rule-bound, the discipline creates a certain technological distance from users which can engender moral hazards. The term validity derives from a Latin root that means "power". Yet numbers are not automatically valid or powerful, but become so through social processes (Porter 1995, ix, 11, 33). Evans (2010), Mills (1989) and Potter (1999) similarly recognize that language is socially constructed and that specialists may use terms in ways that are unfamiliar to the general public.

Said (1983) attributes Foucault with recognizing that changing or manipulating the use of language is one way

“the will to exercise dominant control in society and history has also discovered a way to clothe, disguise, rarify and wrap itself systematically in the language of truth, discipline, rationality, utilitarian value and knowledge.” (216)

Foucault (1980) and Foucault, Burchell, Gordon & Miller (1991) emphasize that shifting concepts percolate through society not merely through official authoritative edicts but through capillary mechanisms with apparent sanction even by those who are being manipulated.

Thus, language is used to create pervasive ideologies which Neimark (1992, 97) defines as unquestioned assumptions by which people make sense of, create, and re-create their environment. Neimark (1992, 100-111) identifies managerial capitalism and the social consumption norm, i.e, consumerism, as two pervasive ideologies. While Eastern cultures sometimes pay attention to interdependencies in the social whole, Westerners are more likely to emphasize individuality and the ability to assess and make comparisons of performance independent of the institutional ground. The ideology of independent selves or accounting entities in Western countries may also play a role in the interpretation of accounting phenomena. Burbank & Martins (2009) revisit concepts from the micro-level process of symbolic interactionism developed by Mead (1934) extending them to Habermas's (1973) macro-analysis of legitimation crises. They concur with Lynch & McConatha's (2006) assessment that information technology has elevated social relations to the point of *hyper-symbolic interactionism* in which users pay little attention to the underlying construct being measured.

Parker (1994, 7) and Blank (1999, 62) focus on instrumental usage of language in order to enhance the communicator's prestige or status. Belkaoui's (1989) summary of accounting and language emphasizes that language has cultural purposes beyond the expression of facts. In particular, works by Sapir (1956) and Whorf (1956) focus on the use of language for symbolic, nonlinguistic, managerial purposes. Belkaoui (1980) found that some groups had widely different understandings of accounting terminology than its insiders, while Libby (1979) found little difference between bankers and auditors suggesting that those more distant from the internal workings of a profession may be more likely to diverge in interpretation.

Given the power of language, where there is a significant distance between professionals and lay users of their output it might be possible to choose adjectives with subtle but potentially conflicting meanings in popular and professional domains. The term 'fair' comes to mind in relation to the debate over the use of the phrase 'presents fairly' in standard audit reports. Users may believe this means fair to their interests, even when the auditing profession intends the term to mean merely that reports meet the letter of generally accepted rules. Similarly, the term market value has been replaced with 'fair' value with an internal understanding that values might be deemed fair if they conform with rules and concepts of accounting affirmed by professional power structures at a particular point in time. Members of the general public though might be expected to hear the word 'fair' in the sense of taking into consideration equity and justice effects in relation to the man on the street. The use of the term 'more accurate' to describe highly detailed, but still fundamentally arbitrary, allocations of costs seems another area in which accountants might be choosing technical, twilight language possibly to obfuscate more than illuminate. The endemic usage of technical qualifiers with alternative popular meanings in the accounting field could suggest a purposive use of language. The potential for sleight of hand constructs to be widely accepted is facilitated when the surrounding culture is "innumerate", i.e., intimidated by mathematics and

unaccustomed to looking beyond quantitative representations to nuances of underlying meaning (Paulos 1988).

Content Analysis of Cost/Managerial Accounting Textbooks

The prior sections of this essay have emphasized the complexity and multi-dimensionality of the accuracy or truth construct in accounting. The specific question to be addressed by the content analysis portion of this study is to what degree cost and managerial accounting textbooks recognize that accuracy is a multi-faceted construct. Specifically, do the textbooks make the basis for their claims to greater accuracy explicit? A sample of five textbooks that have digital versions available on www.coursesmart.com are analyzed. The texts include a mix of those that are very widely adopted with significant market longevity such as the Horngren and Garrison texts, both in their 15th editions, and others with short to intermediate longevity. The website's search facility was used to locate all instances where the words accurate, accurately, or accuracy appear in the textbook. The surrounding verbiage was manually examined by the researcher to classify the usage of the accuracy construct as: 1) Part of the index or table of contents, 2) Referring to precise measures of objective qualities, 3) Reasonably precise in relation to GAAP standards, 4) Related to estimates of future cash flows or expenses, and 5) Unspecified. Items in the index or table of contents are separately classified, but if the accuracy construct appears in a subheading within the body of the text or in problems at the end of the chapters these are classified under one of the remaining categories based on the content in the paragraph that follows. If the surrounding text refers to obtaining objective measures such as inventory counts from departments or to the relative precision of the equation for the historical costs from statistical regressions these are classified as involving objective precision. Discussions of inventory values for GAAP purposes are examples of language classified in category 3). If the text refers to making accurate predictions of operating or capital budgeting inputs, these are classified as category 4). Even though category 4) items refer to making accurate predictions of future items, it is unclear how one knows what constitutes an accurate guess of the future on an a priori basis; still, these are treated as having specified or at least having implied that the veracity of the estimate could be verified in the future. Items for which the criterion for accuracy is not clearly specified or readily inferred from the context are coded in category 5). The precision category is not used for product costs unless the reference is to a direct assignment of costs, e.g., direct materials, direct labor, or costs involving a single department, rather than for detailed allocation of a pool of miscellaneous costs. Table 1 shows how often the accuracy construct appears in each of the categories for the five textbooks. The analysis shows that the use of the accuracy construct is widespread within these popular texts and that the basis for accuracy claims was often indeterminate. Table 2 eliminates those items appearing in the table of contents and indices category while combining the Precision and GAAP categories. The condensed categories mitigate the problem of small cell sizes which can distort Chi-Square tests. The Chi-Square test of independence suggests that the differences in frequency of the accuracy construct within the books is greater than would be likely to appear by chance (Chi-square = 127.803 with 8 d.f, $p = .00$).

Summary, Implications, and Limitations

The theoretical analysis in this paper suggests that accounting truth or accuracy claims are far from simple and definitive. Some accounting representations may correspond to precise, objective facts, but more commonly accounting measures have social roles that can reify and create as well as measure reality. Failure to recognize the often indeterminate nature of accounting accuracy can pose significant moral hazards in accounting practice and pedagogy.

Even though financial executives are required by law to certify that accounting statements and certain disclosures are accurate and complete, there is no evidence that the profession as a whole has reached any closure as to what it means for financial statements to be accurate. This suggests that the widespread use of the term accuracy is more symbolic than functional. With the requirements for certifications of financial statement accuracy in the U.S. deriving from government mandate rather than professional initiative, legitimation issues would seem to be paramount in the mandates. American auditors and defense contractors deriving their professional monopoly rights from government authority have little choice but to sign SOX 302 and cost methodology disclosure statements avowing 'accuracy' whether the construct is well-defined or not. Still, professional organizations might consider the long run implications of their members signing statements that suggest accuracy is an all or nothing construct when a close examination shows it to be otherwise. Using signed accuracy statements to serve primarily as a symbolic *mantram* to create public legitimacy from thin air is not new as the same methods were used in the certification of banks were used to restore public confidence after the American bank "holidays" of 1933 (FDIC 1984). In asking for bank certifications to be in place after only four days, far too short a time for detailed audits, Moley (1966, 171) claims that key government players explicitly recognized "how much of banking depended upon make-believe or, stated more conservatively, the vital part that public confidence had in assuring solvency." Still, in the modern litigious environment, these all or nothing certifications may exacerbate the expectation gap and the potential for litigation by imposing a magical but impractical aura of certainty on accounting reports (Leggio 1974; Godsell 1992; Koh & Woo 1998; Zhang 2007; Dennis 2010). Further, invoking symbolic uses for accounting too frequently could lead to a legitimation crisis in which the public loses rather than gains confidence in accountants, governments, and economic systems (Habermas 1975).

In the cost/managerial context there are multiple explanations as to why such an indefinite and poorly specified construct would be so widely used. Practitioners and educators may conflate the level of detail with accuracy because they have simply not thought about the ontology and epistemology of truth in accounting. More detailed techniques such as activity based or resource consumption accounting methods are newer, more detailed, and potentially more lucrative for practitioners even though there is only limited evidence of superior firm performance arising from the use of the techniques, with that evidence often provided by purveyors who only cite their success stories. Accounting pedagogical materials may attempt to promote the value of certain practices to their students because the authors know that these are the types of techniques targeted employers are interested in promoting through their consulting practices.

In examining cost/managerial accounting textbooks' claims which imply that more detailed allocations are universally more accurate than simple, traditional techniques there is rarely any information specified as to what the relative tradeoff in cost would be between the simpler and the more detailed techniques. The Hansen & Mowen textbook which has the highest use of the term 'accuracy' among the limited textbooks examined is ostensibly based on a platform of getting students to examine the how's and why's of accounting practice. Yet, the text seems to repeatedly ask students to tell which of various methods are more accurate based on the textbook's implicit assumption that more detail in allocation equals accuracy. Thus, what is on its surface a device to promote critical thinking may have the opposite effect; by failing to emphasize the potential for an indeterminate answer involving a multiplicity of tradeoffs, critical thinking could actually be limited if the students interpret the questions as asking for a regurgitation of the textbook's unspecified accuracy claims. This is likely to be an increasing problem as publishers actively promote the use of electronically graded learning management systems in course adoptions. Consequently, this paper concludes that accounting instructors and professors should consider offsetting the widespread and seemingly definitive claims of greater cost accuracy that appear

in cost/managerial textbooks by engaging students in a deeper discussion of the multiple facets of what it means to be accurate, the role of accounting to effect symbolic ends, and the cost tradeoffs inherent in more detailed accounting methods.

The primary purpose of the analysis was to investigate the widespread use of an unspecified construct in accounting textbooks. A limitation of the study is that a single researcher's judgment, rather than a panel of experts, was used to assign items to the categories. This limitation is mitigated by the ready availability of digital texts that college professors could use to confirm for themselves the degree to which the researcher's category counts roughly approximate their own judgments. While a significant body of research exists which examines the concept of accounting materiality, additional research is needed to determine whether there are significant differences in the perceptions of accounting educators, practitioners, and students as to the meaning of accounting accuracy.

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Table 1
Classification of the Accuracy Construct in Examined Texts

Textbook Examined	Index/Content	Precision	GAAP	Future Costs	Unclear	Total
Hansen et al. 3rd	1	23	16	9	180	229
Garrison et al. 15th	1	7	4	5	30	47
Horngren et al. 15th	6	23	8	9	40	86
Blocher et al. 6th	0	40	1	15	100	156
Kinney & Raiborn 9th	0	10	6	33	17	66
ALL COMBINED	8	103	35	71	367	584

Table 2
Condensed Table of Accuracy Construct Classifications

Textbook	Precision/GAAP	Future	Unclear	Total
Hansen et al. 3 rd	39	9	180	228
Garrison et al. 15 th	11	5	30	46
Horngren et al. 15 th	31	9	40	80
Blocher et al. 6 th	41	15	100	156
Kinney & Raiborn 9 th	16	33	17	66
<i>Chi-square = 127.803; 8 degrees of freedom; p = .00</i>	138	71	367	576