

**What proponents of CSR need to know about accounting:
Drawing on Weber and Aristotle to rethink
Generally Accepted Accounting Principles**

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Abstract

The purpose of this paper is to discuss and provide an alternative, less materialist-individualist approach to interpret the four assumptions of generally accepted accounting principles: economic entity; unit measure; periodic reporting; and going concern. The paper draws from and builds on arguments first developed by Weber and Aristotle to demonstrate how a materialist-individualist moral-point-of view influences the conventional interpretation of the four basic assumptions for generally accepted accounting principles. We then propose an ideal-type conceptual framework upon which to critique mainstream accounting theory and to develop alternative accounting theory that balances multiple forms of well being (including financial, but also social, physical, spiritual, and ecological well being) for multiple stakeholders (including owners, employees, customers, suppliers, competitors, neighbors, future generations and so forth).

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Introduction

In recent decades, the relevance of the accounting profession and the traditional financial reporting model has been aggressively challenged. A large body of empirical accounting research has documented a decline in the value relevance of conventional accounting information in recent years (Balanchandran and Mohanram, 2011). Part of this decline may be attributable to the increase in disclosures firms make outside of financial statements: Firms are increasingly reporting extensive non-financial measures, and in many circumstances use them as an important component of manager compensation (Ittner *et. al.*, 1997). Many firms also have chosen to provide disclosures of their social and environmental activities outside of the traditional financial statements, and several external certification bodies have sprung up outside of the accounting profession to provide assurance on that information (Power, 1997). These phenomena can be seen as threats to the legitimacy and usefulness of mainstream accounting, and they question the ability of the accounting profession to meet the information needs of society with respect to measuring and reporting corporate performance and question whether formal accounting information has been marginalized (Hopwood, 2009; Matthews, 1997; Wallman, 1996).

In this paper, we argue that these initiatives may appear unrelated, but are in fact piecemeal solutions to one underlying problem: that the accounting profession has generally failed to recognize that the most foundational building blocks of our conceptual framework reflect a set of values or moral point of view that is increasingly being called into question by society.

We use Weber's insightful landmark study *The Protestant Ethic and the Spirit of Capitalism* (1958, original 1904) to provide a framework for the socio-historical analysis of the relationships between accounting and organizations and society (Colognon and Covalleski, 1991). Specifically, for this paper it provides a useful lens through which to view accounting and suggests alternative perspectives. In teasing out these alternative perspectives we also draw on Aristotle, who notes that human agents cannot simply be reduced to self interest-maximizing *homo economicus* participating in, and thus accounting should not be limited to describing, narrowly defined market exchanges. Aristotle's view of economics suggests that markets rely on virtues such as human dignity, trust, creativity and sociality to function justly and humanely. Accounting concepts and practices should engender and secure such values rather than conceal or corrode them (Hinze, 2004).

In the *Protestant Ethic*, Weber describes how a moral-point-of-view characterized by its emphasis on materialism and individualism underlies contemporary management theory and practices (Dyck and Schroeder, 2005). Weber argues that in order to properly understand mainstream management theory and practices, we must understand this underlying moral-point-of-view (what he calls "substantive rationality," Kalberg, 1980; Dyck, 1997; Townley, 2002). Regrettably, even though scholars affirm Weber's general argument about the importance of understanding the moral-point-of-view that underpins management theory, they seldom put it into practice. "As Weber pointed out, the *value-laden nature of assumptions* can never be eliminated. Yet if a theory is to be used or tested, the theorist's implicit assumptions, which form the boundaries of the theory, *must* be understood. Unfortunately, theorists rarely state their assumptions" (Bacharach, 1989, p. 498, emphasis added here; see also Calas and Smircich, 1999). The general failure to articulate the underlying moral-point-of-view results in fruitless

debates among scholars (Bacharach, 1989), hides organizational stakeholders' interests (Calas and Smircich, 1999; Perrow, 1985), and stifles opportunities for practitioners and scholars to give voice to non-utilitarian "moral impulses" (Bos and Willmott, 2001).

We examine how Weber's allusion to competing moral-points-of-view is reflected in current accounting theory and practice in the same way that it is embedded in management. Interestingly, while the key assumptions underlying contemporary management theory and practice have not been widely-acknowledged in the literature, the four basic assumptions underlying generally accepted accounting principles (GAAP) have been: going concern, unit of measure, entity, and periodic reporting. We argue, however, that what is not stated is how a particular moral-point-of-view has informed the conventional interpretation of these GAAP assumptions, despite the aspiration of accountants to be "neutral". Conventional accounting, built upon specific value-laden assumptions, reinforces the existing power structures, morality, and ethical conventions of society. To the extent that these values are being called into question, so will conventional accounting be called into question.

This research adds to the dialogue on developments in social and environmental accounting (SEA) research. Nikolaou and Evangelinos (2010) note that existing social and environmental accounting is not comprehensive nor standardized, and there is a need to provide this information within the conventional accounting system to ensure relevance and reliability. To that end, they suggest foundations of a framework to classify existing SEA information according to the type of measures used, the formality of the accounting principles applied, and the nature of the content. That is, they explain *how* SEA information is different from current financial accounting information. In our paper, we attempt to explain *why* the current accounting system is different, that those differences are based on fundamental assumptions that reflected a

certain moral point-of-view, and how changes in the values held by society will make those assumptions increasingly problematic.

Our paper is divided into several parts. In the next section, we review Weber's argument that conventional management theory reflects a predominant materialist-individualist moral-point-of-view. We then present several sections where we apply and identify the implications of the Weberian framework and Aristotelian economics for accounting theory and practice. This includes a description of how a conventional materialist-individualist substantive rationality gives rise to a conventional formal rationality of accounting theory and practice, and how an alternative substantive rationality gives rise to a radical formal rationality of accounting theory and practice. Implications are discussed for the four foundational assumptions of accounting.

I. Weber's Moral Points of View Framework

Max Weber, still considered a leading management moral philosopher (Clegg, 1996; cf Greenwood and Lawrence, 2005), argues that the conventional management paradigm can be characterized by the fact that it places primary emphasis on individualism and materialism.¹

¹ This discussion of the emphasis on individualism and materialism, and the resulting four Weberian moral-points-of-view framework, draws heavily from Dyck and Schroeder (2005). Greenwood and Lawrence (2005) suggest that Weber's influence on organization studies may be unrivaled (Greenwood, R. and Lawrence, T.B. (2005) "The Iron Cage in the information age: The legacy and relevance of Max Weber for organization studies (Editorial)," *Organization Studies* 26:493-499). Some of Weber's most influential works include: Weber, M. (1958 orig 1904-05) *The Protestant Ethic and the Spirit of Capitalism*. (transl. T Parsons). New York: Scribner's; Weber, M. (1947) *The Theory of Social and Economic Organizations* (ed. T. Parsons, transl. AM Henderson and T Parsons). New York: Free Press; Weber, M. (1946) *From Max Weber: Essays in Sociology* (ed. H.H. Gerth and CW Mills). New York: Oxford University Press; Weber, M. (1978) *Economy and Society* (ed. G. Roth and C. Wittich). Berkeley: University of California Press; Weber, M. (1927) *General Economic History* (trans. Frank H. Knight). London: Allen & Unwin. Weber remains one of the most frequently cited authors in scholarly management journals. (Lounsbury, M. and E.J. Carberry (2005) "From king to court jester?: Weber's fall from grace in organizational theory." *Organization Studies*, 26(4): 501-525.

First, the contemporary secular idea of individualism can be traced back to the notion of *calling* developed during the Reformation. According to this view, not only does God call individuals to work intensely in their jobs, but moreover the “*only* way of living acceptably to God was ... through the fulfillment of the obligations imposed on the *individual* by his [sic] position in the world” (Weber, 1958, p. 80; emphasis added here). Because an individual’s achievement of eternal salvation cannot be ensured by others, Weber argues that the Protestant Ethic gives rise to “a feeling of unprecedented inner loneliness of the single individual.” Indeed, Weber regards individualism as a defining characteristic of the Protestant Ethic moral-point-of-view and “the absolutely decisive difference” from Catholicism (Weber, 1958; pp. 104 and 105; see also pp. 80-81, p. 160). The publication and popularized interpretation of Adam Smith’s (1776) *Wealth of Nations* (Smith, reprinted 1937) further reinforces and legitimates individualism, transforming it from being “roundly condemned in the Bible and unheard of in most ancient societies” into a virtue of the highest order. “As Smith imaginatively put it, ‘an invisible hand’ would guide apparently chaotic individualism to collective good” (Solomon & Hanson, 1983, p. 37).

A high emphasis on materialism is Weber’s second defining feature of the conventional moral-point-of-view. While it may be over-stated, Weber quotes the preacher John Wesley (1703-1792), who describes how the Protestant Ethic gives rise to materialism: “religion must necessarily produce both *industry* and *frugality*, and these cannot help but produce *riches*” (Weber, 1958, p. 175; emphasis added here). Put in contemporary terms, the fundamental goals of conventional management include maximizing productivity (“industry”) and efficiency (“frugality”) in order to maximize profitability (“riches”). Weber’s dislike for the materialism that characterizes this conventional moral-point-of-view is evident in his famous metaphor of the

“iron cage:”

“the care for external goods should only lie on the shoulders of the ‘saint like a light cloak, which can be thrown aside at any moment.’ But fate has decreed that the cloak should become an iron cage. ... material goods have gained an increasing and finally inexorable power over the lives of men [sic] as at no previous period in history” (Weber, 1958: p. 181; emphasis added here).

Solomon and Hanson (1983) echo Weber when they suggest that: “The idea that making a profit is a legitimate activity would have horrified most people until very recently.” They concur that materialism was legitimized in part by protestant preachers like John Calvin (1509-1564), who taught that material wealth was a sign of a person’s eventual salvation.

According to Weber, in order to understand the role of organizations in society generally, and the techniques of accounting practices and management in particular, it is essential to determine their underpinning substantive rationality, or what others have called their moral-point-of-view (Dyck and Schroeder, 2005). In this light, Weber’s greatest disappointment might be that his research has not spurred scholars to develop non-conventional moral-points-of-view to permit escaping what he called the “iron cage” that characterizes the status quo. He was especially interested in developing moral-points-of-view that de-emphasize the materialism and individualism characterizing the mainstream paradigm.

A recent example of the sort of research that Weber was calling for, and which informs our paper, comes from several studies that provide a simple test of the basic hypothesis undergirding Weber’s premise. Dyck and Schroeder (2005) argue that having a materialist-individualist moral-point-of-view will lead to a formally rational approach to management that

emphasizes conventional ideas like specialization, centralization, formalization and standardization. They then posit that a Multistream moral-point-of-view will be consistent with an alternative formally rational approach to management theory and practice that emphasizes alternative ideas like sensitization, dignification, participation and experimentation. Dyck and Weber (2006) then provide an empirical test of these hypotheses. Their findings support Weber's contention that managers who subscribe to a Mainstream moral-point-of-view will practice management differently than managers with a more radical moral-point-of-view, in ways predicted by Dyck and Schroeder (2005). Similarly, Dyck *et al* (2011) found that business students exposed to both multi-stream and mainstream approaches in their introductory management course differed in their perceptions of what constituted effective management, which could ultimately lead to them practicing management differently.

In the next section, we extend the Weberian analysis to accounting. It is our contention that doing so is important and appropriate as there is well-acknowledged link (including, interestingly by Weber himself) between accounting and management as the practice of accounting both measures but potentially changes how management performs. Further, Weber's insights with regard to the failure to articulate the moral point of view, or substantive rationality, underpinning management practices may apply to accounting practices as well.

II. Accounting and Management

Weber believed that the development of accounting was intimately tied to the development of contemporary organizations. In the accounting literature, Weber has been used to articulate accounting's role in the rise of capitalism by situating accounting as part of the rationalizing form of calculation necessary to organize and give meaning to economic action. He

made special note of the advent of double-entry bookkeeping, and stated "...a rationalistic enterprise is one with capital accounting, that is, an establishment which determines its income-yielding power by calculation according to the methods of modern bookkeeping and striking of a balance" (1961, p. 207). Miller and Napier (1993) suggest that Weber "helped indirectly to delimit accounting history, by according double entry bookkeeping a fundamental significance for the operation of capitalist enterprise" (1993, p. 635). That is, the role of accounting to determine income-yielding power was a fundamental technique to organize and give meaning to economic action which was "conducive to capitalist activity" (Carruthers and Espeland, 1991). The Sombart (1953) thesis goes further, proposing that there was a causal link between double entry bookkeeping and the rise of capitalism (Miller and Napier, 1993).

Ample evidence links accounting theory and practice with management and organizational practices. For example, accounting mediates social relations by determining what is measured, and what is rewarded (Burchell et al, 1985). Similarly, Tinker (1980) points to the distributive role played by accounting techniques in that these techniques mediate relations by measuring and rationalizing power relationships. If a particular aspect of performance is important, then it should be measured (or "accounted for") (Kaplan & Norton, 1992). Performance affects accounting by determining what is measured, and how. However, accounting also affects performance: Kaplan and Norton (1992) state this succinctly by the phrase "What you measure is what you get."

In sum, it is clear that accounting is central to the practice of management. Let us now consider how accounting, just like management, is a value-laden discipline.

III. The Value-Laden Nature of Accounting

Accounting concepts and standards are typically considered to enable neutral and objective measurement of a firm's financial performance. Accounting is seen as a neutral intermediary that simply passes truth to investors and markets. However, echoing Weber, Carruthers and Espeland (1991, p. 36) note that "Double-entry bookkeeping was devised to account for business transactions, but once established, it altered those transactions by changing the way businessmen [sic] interpreted and understood them". Carruthers and Espeland (1991) argue that double entry accounting embodies not only a set of measurement techniques essential to the rise of capitalism; its use also represents and signals a set of values and a "world view" that is consistent with capitalism and the legitimization of profit-seeking activities.

While some might argue that conventional accounting theory and practice is, technically-speaking, merely a "value-neutral" outcropping of a value-based materialist-individualist moral-point-of-view—that is, accounting theory and practice provide structures and systems that are consistent with, but technically apart from, certain values (Colignon and Covaleski, 1991)—our view is more consistent with those who argue that one's basic understanding of the exchange systems that characterize everyday transactions would be different if one adopted a qualitatively different substantively rational moral-point-of-view rather than one associated with conventional formal rationality (e.g., Biggart and Delbridge, 2004). Along these lines, we suggest that conventional formally rational accounting arises out of a specific (materialist-individualist) moral point-of-view and, further, that starting from a different moral-point-of-view may give rise to a very different, yet still (non-conventionally) way of doing accounting. We also use Aristotle's concepts of *oikonomia* (economics) and his use of the Greek notion of time as *kairos* (Stahel, 2006; Ramo, 1999) to provide a lens for understanding a Multistream approach to

accounting. This provides other reference points for accounting and alternative understandings of the way accounting organizes time within organizations (Giddens, 1987).

Weber would likely welcome the development of accounting theory (and practice) that challenges the materialist-individualist status quo, calling on scholars to develop alternative formally rational theory that is based on a less materialist-individualist substantive rationality. Insofar as society at large may be adopting a different substantive rationality, conventional formally rational accounting theory and practice will become increasingly irrelevant and incongruent with social values. We follow and build on Weber by arguing that it is possible to develop alternative formal rational accounting theory and practice that is based on what may be called a multistream (or a radical) moral-point-of-view (see Dyck and Neubert, 2010; Dyck and Schroeder, 2005). Whereas a **Main**stream approach focuses on the **ma**terial well-being of **in**dividual shareholders, a **Multi**stream approach strives to achieve a balance among **multiple** forms of well-being (financial, social ecological, spiritual aesthetic, physical) for **multiple** stakeholders (owners, employees, suppliers, neighbors, future generations).

IV. A Weberian Analysis of Accounting

Whereas the preceding literature contends that the basic assumptions that underpin management theory and practice often remain unstated, this is not the case in accounting. A highly influential early attempt to articulate the conceptual framework of accounting was the Paton and Littleton (1940) monograph (Zeff, 1999). In that monograph, they identified four basic assumptions of accounting: 1) the monetary unit; 2) economic entity; 3) periodicity; and 4) going concern or continuity. These assumptions or postulates were carried through to other research studies conducted and published by the American Institute of Certified Public

Accountants (Moonitz, 1961; Sprouse and Moonitz, 1962) which formed the basis for the U.S. Conceptual Framework. All four assumptions are widely known among practitioners and scholars: for example, they are generally included in intermediate accounting textbooks (e.g., Spiceland et al, 2010; Kieso et al, 2010; Beechy et al 2011).

While the identification of these assumptions is clearly understood by accountants, we would argue that an understanding of the values inherent in those assumptions, and the extent to which they reflect a conventional materialist-individualist moral-point-of-view, is virtually absent. For each of these four GAAP assumptions, we consider how the assumption reflects a particular moral-point-of-view, and briefly identify current financial reporting issues that we believe reflect tensions with the substantive rationality embedded in the current conventional conceptual framework.

Economic Entity Assumption. According to Sprouse and Moonitz (1962), “Every aspect of wealth -- its creation, its form, its consumption, its safeguarding, its magnitude, its augmentation or its diminution, is assignable or attributable to one or more entities.” The entity concept is central to accounting theory because it defines the organizational unit of analysis being accounted for, and thus narrows the possible objects and activities and their attributes that may be selected for inclusion in the financial statements (Moonitz, 1961, p.13, 31). In fact Nurnberg (2009) suggests that without such a concept, accounting is impossible^[1]. This raises issues of understanding the boundaries of the firm and how to render the firm accountable.

From a Mainstream perspective the economic entity assumption is often used to justify the separation of a company’s business activity from its owners (Paton and Littleton, 1940), which thereby also separates a company’s business activity from the larger community. Shearer (2002)

argues that the current construction of the accounting entity as a business unit is such that the unit is obligated to pursue only its own financial good. Her argument in turn follows from Schweiker (1993, pp. 231) who argues that “If it is impossible to render economic forces morally accountable, then human beings have become slaves to their own financial and corporate creations, and the world is subjected to unending exploitation under the aegis of ‘efficiency.’”

To summarize, under this perspective the economic entity assumption results in a company representing its financial position as the difference between its own assets^[ii] and its own liabilities. Therefore, if performance is defined as improvements in financial position, then any activity that increases the entity’s assets or decreases its liabilities is “good”, even if this activity imposes large (or small) externalities on the external environment. This emphasis on maximizing the financial well-being of an entity is not new – it dates back at least as far as Aristotle, who called it “*chrematistics*.” But even 2,500 years ago Aristotle noted that *chrematistics* should never become an end in and of itself: he argued that *chrematistics* should always be subordinate to the more holistic idea of *oikonomia* (literally, the management of a goods and service producing organization) which assumed that the purpose of the entity went far beyond maximizing its financial well-being.

Table 1: Two interpretations of the four basic assumptions of GAAP

Assumption	Mainstream	Multistream
Entity	Stakeholders are primarily interested in the <i>chrematistic</i> economic condition of a clearly-demarked single entity.	Stakeholders are primarily interested in the <i>oikonomia</i> economic condition of a system of community of actors and entities (and the focal unit's contribution to that community).
Unit of measure	The (<i>chrematistic</i>) economic activity of an entity can be effectively stated in terms of a single unit of measure (cf. monetarization, commodification).	The (<i>oikonomia</i>) economic activity of a system goes beyond financial measures, and includes important non-financial dimensions of performance even if they defy easy measurement.
Periodic reporting	(<i>chronos</i>) Linear, to the beat of a chrematistic drum.	(<i>kairos</i>) Seasonal, on-going.
Going concern assumption	The Mainstream assessment of going concern (i) has a short term time horizon (one year), (ii) focuses on financial measures, and (iii) is at the level of analysis of the single entity (ignoring long-term non-financial externalities).	The Multistream assessment of going concern reflects ideas of "sustainable development" and (i) has a long-term time horizon,(ii) considers multiple forms of well-being, and (iii) considers contributions and drawbacks of the entity in the context of its larger social and ecological systems.

Generally consistent with Aristotle's critique, Multistream proponents would note that the Mainstream operationalization of the accounting entity as the business itself ignores a multitude of other potentially accountable relationships to which the business entity is a party. For example, social contract theory holds that a social contract exists between organizations and society, through a series of explicit and implicit laws that confer a kind of organizational legitimacy vis-à-vis society. Therefore, an organization should act in a manner that fulfills its fiduciary duties to all its stakeholders (Sacconi, 2007), rather than merely maximizing its own

financial position. That is, the emphasis must be shifted from the enhancement of the individual firm to the enhancement of the collective community. By adopting at least supplemental measures of the enhancement of *community* well-being, and blurring the boundaries between the entity and its context (Leduc, 2001), it is possible to measure performance in different, more radical ways that recognize and reward behaviors that enhance community welfare even if they fail to maximize *corporate* profits. Leduc (2001) calls for such a holistic, more radical, view of a corporation that allows for the possibility that value creation in one part of the system can either help or harm the larger system. By enlarging the concept of entity, positive aspects of performance could be recognized, such as, enhancing spiritual and environmental well-being, and redistributing wealth from the business entity itself to members of the community.

Again, in many ways this tension between a Mainstream versus a Multistream interpretation of the economic entity assumption echoes Aristotle's observations about *oikonomia* and *chrematistics*. Karl Polanyi suggests that this distinction "was probably the most prophetic pointer ever made in the realm of the social sciences" and "certainly still the best analysis of the subject we possess" (Polanyi, 1977: 53–54; cited in Stahel, 2006; see also Dierksmeier and Pirson, 2009). For Aristotle, sustenance economics (*oikonomia*) was about managing all aspects goods and service producing organizations, and it referred to managing property and wealth to increase the long-run term overall (financial and non-financial) well-being for owners, members and other stakeholders. Sustenance economics [i.e., *oikonomia*] emphasizes community-oriented values, long-term multi-generational concerns, and stewardship. It speaks to issues of quality of life that cannot be meaningfully expressed or reduced to quantifiable measures like financial wealth, income or goods consumed (Dyck and Neubert, 2010, p. 87). *Chrematistics*, in contrast, refers to "the management of property and wealth in

such a way that the short-term monetary value for owners is maximized” (Dyck and Neubert, 2010, p. 76). For Aristotle, *chrematistics* should always remain subservient to *oikonomia*; *oikonomia* was the big picture of economics, *chrematistics* merely a specialized tool that should be used in a small subset of economic activity. This analysis was also used by Sismondi to reinforce the view that an anthropological perspective was needed in economics. He viewed economics as the provisioning of the household and on the societal level the same provisioning principle “of the house applied to the city”. Sismondi regretted that *chrematistics* was becoming the chief end of economics because the pursuit of wealth was being conceived of abstractly and not in relation to man and society (Stewart, 1984).

For the purposes of this paper, we note that Mainstream accounting takes a *chrematistic* interpretation of the economic entity assumption. Its focus is on (only) financial activities of (only) a specific entity in a larger community. In contrast, the Multistream approach to accounting takes an *oikonomia* interpretation of the economic entity assumption. Here accounting takes a more holistic approach to “the art of living and living well” that encompasses a variety of forms of well-being. An economic entity is not concerned merely with financial matters of the entity itself: “living well” is also concerned with nurturing meaningful community and relationships, practicing and facilitating the practice of virtues, and so on.

This problem with the Mainstream approach was illustrated in the 2008 financial and economic collapse. Roberts and Jones (2009) point to the constricted nature of the entity concept. Before the collapse, banks conducted activities through special purpose vehicles and structured investments. There was limited disclosure on the balance sheets of the sponsoring banks as these vehicles were considered outside the entity’s boundaries. Hence there was little understanding of the nature of the activities conducted, the risks involved, and the potential

losses. Accounting for the entity did not explain why such losses suddenly appeared, and could not address the systemic effects of the crisis because the losses “were only visible in the ways these touched an individual institution” (Robert and Jones, 2009, 863). Accounting, they suggest, was a “like blind men touching different parts of the elephant, or like a pixilated TV screen, there was no sight of what was generating these effects” (Roberts and Jones, 2009, p. 863).

Compared to the relatively narrow definition of entities associated with Mainstream accounting, the more holistic nature of the Multistream approach would consider interrelationships with other entities across time and space. For example, from a Mainstream approach a particular firm may be seen as a marginal contributor because of its poor financial performance, when in fact it may play an important role in the healthy *oikonomia* functioning of the community. For example, Greyston Bakeries may not be as profitable as other bakeries, but because it hires ex-convicts and drug-dealers and provides them a chance to become law-abiding contributing members of society, it plays a very important role in the communities and people it serves in New York City (Dyck and Neubert, 2010). Similarly, a specific firm may be doing very well by Mainstream measures, but when externalities are taken into account (e.g., pollution issues, long-term pollution costs, mental health of employees, etc) it may be an *oikonomia* bankrupt organization. For example, for-profit hospitals may have impressive financial performance, but at cost to its patients and other stakeholders (Cresswell, 2012).

Unit of Measure Assumption. A second basic assumption of generally accepted accounting principles is the Unit of Measure assumption. From a Mainstream perspective this assumption—which is sometimes called the Monetary Unit Assumption—states that money is the common denominator of economic activity and provides the only appropriate basis for accounting

measurement and analysis (Moonitz, 1961). The strength of using the monetary unit assumption is that it allows diverse information to be aggregated and summarized. This emphasis on using a financial measure is very consistent with *chrematistic* economics. In contrast, from a Multistream perspective, financial measures would at best constitute one of several different units of measure. Indeed, following Aristotle's warnings about *chrematistics*, Multistream managers would be hesitant to emphasize financial measures to the detriment of other bottom lines (e.g., ecological or social well-being).

Monetization leads to commodification. Money has a tendency to reduce qualities to quantities. It has the effect of flattening the world of things and stripping them of their color, taste and texture. The financial value of things is maximized over qualities of beauty and creative purpose. Aristotle made similar arguments: while attaching monetary values to commodities simplifies both trade and accounting, the pursuit of "coin" may eventually supplant the intended purpose of the transactions. As he argued,

"when the use of coin had once been discovered, out of the barter of necessary articles arose the other art of money-making, namely retail trade; which was at first probably a simple matter, but became more complicated as soon as men [sic] learned by experience whence and by what exchanges [chrematistics] the greatest profit might be made. Originating in the use of coin, the art of money-making is generally thought to be chiefly concerned with it, and to be the art which produces wealth and money, having to consider how they may be accumulated. Indeed, wealth is assumed by many to be only a quantity of coin, because the art of money-making and retail trade are concerned with coin. Others maintain that coined money is a mere sham, a thing not natural, but conventional only, which would have no value or use for any other purpose of daily life if

another commodity were substituted by the users. And, indeed, he who is rich in coin may often be in want of necessary food. But how can that be wealth of which a man may have a great abundance and perish with hunger, like Midas in the fable whose insatiable prayer turned everything that was set before him into gold?” (Aristotle, 1967, p. 42–43).

Dangers of using a monetary unit of measure are well-known in the accounting literature. For example, Neu (2000) asserts that this *monetarization* was instrumental to the objectives of colonialization and encouraged the appropriation of wealth by the colonials and the genocide of Canada’s First Nations. That is, the assignment of monetary value to non-monetary phenomena may entail certain consequences (Morgan, 1988). Along these lines, the impact of an ethical dilemma on various stakeholders tends to be understated when financial surrogate measures are adopted for items that are not directly measurable (Brooks, 2000). For example, if the value of loss of health is measured as the loss of income plus the cost of medical treatment, it will not capture the pain and suffering involved as a result of the loss of health. One possible remedy to this dilemma is to avoid the use, or at least the exclusive use, of monetary units to define value. Morgan (1988) argues that the metaphor of money should provide only a partial view of the organization, and that other lenses are needed.

Rather than try to measure everything in terms of financial measures the Multistream approach is comfortable with the messiness of developing and using different measures, and not shying away from some things that cannot be easily measured. Some initiatives have been made in the development of alternate performance reporting in the areas of sustainability and corporate social responsibility, such as the formation of the International Integrated Reporting Council whose mission is to “create a globally accepted Integrated Reporting framework which brings together financial, environmental, social and governance information in a clear, concise, consistent and

comparable format. The aim is to help with the development of more comprehensive and comprehensible information about organizations, prospective as well as retrospective, to meet the needs of a more sustainable, global economy.” (International Integrated Reporting Council, 2012).

While the use of non-financial measures—for example the balanced scorecard (Kaplan and Norton, 1992; Smith, 1998)—is often motivated by the desire to improve financial performance, the development of non-financial performance measurement systems can nevertheless measure, for example, the quality of stakeholder relationships (Svendsen *et al.*, 2001). In this way the use of non-financial measures provides a means of capturing the non-materialistic objective inherent in the alternative moral-point-of-view accounting. Indeed, some firms who explicitly use multiple measures of performance willingly reduce their financial well-being in order to enhance ecological or social well-being of the larger community (Gold, 2010).

Periodic reporting assumption. The Mainstream approach to frequency of reporting is linear based on chronological (or *chronos*) time. Moreover, the content and frequency of the reports are designed to serve the needs of financial investors and potential investors. More specifically, in many western countries the periodicity is dictated by *chrematistically*-minded investors (increasingly called “traders”) who are interested in maximizing short-term financial gains. For example, one study suggests that already by 1995 speculative investment accounted for 95 percent of all transactions, whereas as recently as 1970 trade and long-term investment accounted for 90 percent of transactions (Wilson, 2005).

In particular, there is a sort of short-termism built into accounting reports and practices. Regulators, in the interest of providing “timely” information to investors require quarterly

reporting and consideration has been given to mechanisms enabling continuous reporting.

Ample anecdotal evidence testifies to the shortcomings of this approach, where employees are driven to make decisions that maximize their bonuses to the detriment of the long term health of the entity. McSweeney (2009) has drawn attention to how accounting has been seconded to derive profit calculations that promoted short-term shareholder value to the detriment of stable, long-term markets (p. 842).

The Multistream approach would have a longer-term time horizon, and rely more on *kairos* time (vs. linear *chronos* time). Kairos time is more seasonal in nature, and takes into account the natural rhythms of organizational life. Kairos time signals when one project is over and a new one begun. Rather than force data into calendar-determined time slots, accounting and reports would be structured to make sense within the work flow of the organizations. The periodicity concept needs to recover the concept of voyage accounting. Voyage accounting accounted for the appropriate time in the organizational life. It was kairos accounting. Accounting needs to account for “moments of truth” as well as routine business events (Ramo, 2002).

As an example, some firms responding to the short term horizons of executives based on short term earnings, have introduced the concept of “bonus banks”. UBS determined their executive bonuses in 2009 but only paid out one third of the bonus: the remaining bonus is banked and drawn down over three years if predetermined targets are met. By doing so, executives are discouraged from actions that create results in the short term but are detrimental in the long term (Byrnes, 2009). We see this as a manifestation of voyage accounting – earnings for an arbitrarily short time period are imperfect measures of the success of the “voyage”. Instead, these companies are waiting for more of the voyage to be completed before rewarding

the voyageurs.

Going concern assumption. As GAAP are based on a going concern assumption, auditing standards require assessment of the entity's ability to continue as a going concern. For a Mainstream approach this assessment is characterized by three attributes, consistent with the assumptions evident in the first three GAAP principles, that reflect a materialist-individualist substantive rationality. First, consistent with its emphasis on *chronos* time in the periodicity of reporting, the going concern assessment considers the entity's ability to continue in the short term, arbitrarily defined as a one year horizon. Second, reflecting its emphasis on chrematistics as the unit of measure, the going concern assessment is concerned only with the financial viability of the entity and its "success" in monetary terms. And third, reflecting its lack of emphasis on *oikonomia* ideas as an entity, the going concern assessment is made exclusively at the level of analysis of the organization as the specific entity, essentially ignoring any positive or negative (financial or non-financial) externalities it may provide for society or the environment.

These fairly narrow criteria may actually cause problems when assessing an entity's going concern status, as evident during the recent financial crisis. Moreover, Sikka (2009) has questioned the ability of auditors to make going concern judgments given the number of unqualified audit opinions given to companies who subsequently collapsed. These myopic assessments are problematic given that accounting in a sense shapes the future and who gets to share in the organizations's surplus (Hopwood, 2009).

The Multistream approach is consistent with the idea of sustainable development, which is famously defined by the UN's Brundtland Commission as meeting "the needs of the present without compromising the ability of future generations to meet their own needs" (United

Nations, 1987). Note how this definition essentially inverts the Mainstream interpretation of the three dimensions of what constitutes a going concern. First, in terms of time-line, rather than a short-term entity-centric idea of viability, it points to a long-term future-centric understanding. The question is not whether an entity can serve needs within the narrow window of the coming 12 months, but rather what effect the entity has for the future. Second, in terms of measure of performance, rather than consider only financial aspects, it points to multidimensional aspects. The question is not about how much money a firm will make (lose) in the coming year, but rather on well it is meeting people's "needs" (not merely "wants"). And third, in terms of level of analysis, rather than focus on the financial well-being of owners and other members of the entity, a Multistream approach considers overall societal well-being.

Thus, for example, even though with \$1 billion in annual revenue Ray Anderson's company Interface Inc. was clearly a viable going concern from a Mainstream perspective, from a Multistream perspective he realized that it needed to change and become more accountable in terms of the long-term implications and externalities of its actions. The company was a financial success, but at a cost of putting over 5 billion pounds of carpet in landfill every year. The company has now developed accounting systems designed to make it increasingly ecologically and socially sustainable, and to help its customers and suppliers also do the same (Dyck and Neubert, 2010).

V. Competing Rationalities

Our analysis suggests that the Mainstream formally rational practice of double entry bookkeeping was informed by a materialist-individualist substantive rationality, and this in turn has socialized its users to adopt a materialist-individualist moral-point-of-view. Furthermore,

although the materialist-individualist substantive rationality embedded in accounting initially informed (and promoted) by what Weber calls the Protestant Ethic, it has long since been secularized and has become the dominant implicit substantive rationality guiding much of the western world. For example, the mantra of shareholder profit maximization has certainly been legitimized by the conceptual frameworks of accounting. Those frameworks also explicitly state that financial accounting information is primarily for the benefit of investors (FASB), implying that other stakeholders and other uses of accounting information are secondary in importance. In other words, the “iron-cage” is still the dominant status quo underlying current generally accepted accounting principles.

While the materialist-individualist “iron cage” has been the prevalent substantive rationality for centuries and is strongly embedded in management education (Dyck, Walker, Starke and Uggerslev, 2011), there is tension between it and contemporary alternative substantive rationalities. For example, investors increasingly demand that firms behave in a socially and ecologically responsible manner, and firms are increasingly accountable and disclose information to multiple external stakeholders (Moura-Leite and Padgett, 2011), perhaps to legitimize their existence (Eugénio et al, 2010). At the same time, many question the extent to which firms and investors are willing to forego profits to engage in these behaviors (Williamson *et al.*, 2006, Moser and Martin, 2012), and the extent to which their disclosures are reliable and reflect genuine behavioral change (Dando and Swift, 2003).

Some evidence suggests that the grip of the materialist-individualist “iron cage” may be decreasing. For example, existing challenges to the going concern assumption provide a context for people to see the unsustainability of the current system, both ecologically (for the planet as a going concern) and socially (for the people). With regard to ecological concerns, if the whole

world were ever as “developed” as the world’s leading economies, we would require three planets to handle the pollution (Rees, 2002). And with regard to social concerns, growing body of research shows that materialism and individualism result in a lower quality of life (Kasser, 2003). The status quo has resulted in widening gaps between the rich and poor (a) within organizations, (b) within nations, and (c) across nations (e.g., Weisbrot et al., 2001).

Indeed, research suggests that globally people are becoming less materialistic over time (Giacalone, 2004). A recent study finds that almost half of Americans have voluntarily made life-style changes that resulted in making less money; 85 percent believe that their society’s priorities are out of whack; 70 percent said that excessive materialism is causing harm to the global environment; and 87 percent said that current consumer culture makes it harder to instill positive values in children (New American Dream, 2004; cf. Etzioni, 2001). The Investors Responsibility Research Center (IRRC), an independent research firm in Washington, D.C. reports a dramatic increase in shareholder resolutions in 2003, many of which asked companies to address global warming and key social proposals relating to fair employment practices. The Occupy Wall Street movement provided evidence of deep rifts within society regarding the equitable distribution of wealth (Stolarik, 2012).

To some extent, this shift in the “moral point-of-view” is affecting how corporations are viewed and evaluated, and how firms behave. For example, socially responsible investing (SRI) calls for the consideration of how companies manage their environmental, ethical, and social reputations, in addition to their financial performance (Friedman and Miles, 2001; Ruf *et al.*, 2001). From 1995 to 2010 in the United States, professionally managed assets following SRI strategies had increased 380%, while professionally managed assets had increased overall by only 260%. In the United States by 2010, nearly one dollar of every eight professionally

managed dollars was involved in some form of SRI strategy (Social Investment Forum Foundation, 2010). The majority of company leaders surveyed believe at least some responsibility for social and political issues will fall to their companies, and companies are increasingly engaging in activities to ensure their products or processes are sustainable (Engardio, 2007).

The resulting interest and prevalence of voluntary reporting of non-financial measures—like triple bottom line and other types of social responsibility reporting—may be a challenge to the relevance of financial information prepared according to generally accepted accounting principles. For example, a decade ago companies began to issue “pro forma” earnings which management asserted provided better projections of future financial performance than traditional GAAP based earnings. In the same way that companies issuing pro-forma accounting figures were challenging the relevance of GAAP-based income for predicting future cash flows, supplementary disclosures of social responsibility, and certification for fair labor practices and environmental performance by bodies outside the accounting profession underline that traditional accounting inadequately meets these information needs. The accounting profession has struggled to expand assurance into these non-financial areas, providing an opportunity for competing players to develop criteria and provide assurance over these claims (O’Dwyer, 2011).

Weber’s analysis suggests that the usefulness of accounting will be increasingly eroded if it fails to adapt to shifting substantive rationalities (cf. Burchell *et al.*, 1985). The current economic recession has reminded us of the socio-political nature of accounting, pointed to perceived shortcomings of conventional accounting, and illustrated the way accounting can adapt to meet changing rationales. Taken together, understanding the substantive rationality embedded in the assumptions underlying Mainstream generally accepted accounting principles, and

developing accounting theory and practice consistent with the emerging post-materialist-individualist moral-point-of-view and needs of society, suggests that the choice of conventional versus radical accounting will play an important role in any transformation of society.

This begs the question of what a multistream, non-conventional, accounting framework would look like. Although we leave this for future research, but by way of foreshadowing we suggest that financial statements of organizations might become similar to financial statements of not-for-profit organizations following the restricted funds method. Rather than a strict “boundary” of the entity that exists now, there would be a porous boundary between the organization and the external environment. The results of the conventional entity would be presented, akin to the way that unrestricted or operating funds are presented in not-for-profit financial statements, but transfers between the entity and the external environment (similar to the “community” fund) could also be shown. In so doing, the financial statements would show not only how the entity enriched itself, but how the entity also enriched the external community. We would also expect to see “enrichment” quantified not only in monetary terms, but relevant non-monetary terms as well. Given the importance of this information to society, we would expect to see further development in agreed-upon criteria for the measurement of the phenomena, and that all these measures would be mandatory disclosures and would be subject to audit. Finally, we would also expect that longer term measures would be presented to encourage a longer-term window over which firm performance is measured.

VI. Conclusion

This paper draws from and builds on arguments first developed by Weber and Aristotle to demonstrate how a materialist-individualist moral-point-of view influences the conventional

interpretation of the four basic assumptions for generally accepted accounting principles. As such, conventional accounting encourages organizations to have a short term focus on monetary profits. The organization may be successful on those metrics while at the same time having poor performance when defined in non-monetary terms, or when viewed by other financial and non-financial stakeholders, or when viewed by the perspective of the ability of the organization to sustain that performance in the long term.

We then observe that challenges to the relevance of accounting may be related to shifts in the underlying substantive rationality held by society as societal needs and wishes evolve. We provide a conceptual framework upon which to critique mainstream accounting theory and to develop alternative accounting theory that balances multiple forms of well being (including financial, but also social, physical, spiritual, and ecological well being) for multiple stakeholders (including owners, employees, customers, suppliers, competitors, neighbors, future generations and so forth).

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i. Accountability relationships have also been debated by accountants within the entity concept raising issues of the theory of the firm. Proprietary theory emphasizes the perspective and interests of the proprietor. Accounting is directed at preserving the owner's capital, and income is measured in relation to that capital preservation. The accounting equation is expressed as $\text{Assets} - \text{Liabilities} = \text{Proprietorship}$. In contrast to proprietary theory, entity theory emphasizes the viewpoint of the business entity as the viewpoint to which accounting is directed. The accounting equation becomes $\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$. Accounting measures net income as the increase in all equities. Interest on long term debt is considered a distribution of profits rather than an expense (Zambon and Zan, 2000). Nurnberg (2009) observes the importance of this debate within the entity concept as having important economic and fiscal policy implications in society. It demonstrates how accounting is an interested activity and is used to reinforce differing theories of the firm.

ii. Another assumption implicit in this accounting treatment is that assets can "belong" to an entity. In contrast under Islam, for example—and indeed under many Christian interpretations as well—all assets belong to God (Hamid, Craig and Clarke, 1993). Therefore, entities only have stewardship over these assets, rather than ownership.