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Abstract

This paper concerns three metaphors for financial statements associated with accounting education: lenses, photographs, and the board game, Scrabble. These metaphors not only describe financial statements but also affect our interpretations of them and our behavior towards them. The lens metaphor has many implications that accounting cannot live up to; however, that does not mean that it is an inappropriate metaphor to express our aspirations for accounting and to inspire our students. The Scrabble metaphor is a somewhat pejorative metaphor that we may cynically apply to accounting, but it may also be an effective means of criticizing mindless manipulation of financial statement elements. The photographic metaphor, occupying a middle ground, might be the most intriguing of the three. At an elementary level, it captures some simple truths about accounting, or at least some simple statements we would like to be true. But as the complexities of the metaphor are explored, they reveal a variety of intriguing ontological issues that concern financial statements.

I. Introduction

Financial statements are signs that represent businesses,[1] but what kinds of signs are they? According to Peirce (1991), a sign either is an *icon*, an *index*, or a *symbol*. An icon represents through resemblance, an index through causality, and a symbol through convention. For example, a drawing of a flame is an iconic representation of a fire (the flame is our conventional image of what fire *is*), smoke is an indexical representation of a fire (smoke is caused by a fire), and the word "fire" is a symbolic representation of a fire ("fire" is how we conventionally refer to a fire in the English language). Were financial statements icons, they would look like a business, were they indices, they would be the result of a business, and were they symbols, we would have agreed that they represent a business.

It would be easiest to make the argument that financial statements are indices; that is, they are *necessary byproducts* (the smoke) of the operations of a business (the fire). A business cannot operate without generating financial statements; thus, they signal to us that a business has been operating. Some might challenge the word *necessary.* If businesses can operate without producing financial statements, then financial statements are more like symbols (the word "fire") that we have agreed represent the business (the fire itself). Others might challenge the word *byproducts*. For many constituencies (both external and internal), financial statements are all that is ever seen of an enterprise. As such, they are not merely byproducts or traces (the smoke), but iconic images (the drawing of a fire) of the business (the fire).

The semiotics of financial reporting; that is, financial statements as *signs*, is an interesting academic issue. What transforms it into an interesting practical issue that affects the functions of business, accounting, and finance, however, is the connection between semiotics and metaphor. How we believe that financial statements represent businesses as signs is embodied in the metaphors we use to describe financial statements. Previous research has consistently noted that metaphors are used in various realms of accounting including technical accounting pronouncements (Young 2001), accounting textbooks, and discussions by practicing accountants (Walters-York 1996). However, metaphors not only describe financial statements, but they also influence our interpretations of them and our behavior towards them. A metaphor explicitly states that something *is* something else, even though metaphors are not identities. Although

[1] This statement uses Sebeok's (1994) very broad definition of a sign as "any mark, bodily movement, symbol, token, etc., used to indicate and to convey thoughts, information, commands, etc." (Sebeok, 1994, p. xi)

something is not identical to something else, some aspects of it are indeed the same as for something else. Some of these identical aspects may have suggested the metaphor, whereas others are suggested by it. What is of special interest concerning metaphors are not the similarities out of which the metaphors first arose, but the similarities that we subsequently discover, and even create, as a result of the use of the metaphors. Lakoff and Johnson (1980) define metaphors as ways of expressing one experience in terms of another. When we think or speak about something as if it were something else, we are inclined to act in such a way that it actually becomes more like that something else.

This paper concerns three metaphors for financial statements (lenses, photographs, and the board game, Scrabble). Each of these metaphors that students typically encounter soon after they come in contact with accounting largely corresponds to a different type of sign (icon, index, and symbol). It is common for accounting textbooks to explicitly state that financial statements are lenses through which enterprises are viewed or that balance sheets are snapshots of an enterprise taken at the end of a reporting period. Although no textbook would explicitly state that financial statements are like a game of Scrabble in which alphanumeric symbols are arranged according to a specific set of rules, students often implicitly behave as if they are.

If financial statements are lenses, then looking at them is looking at the business. As lenses, they are icons that resemble the business because we see a likeness of the actual business through them. If financial statements are photographs, then looking at them may also be like looking at the business. What distinguishes photographs from paintings or drawings, however, is that a technical process through which an original, as a consequence of its presence in front of some sort of photographic apparatus, physically causes the photograph. As photographs, financial statements are in this way, indices. Finally, if financial statements are like games of Scrabble, they are then consequences of agreed upon rules for their production. As such, financial statements are symbols.

The following three sections (II, III, and IV) each consider one of the three metaphors and its implications for how we interpret financial statements and behave towards them. Of course, they are not the only metaphors for financial statements[2], and they may not even be the most familiar. Nevertheless, they are representative and suggestive, and we use them (lenses and photographs) or attempt to disabuse students of them (Scrabble) in our accounting pedagogy.

[2] For example, in a review encompassing over 30 financial accounting standard board pronouncements Young (2001) identified numerous metaphors related to risk.

The final section V is an overall summary of what these metaphors say about our beliefs concerning the nature of accounting, financial statements in particular. The sequence "icon-to-index-to-symbol" reflects an increased distancing between the sign and what it actually represents. We believe that this paper is the first to specifically use Scrabble as a financial reporting metaphor; thus, it definitely postdates the metaphors of financials statements as lenses or as photographs. It might therefore be tempting to apply a historical interpretation to the sequence; that is, accounting has become increasingly distant from business over time. It is possible, though, that the opposite has occurred—that we have increasingly come to see business not as it is, but as we account for it. Our representations may have become increasingly abstract, but like other metaphors that we no longer recognize as such, we may have come to mistake our representations for the real thing.

II. Lenses and Accounting

The lens metaphor used to describe financial statements appears in the popular financial press (Labro, 2004; Watson, McGuire & Cohen, 2000), in accounting textbooks (Williams, Haka, Bettner & Meigs, 2003; Deegan, 2000), and in the professional literature disseminated by large public accounting firms (Bell, Marrs, Solomon, & Thomas, 1997). By virtue of widespread use, it may be argued that lenses are an accepted *mainstream* accounting metaphor. Mainstream metaphors often become established as resolute truths due to unwarranted fixations and to blurred boundaries between that which is real and representations thereof (Walters, 2004).

In this section we discuss the implications of the lens as a mainstream iconic metaphor used to represent financial statements. Our intent is not to defend - nor is it to completely debunk - the appropriateness of the lens metaphor. Our purpose is to examine the consequences of the lens metaphor—to consider its effects on students studying accounting and on investors who use financial statements.

The lens metaphor has a number of seemingly useful entailments regarding accounting in general and financial statements in particular. These include:

1. *Transparency*- Financial statements and their related rules and regulation ideally should be highly *transparent*/clear (Giles, Venuti, & Jones 2004; Ohly 2002).

2. *Perception/Clarity*- Financial statements ideally should facilitate *perception*, comprehension and evaluation of a company's financial performance. In other words, financial statements should correct blurry

images of a business, thereby increasing the opportunity for objective rational analysis of a company's financial performance (Derieux, 1994). Improving *clarity* is a stated goal of a number of emerging financial accounting standards (FASB, 2005).

3. Magnification- Like a telescope, financial statements should be able to allow external shareholders to more closely see a business that they may feel distant or remote from because they have no personal contact with the people who run the business (Laurance, 1988).

4. *Focus-* Financial statements and related financial analysis should enable a reader to *focus* on the key financial indicators of a business (White, Sondhi, and Fried 2003).

Our statement that the lens metaphor reflects iconic representation itself requires clarification. If a sign is an exact replica of the object, then it is not an icon, and if we think of a lens as simply a transparent device through which we see an object exactly as it is, then a lens is *not* an icon. It is our position, however, that lenses enable us only to *imagine* the exactness of an object. From the perspective of the viewer, a lens intervenes to create transformations in the subject being viewed. A microscope magnifies the object so that it appears much larger than it really is. A telescope miraculously enables us to see objects that are thousands or millions of miles away, but when Venus and/or Mercury are viewed through a telescope these planets appear much smaller than they actually are. Such transformations mean that we are not really seeing something as it should appear to us from our viewing position. We are looking at an image.

The use of a lens as a tool for understanding depends, in part, on a realization that images conveyed to the eye are more or less fictions. Early users of lenses did not believe that what they were seeing was an object itself, as noted by Darnton in, "*Mesmerism and the End of the Enlightenment in France*":

> "The progressive divorce of science from theology in the eighteenth century did not free science from fiction, because scientists had to call upon the imagination to make sense of, and often to *see*, the data revealed by their microscopes, telescopes, Leyden jars, fossil hunts, and dissections." (Darnton, 1968, page 12)

Ignoring for now the deliberate and unethical distortions of financial statements in recent years, it is important to realize there is a tremendous amount of judgment and estimation (the cynic might say *imagination*) in the creation of all financial statements[3]. Tinker (1991) accuses corporations of utilizing the discretion they exercise over accounting numbers to *create meaning* (i.e., "I'll believe it when I see it!" in terms of financial reporting often becomes, "I'll see it when

[3] For example, revenue recognition involves a significant amount of judgment and the FASB and IASB have struggled for years to develop a comprehensive statement addressing the issue (Marshall, 2004).

I believe it!" as it was for historical users of microscopes and telescopes.) Thus, achieving perfect transparency, objectivity, or neutrality may not be possible even if financial statements are free of intentional or illegal misrepresentations. Although the accounting profession has strived for a transparent, objective, and neutral reporting environment[4] (FASB, 1980; Turner and Goodwin, 1999), its rule-making efforts have been largely unsuccessful (Rubin and Buckner 2003; Monroe, 1995).

In addition to being transparent and clear, the efficacy of a lens depends on its capacity to focus and to magnify. Financial analysts tend to focus primarily upon aggregate components of performance in the financial statements (e.g., net income, revenue growth, etc.) to the exclusion of specific line items such as unfunded employee pension obligations, loan loss provisions, and asset impairments. There is an inherent danger that the objects upon which financial lenses focus become overly magnified and thereby lead to a myopic exclusion of important *non financial* indicators (e.g., a company's hiring practices, its environmental friendliness, product safety, its treatment of women and minorities, etc.).

The tendency to focus upon and to magnify insignificant – yet verifiable – objects is not unique to accounting. The history of lenses is filled with instances of lenses being used to focus and magnify trivial but verifiable objects. For example, consider the challenge initially faced by Galileo when attempting to convince others of the telescope's role in scientific inquiry:[5]

> "Galileo demonstrated his new telescope to prominent observers at a villa outside Rome. When the telescope was pointed at the heavens many present were not convinced that what they saw were satellites around Jupiter or mountains on the moon. Observers were impressed, however, by Galileo's ability to use his optic tube to read inscriptions carved on a distant building. Julius Caesar Lagalla disputed the ability of the telescope to accurately show objects on the moon; he nonetheless was enthused that the telescope made it possible to read the letters on the gallery which Sixtus erected in the Lateran [so clearly] that he distinguished even the periods carved between the letters, at a distance of at least two miles." (Spiller, 2000)

[4] A review of recent accounting projects being examined by the Financial Accounting Standard Board (FASB) shows a concentrated effort to achieve greater transparency with regard to financial statements. For example, in its periodic public project updates, the FASB stated the following related to its Business Combinations project: "The objectives of this phase (the second) of the project are to improve certain purchase accounting rules and practices to increase the *transparency* of information to users of financial statements" (FASB, January 5, 2004). Similarly, in providing some historical context for their current and long standing Liabilities and Equity Project, the FASB stated the following: "The objective of the project is to improve the *transparency* of the accounting for financial instruments that contain characteristics of liabilities, equity, or both" (FASB, December 18, 2003).

[5] There is some dispute regarding the inventor of the telescope. This is mostly due to the fact that around the time when the telescope is said to have been invented, many people including Galileo seem to have claimed to have been its inventor. However, Hans Lippershey, a spectacle-maker from Holland, is the man that most historians believe invented the telescope in 1608 (Reston, 1994).

Accounting in general and financial statements in particular enable focused analyses. The important question is, "Are we focusing on the right things?" Arguably, the focal point of any lens (financial statements notwithstanding) dictates viewer perceptions and biases.

In addition to life experiences, the manner in which we interpret and understand the world around us hinges upon the focus[6] and the degree of magnification (emphasis) we place on various pieces of data/information. For example, financial analysts place tremendous focus and magnification on quarterly earnings. As a result, a company's stock price can be penalized severely if earnings fall short of forecasted targets by even the slightest amount. Perhaps users of financial statements, like the people of Galileo's time, "ignore Jupiter" by focusing upon historical inscriptions carved in the courtyard wall. It appears that users' perceptual biases - in combination with optical imperfections that distort transparency and clarity - hinder the representational faithfulness of financial statement lenses.

Interestingly the Financial Accounting Standard Board's definition of representational faithfulness (the correspondence or agreement between accounting numbers and the resources or events those numbers purport to represent) is quite similar to Peirce's (1991) description of an icon. Moreover, the term representational faithfulness is itself an emotive accounting metaphor signifying a number of different and sometimes conflicting attributes:

> "The implicative complex evoked by reading of the secondary subject 'faithfulness' might include attributes (some of which may constitute subordinate metaphors) such as belief, religion, fidelity, loyalty, obedience, honor, trust, observance of duty, firm adherence to promises, strong conviction or alternatively blind belief in something for which there is no proof, fanaticism, hypocrisy and so on." (Walters-York-1996 p. 54)

The two most relevant attributes of representational faithfulness identified above by Walters-York (1996) are *trust* and *religion*. Trust is the assured reliance on the truth of someone or something, whereas truth is a general agreement of a sign with its object (Peirce, 1991). In the wake of the various accounting scandals that have occurred in the last ten years, an argument can be made that trust in financial statements has been reduced (Rezaee, Z., 2004; Koller, 2003; Petrillo, 2002). In essence, financial statements – like lenses – can blur distinctions between fact

[6] Brunswick's Lens Model (1956) relates strongly to the concept of focus. Brunswick proposed that complex stimulus patterns are processed as if through a lens. Scattered stimuli are focused into a single perception of the environment. This helps to reduce the complexity of the environment. The actual state of the environment and the resulting perception may overlap, resulting in an accurate/transparent perception. Or the actual state of the environment and the resulting perception may be far apart (inaccurate perception) (Belkaoui, 1989). Tinker (1991) makes a similar observation regarding the telephone. Specifically, he notes that the telephone is selective and reflects intended and unintended biases.

and fiction and thereby negate any agreement of a sign with its object (i.e., financial statements negate truth).

Religion is also an attribute of representational faithfulness and the lens metaphor. For example, During (2002) notes that Baruch (Benedict) Spinoza was both a philosopher and lens maker. This fascinated During because of the congruence between Spinoza's thought and his trade:

> "Lenses enable that concentration of vision which becomes an analogue not only for the 'light of reason' whereby we grasp 'adequate' ideas, but also for the spiritual inner light of Protestantism, which Spinoza presses into the service of his rationalism." (During 2002, p. 262)

It is possible that when the Financial Accounting Standards Board introduced the concept of representational faithfulness twenty-five years ago its motive was to provide a *light of reason* or an *inner light* to financial reporting. Conversely, one might also argue that in the decades preceding the Enron and WorldCom debacles, many of the Board's pronouncements and concept statements were nothing more than *optical gimmicks* used to distort economic reality and mask conflict, in much the same way that optical gimmicks/illusions and magic were once pervasive in religious services[7] (Klein, 2004).

Lenses are used extensively in accounting education (and elsewhere) as iconic metaphors to describe financial statements. The implication is that financial statements - like lenses - focus upon and magnify, and thereby reveal to users information about the performance and financial position of an economic enterprise. And they do so clearly and transparently. Without delving too deeply into the metaphor, this is certainly what accounting education wants to communicate to students about the activities of the accounting profession. Another familiar pedagogical metaphor, the photograph, also has attractive entailments. But it has even more interesting implications when considered in greater depth.

III. Photographs and Accounting

[7] "Optical gimmicks were pervasive in many churches and theaters by 1622. Perspective could be accelerated or decelerated by tilting floors, narrowing walls, adding a deep focal point. Special effects were featured on ceilings: trompe l'oeil, accelerated perspective, anamorphosies - to induce a moment of wonder - a "vertigo" when the lid of a building simply dissolved." (Klein 2004 p.112).

The balance sheet is a snapshot of an economic enterprise. This textbook metaphor reinforces for students certain attributes of the traditional image of accounting: the production of an accurate image of a business at a single point in time. Another entailment of the metaphor, that accounting is a technical process independent of the accountant, is not necessarily intended but is not undesirable. The metaphor has other less desirable implications of which students more gradually become aware: (1) financial statements are a consequence of the technologies of its production; (2) financial statements privilege the point in time of which it is an image; (3) financial statements are consequences of the decisions of the accountant; and (4) financial statements can be manipulated. But there are still other, more subtle, implications of the metaphor: (5) the business can become more of a consequence of accounting than accounting is of the business; (6) financial statements are experienced in a socio-cultural environment that determines its reception; (7) financial statements permit a single point in time to be replicated, distributed, and preserved; (8) the appropriation of the image of the business in the form of financial statements empowers accountants. In short, the ontology of financial statements is quite different than that of the business. Once an image has been created, such as financial statements as an image of the business, it takes on a life of its own.

It is not clear whether a photograph is an icon or an index. This confusion is a consequence of the photograph's dual roles of documentation and duplication (Savedoff, 2000). The technical process by which a photograph is created *documents* the existence of the objects in the photograph. In order to have been photographed, they must have been in front of the camera, and their presence there caused their image to appear on the photograph. The photograph as a document is an index of the objects in it. For whatever historical or cultural reasons, we also believe that this technical process faithfully *duplicates* the appearance of the objects in the photograph as they were when they were in front of the camera.[8] The photograph as a duplication is an icon of the objects in it. In the intended sense of the textbook metaphor, financial statements as photographs are therefore accurate (duplication) records (documentation) of business operations.

We do not intend to question photographs as documents, because it is just this documentary role that distinguishes photographs from paintings.[9] Unless something existed in

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[8] "Although the photograph may be *understood*, at least in part, as a construction of the photographer, and as itself transformative of the objects it presents, it may nevertheless irresistibly be *seen* as presenting us with a record of fact." (Savedoff, 2000, p. 50)

[9] "I call "photographic referent" not the *optionally* real thing to which an image or a sign refers but the *necessarily* real thing which has been placed before the lens, without which there would be no photograph." (Barthes, 1981, p. 76) and "The important

front of a camera using a technical photographic process to record its image, it isn't a photograph, as much as it may look like one.[10] But we can certainly question the documentary nature of financial statements. Any set of numbers that obeys certain rules can serve as a financial statement, and such synthetic statements are quite common in pedagogical material. Of course such a statement is a painting and not a photograph, although we never use that pejorative metaphor. It is, in fact, quite closely related to the metaphor of financial statements as *games* and will be dealt with in greater detail in the following section.

Whether photographs are duplications is the more interesting issue for us. Earlier statements on the philosophy of photography conflated the roles of documentation and duplication and stressed the objectivity of the image (Savedoff, 2000):

> "The production by automatic means has radically affected our psychology of the image. The objective nature of photography confers on it a quality of credibility absent from all other picture-making. In spite of any objections our critical spirit may offer, we are forced to accept as real the existence of the object reproduced, actually *re*-presented, set before us, that is to say, in time and space. Photography enjoys a certain advantage in virtue of this transference of reality from the thing to its reproduction." (Bazin, 1979, p. 144)
>
> "The photographic image is the object itself, the object freed from the conditions of time and space that govern it.. . [The image] shares, by virtue of the very process of its becoming, the being of the model of which it is the reproduction; it *is* the model." (Bazin, 1979, p. 145)

In these passages, we see how the photograph as document is naturally taken to justify the photograph as duplicate. In a nearby passage, Bazin points out that the French word for *lens* is *objectif.* The only difference between viewing an object through a lens and taking a photograph of it (also through a lens) is the chemical/electronic process which captures and preserves the image instead of the human eye and mind.[11] One process is just as *objective* as the other, although looking at a photograph of an object taken through a camera lens does place us at a greater distance than looking at the object through a microscope, telescope, or eyeglass lens.

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thing is that the photograph possesses an evidential force, and that its testimony bears not on the object but on time. From a phenomenological viewpoint, in the photograph, the power of authentication exceeds the power of representation." (Barthes, 1981, p. 88-89)

[10] Traditional and digital matte paintings for films are paintings which are intended to resemble photographs when projected on the screen, but are surprisingly unlike photographs when viewed closely. Savedoff (2000) notes that painting may more accurately represent how we see than photographs. Photorealist paintings are very much more like photographs, but how intentional the resemblance is a more complicated matter.

[11] "And this—for I come at last to our main subject—precisely this is the function of photography. . .Here is a new and accurate visual memory, a perfect record of what the brain must necessarily forget or confuse. Here is an art that truly imitates the given nature, in the proper meaning of this much-abused phrase—an art that carries on in the spirit of nature, but with another organ, functions which the given nature imperfectly performs. Photography imitates memory, so that its product, the photograph, carries out the function imperfectly fulfilled by the mental image. The virtue of photography is to preserve the visible semblance of interesting things so that the memory of them may be fixed or accurately restored." (Santayana, 1981, p. 259-260) Snyder and Allen (1975) point out, however, that there is nothing within us corresponding to a photographic image.

Once again, the textbook use of the photographic metaphor of financial statements equates the financial statements with the business of which they are an image. It is very much the equivalent of the standard interpretation of the lens metaphor.

A closer look at photographs challenges their duplicative powers.

> "Photographs transform their subjects. They have the power to make even the most familiar objects appear strange, the most chaotic events appear structured, or the most mundane items appear burdened with meaning. Photographs seem to reveal to us things that cannot be seen with our eyes alone." (Savedoff, 2000, p. 2)

But how do photographs do this? The most obvious answer is that no technology is perfect, if it were even possible to assess perfection. The qualities of the lens, the qualities of the chemical film or the electronic CCD (Charge-Coupled Device), and more importantly the skill or lack thereof of the photographer or electro/mechanical surrogate setting focus, aperture, shutter speed, flash, etc. all have profound effects on the image. And like photography, the technologies of data collection affect financial statements.

A more interesting answer is the selectivity necessarily exercised by the photographer, who chose one sight over an infinite number of others to be preserved for extended viewing. Fry (1998) has said in reference to art that we only really see what exists only to be seen, and the photograph preserves a selected sliver of reality to be seen for the sake of seeing (Sontag, 1977). The photograph has a special importance not only because we are in a position to spend more time seeing it and devote more conscious thought to it than we *could* if the sight were to pass by us in our daily routine. We spend more time seeing it and devote more conscious thought to it than we *would* if the sight were to pass by us in our daily routine because the photographer chose it so that we would do so.[12] We are not only able to use our own eyes in a different way, but we are also able to use someone else's eyes. It is not surprising that there is a photographic way of seeing quite different from our normal way of seeing (Sontag, 1977). And like photographers with their photographs, accountants choose which events to record and how and when to record them. There is as much an accounting way of seeing as there is a photographic way of seeing.[13]

Although recent advances in digital technology have made the process easier and more sophisticated, it has always been possible to manipulate photographs. While the manipulated

[12] "Every depiction is an interpretation." (Maynard, 1983, p. 157)
[13] We must not ignore the impact that both photographers and accountants have. They don't just select something for representation, they alter it in the process. (Arnheim, 1974)

photograph may remain a document in that all of the objects within it did indeed appear in front of the camera at some time, it is not a duplicate in that they did not necessarily appear in front of it at the same time or in the same arrangement. A more common, and simpler, form of manipulation is the posed photograph, in which objects in the image appearing to have been arranged naturally were in fact arranged by the photographer. Financial statements purporting to have been captured in the normal course of business are of course also often posed.

All of the preceding entailments of the metaphor of financial statements as photographs, both intended and unintended, can be interesting but are not unexpected. The most provocative qualities of the photograph are a consequence of its being a real object in its own right and not simply a record (document) or image (duplicate) of a real object. And it is these qualities that suggest the most provocative entailments of the metaphor.

> "It suited Plato's derogatory attitude toward images to liken them to shadows—transitory, minimally informative, immaterial, impotent co-presences of the real things which cast them. But the force of photographic images comes from their being material realities in their own right, richly informative deposits left in the wake of whatever emitted them, potent means for turning the tables on reality—for turning *it* into a shadow. Images are more real than anyone could have supposed." (Sontag, 1977, p. 179-180)

Several authors have commented that through constant exposure to photographic images, we begin to adopt a photographic way of seeing as our normal way of seeing, transforming life into a series of photographs (Sontag, 1977; Ivins, 1980). Rather than images having the qualities of real objects, real objects have the qualities of images. Life becomes an exhibition to be viewed rather than an experience to be lived; what cannot be captured in a photograph is subordinated to what can (Marincola, 1982). For example, some people visiting popular tourist attractions never put down their cameras, and we cannot know whether they are documenting the event for the benefit of absent others or whether the site does not look "right" unless viewed through the apparatus and transformed into an "image." When we become too accustomed to seeing a business in the form of financial statements, the purpose of the business becomes the production of attractive financial statements, and what our financial statements exclude becomes secondary to the business.

Barthes (1979) views the photograph as a message. The uncoded part of this message consists of its denotations, which for a photograph are a perfect analog of what it was that appeared in front of the camera. The coded part of this message consists of its connotations, which are the socio-culturally grounded connections to other images and ideas introduced in both the production and reception of the photograph/message. What appears to be an objective image is in fact an ideologically-loaded object that intentionally or unintentionally invokes what is not there (Berger, 1980). And what appear to be objective financial statements are ideologically loaded at a fundamental level through their structure and what they include and exclude.

Contemporary artists, among them Sherrie Levine, have explored the idea of the appropriation of imagery.

> "[Sherrie Levine] takes the position that every photographic act is essentially an appropriative gesture, triggered by an acquisitive desire that finds its outlet in the duplicative capabilities of photography. The critical property of photography, then, becomes its status as a copy, or a representation. Levine's posture subverts the privileged status of the original, offering in its place a critique of what some see as the politics of the art market: of the work of art as one more luxury item available for consumption." (Marincola, 1982, p. 24)

What this might mean for accounting is not so clear but nonetheless exciting. Financial statements permit the unlimited reproduction and distribution of a piece of a business—a piece that achieves a disproportionate importance as a result of this reproduction and distribution, as it is all that many if not most of the recipients will have of the business. Photographs are "inexhaustible invitations to deduction, speculation, and fantasy" (Sontag, 1977, p.23). And Levine's photographs may even become more famous than the photographs or paintings she appropriates, just as the original photographs and paintings, if worth appropriating, are almost certainly more famous than the objects they depict. Likewise, financial statements may be dissected, analyzed, evaluated, and projected by financial analysts or business leaders whose comments and judgments may become more widely known and influential than the financial statements or even the business itself. We may be quite familiar, for example, with Warren Buffet's opinions, based upon information we do not know concerning a business we've never heard of. Just as Levine's photographs comment on the art market, Buffet's comments shape financial markets.

Additionally, the act of appropriation empowers the appropriator. It is an aggressive capture of reality (Sontag, 1977). This is not simply a matter of the photographer or accountant having the power to shape the image of an object or of a business. Normally, we think of objects and businesses possessing and controlling their own images. Photographers and accountants have the ability to create, possess, and control an image that may be both more revealing and more powerful than the original object or business. Finally, everyone is familiar with the letdown experienced when a tourist attraction visited in person fails to live up to its image in the brochures. Advanced accounting students feel a similar letdown when businesses don't fit as nicely into the clear-cut categories as they did in the introductory courses.[14]

When we move from the metaphor of financial statements as lenses to accounting statements as photographs, we move from financial statements as icons of businesses to financial statements as indices of businesses. Financial statements *may be* documentary, and photographs *are* documentary, but neither are duplicates, just as smoke documents the existence of the fire but is not the fire itself. Financial statements and photographs are independent entities, which along with reflecting properties of what it is they represent, have properties of their own. When we move from the metaphor of financial statements as photographs to financial statements as games, we cut the documentary cord as well.

IV. Scrabble and Accounting

The signs and symbols of metaphor convey imperfect representations of the way things actually are. In accounting education, the collage of traditionally accepted metaphors used to depict financial reporting often diverts our attention away from politically charged issues by masking conflict and glossing over social tensions (Walters, 2004; Young, 2001; Walters-York, 1996). Alternative and critical uses of metaphor have been suggested to challenge the fictions that underlie mainstream accounting thought (Tinker, 1991; Boland, 1986; Boland, 1989; Boland & Greenburg, 1992). Several nontraditional metaphors have been used to highlight the deficiencies of mainstream accounting images (Davis, Menon, & Morgan, 1982; Preston, Wright, & Young, 1995; Preston & Oakes 2001; Preston & Young, 2000; Young, 2001). Alternative metaphors, including ritual (Gambling, 1987; Mills & Bettner, 1992), magic and witchcraft (Gambling, 1977; Covaleski & Dirsmith, 1981), and games (Goldberg, 1997; Mulford & Comiskey, 2002) have been used to dismiss conventional images, perceptions, models, and paradigms widely used in accounting education.

Images of accounting "games" sometimes entail creatively deceptive uses of financial information to mislead, manipulate, or to exploit others (Collins, Munter, & Finn, 1987). Our

[14] "Cameras define reality in the two ways essential to the workings of an advanced industrial society: as a spectacle (for masses) and as an object of surveillance (for rulers)." (Sontag, 1977, p.178) The latter has been around for a long time for accounting, but a surging stock market and financial scandals have made accounting a spectacle for the masses too.

use of Scrabble as a nontraditional metaphor is not about deceitful gaming behaviors, per se. Rather, our focus is upon inherent characteristics that highly competitive tournament Scrabble shares with financial statements. Our examination of these shared characteristics provides insight regarding the shortcomings of mainstream images used in accounting education to tout the usefulness, neutrality, and representative faithfulness of financial statements.

There are only several hundred true *masters* of tournament Scrabble whose NSA (National Scrabble Association) ratings exceed 2000. Members of this elite group have an uncanny ability to obsessively compartmentalize their thinking to avoid panic or worry. Most of them are brilliant, and all of them can be extremely competitive and cutthroat (Price, 1995). One might surmise that these players are an eclectic fusion of writers, crossword puzzle enthusiasts, and/or linguistics experts. They're not; rather, they're a predominately male mix of mathematicians, computer programmers, and a handful of true eccentrics for whom classification by professional background is meaningless. For the very best in the world, a mastery of words is not essential to their mastery of Scrabble because for these players, Scrabble is *not* a game of *words* (Teel, 1998; McCumber, 1997; Fatsis, 2001).

The true masters of the game are experts at rack management and point optimization. Most have committed to memory tens of thousands of the highest scoring tile combinations. These players *do not memorize definitions,* for word *meanings* are of little significance. The fact that words happen to appear on the board is a byproduct of the rules of the game and nothing more:

> "[D]efinitions, for the limited purpose of playing Scrabble, don't matter. One could even argue that words aren't words at all. They are strings of letters dancing across the board, an array of lines and arcs and circles. [T]he letters that comprise them are nothing more than scoring tools which must be juxtaposed in a fashion deemed acceptable by a source or else rejected from the playing field. They could be random shapes or colors or buttons or widgets that must be placed in a regulated order. They just happen to be letters forming words." (Fatsis, 2001, p. 39)

Financial statements and Scrabble both rely upon symbols arranged systematically with rules governing their usage. The elements of financial statements, like the game tiles of a Scrabble board, are comprised of symbols with numbers assigned to them for the purpose of measuring and scoring performance (net income, earnings per share, current ratio, return on assets, etc.). In much the same way as a Scrabble player's skill rating or world ranking is determined by tournament performance,[15] a corporation's credit rating or ranking among the Fortune 500 Companies is determined by financial reporting performance. Whereas a Scrabble player's skill rating can be independent of his or her vocabulary, a financial analyst's ability to use accounting information does not require a thorough understanding of what certain financial statement elements actually *mean* (e.g., deferred tax assets, accumulated comprehensive losses, the cumulative effect of a change in accounting principle, etc.). Often, all an analyst must know is whether the numbers assigned to combinations of specific elements result in favorable "scores" (e.g., a high ROI, an acceptable debt-to-equity ratio, a realistic PE ratio, etc.).

In Scrabble, the sequence of game tiles appearing on the board transcends the ostensible meaning of words by creating values used to score performance, rate skill-levels, and determine player rankings. In a similar fashion, the elements of financial statements transcend representative faithfulness by creating artificial images and measures often unrelated to any meaningful or substantive characteristics of the reporting entity (Tinker, 1991; Preston, Wright & Young. 1996; Davis *et al.*, 1992; McGoun, Bettner, & Allen, 2003; Mills & Bettner, 1992).

The importance of symbols – be they Scrabble game tiles or financial statement elements – is not what they *are*, but what they *do*. The alphanumeric symbols of both Scrabble and financial statements are used to construct worlds wherein the scoring of performance is transmitted. And while these symbols possess no clear meaning in and of themselves, both are used to signify meaning and create potentially biased realities in which point optimization is rewarded (Tinker, 1991; Hall 1997; Preston *et al.*, 1996; Davis *et al.*, 1992; Walters, 2004; Walters-York, 1996). In essence, the tiles on a Scrabble board and the elements in a financial statement appear to have *lives* of their own – both insulated and isolated – as if existing in a vacuum.

To illustrate, words such as "flokati," "oquassa," or "sierozem" have practically no relevance or usefulness in any context other than a Scrabble board. Likewise, accounting concepts such as "accumulated depreciation," "comprehensive income," "deferred credits," and

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[15] Scrabble players who compete regularly in tournaments are rated and ranked by the National Scrabble Association (NSA), a pseudo-private organization funded in large part by Hasbro, Scrabble's legal owner. The NSA publishes a newsletter and rates and ranks by skill-level over 2,300 tournament players in over 200 Scrabble clubs worldwide. Tournament players typically compete against those with similar skill-level ratings. The computation of a player's rating is based on a formula incorporating their tournament record, the ratings of those they've played, their scores, etc. Those with NSA ratings below 1200 are considered novice players and are assigned to the lowest divisions of club play. Those with ratings between 1200 and 1700 normally compete in intermediate divisions, whereas those with ratings in excess of 1700 compete in the expert divisions at major tournaments (Chamish, 1987; Fatsis, 2001).

“retained earnings” have practically no relevance or usefulness in any context other than financial statements. Moreover, the *values* computed by the assignment of numbers to symbols both in Scrabble and financial statements are used and interpreted in seemingly detached and secluded worlds. Indeed, 74-point words do not exist anywhere in the universe but on a Scrabble boards nor do they convey anything about the character, integrity, or reputation of a player. Likewise, current ratios of 2:1 do not appear anywhere in the universe but on balance sheets, nor do they convey anything about the character, integrity, or reputation of a corporation’s chief executive officers.

Accounting rules (GAAP) formalize the structure and formation of accounting information in the much the same way as rules of Scrabble formalize the structure and formation of a player’s game tiles. Violations of GAAP (e.g., overstating revenue, understating liabilities, capitalizing expenses, etc.) and violations of the official Scrabble game rules both have economic consequences that can affect wealth distribution, capital availability, and risk assessment (Beaver, 1989). A comparison of the potential economic consequences common to both financial reporting and Scrabble is illustrated below:

Economic Consequences	Financial Reporting	Tournament Scrabble
Wealth Distribution	Bonuses, Dividends, and Stock Prices	Prize Money for Players
Access to Capital	Being Listed on a Major Exchange	Being Invited to Major Tournaments
Performance Assessment	Earning a Strong Credit Rating	Earning a Strong Skill Rating
“Player” Ranking	Position Among S&P 500 Companies	Position Among Other Grand Masters

The economic consequences of financial reporting and tournament Scrabble underscore the importance of *playing by the rules* and the risks and responsibilities associated with whistle blowing. For instance, if during a Scrabble tournament a competitor tries to cheat by playing an illegal word, it is up to his or her opponent to challenge the play. Should an illegal word go unchallenged, the player failing to blow the whistle is cheated, exploited, and may actually lose the game because of it. Likewise, if during the preparation of its financial statements a corporation is in violation of GAAP, it is up to the independent auditors (or management) to report the irregularity or risk becoming implicated in a scandal. In financial reporting, as in Scrabble, the economic consequences of whistle blowing – or failure to blow the whistle – can be devastating (consider the plights of Arthur Andersen and the thousands of stakeholders devastated by the collapse of Enron).

The economic consequences and risks associated with financial reporting unquestionably outweigh those of tournament Scrabble. Yet, both financial statements and Scrabble boards - in and of themselves - share common characteristics revealing similar risk and reward relationships. The lens metaphor is inferior to the Scrabble metaphor in this regard. Interestingly, the fact that while serving time for securities fraud, Michael Milken organized a prison Scrabble tournament (as opposed to a bird watching or a star gazing or a photography club) may also say something about the value of the Scrabble metaphor over lens metaphor or the photograph metaphor in describing and understanding the characteristics of financial statements (Fatsis, 2001).

V. Conclusion

Throughout this paper, we have considered representation in Peirce's semiotic terms as taking the form of an icon, an index, or symbol. In this conclusion, let us examine our metaphors for accounting representation within an art-theoretical framework. Representation in the arts means that someone (the artist) intends something (in the artwork) to stand for something else, and an audience (the interested public) recognizes this (Carroll, 1999). The first part of this definition is just the use of a sign. The second part, however, poses the interesting question of how we recognize a sign.

There are four types of representation: (1) unconditional representation in which we recognize that X stands for Y because we perceive X in exactly the same way as we would perceive Y; (2) lexical representation in which we recognize that X stands for Y because we know that X is the standard code for Y; (3) conditional specific representation in which we infer from our background of antecedent knowledge that X stands for Y; and (4) conditional generic representation in which we infer from our background of antecedent knowledge that if X stands for something, it is Y. The difference between (3) and (4) depends upon whether we recognize that X is standing for something or not (Carroll, 1999). The connection to Peirce's classification is that an icon is an unconditional representation (a drawing of a fire looks like a fire, which is how we recognize it as a fire), a symbol is a lexical representation (we have learned that the word “fire” refers to a fire), and an index is a conditional specific representation (we know that smoke is produced by a fire).

Thinking about financial statements in these art-theoretic terms is somewhat different than thinking about them in the semiotic terms. The structure and content of this paper have suggested that there are successive stages of representation, from lenses through photographs to Scrabble by which financial statements become increasingly distanced from the businesses they represent. It may seem as if the popular lens metaphor is an exceptionally simplistic metaphor which only the naïve or idealistic use for financial statements. When we move to the photograph metaphor and finally to the Scrabble metaphor, we reveal more and more of the “true” nature of financial statements as independent entities of our own creation.

If we ask ourselves the question of how it is that financial statements come to represent businesses, however, the stages seem to come in the opposite order. There is certainly no necessary connection between the production and distribution of goods and services that businesses do and the marks on a piece of paper or a computer screen that record the activities. Financial statements begin as lexical representations. We may come to regard them as conditional generic representations; that is, if financial statements represent something, it is a business, and then as conditional specific representations, that is, financial statements do represent businesses. Eventually, we may see financial statements as unconditional representations of businesses. This should mean that we see the activities of the business in the captions on the financial statements, although it may mean that we see the captions of the financial statement in the activities of the business.

Do financial statements become more independent of business activity as our metaphors for them move from lenses to photographs to Scrabble, or did accounting begin as Scrabble and become more closely associated with business as a photograph and then as a lens? Financial statements may not be images taking on a life of their own; rather, they may be images taking on the life of what they represent.

Of course we do not need to view the sequence of “icon to index to symbol” or the reverse sequence of “symbol to index to icon” as having any particular meaning at all. The metaphors themselves can be considered on their own independent merits. The lens metaphor has many implications that accounting cannot live up to; however, that does not mean that it is an inappropriate metaphor to express our aspirations for accounting. The Scrabble metaphor is a somewhat pejorative metaphor that we may cynically apply to accounting, but it may also be an effective means of criticizing mindless manipulation of accounting numbers. The photographic metaphor, occupying a middle ground, might be the most intriguing of the three. At an elementary level, it captures some simple truths about accounting, or at least some simple statements we would like to be true. But as the complexities of the metaphor are explored, they reveal a variety of intriguing ontological issues that concern financial statements.

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