

Sustainability in the Quantum Age

Thomas G Pittz, PhD Student, New Mexico State University

ABSTRACT

In colloquial usage, the term “sustainability” has become polemic. On the one hand, it has been co-opted by a corporate agenda of maximizing shareholder value while profiting from an implied sense of social responsibility. On the other hand, it is the sworn domain of groups proselytizing an eco-agenda. “Words operate and derive meaning, not from their degree of correspondence with the world, but from their context and position within a language game.” (Cooperrider, et al, 1995). In the case of sustainability the language game has rendered the term to be so polarizing that it no longer serves to achieve its stated objective.

It is the goal of this paper to outline the historical background and theoretical underpinnings of the concept sustainability and utilize a method of “Quantum Storytelling” to illuminate the dominant narrative as the first step towards unfreezing it from its past (Boje 2012). Although dominant narratives can be successful at focusing attention on short-term, achievable goals in stable environments, they fall woefully short when complex and turbulent environments call for nimble solutions and the ability to envision new directions. The goal of sustainability is hardly a simple or static task and radically changing actors and resources continually alter the environment. Sustainability calls for all voices – especially those most marginalized – to be heard, it calls for a non-linear view of time and, indeed, it calls for a Quantum Storytelling approach (Boje 2012). The lessons of Quantum Storytelling remind us of the Husserl and Stein’s phenomenological inter-subjectivity where there is no “I”, nor “you”, there is only a “we.”

In this paper, I will take a critical approach to sustainability efforts within the modern corporation and suggest that it has been morphed to fit within existing strategy as opposed to the other way around. As such, I will make an appeal for a transformation of the concept of sustainability within the corporate landscape. This appeal will utilize the example of sustainability efforts at New Mexico State University as the microanalysis for the larger discussion. It is my belief that this example can serve as a conceptual framework for understanding the current problem and provide a method for working towards ameliorating it.

Introduction & Antenarrative

In 1987, the Brundtland Commission was established as “a response to the conflict between the nascent order promoting globalized economic growth and the emerging recognition of ecological disaster on a global scale” (The Brundtland Report, 1987). Its genesis began under Ronald Reagan and Margaret Thatcher and culminated with the ratification of the World Trade Organization under Bill Clinton. The Brundtland Commission was tasked with the question of how to harmonize ecology with prosperity. Their answer was a redefining of “economic development” as “sustainable development.”

This new definition, established in 1987, reads as follows: “*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*” The two key concepts of this definition are: 1, “needs” where the Commission gave precedence to the needs of the world’s poor and 2, the inability of the environment to meet future needs considering the current state of population demands and technological expansion.

It is important to note that the brevity and malleability of this definition was intentional since the Brundtland Commission hoped for an ongoing and widespread global discourse to create common purpose. As such, the definition is antenarrative (Boje 2007) in nature. As initially defined by Boje in 2001, antenarrative is “the ante (bet) on the transformation of the future, and the ante (before) its fossilization in narrative retrospection coheres.” The Brundtland Report became the genesis of the dialogue of sustainability and was very much a “bet” on the future since the Commission’s objective was to promote global discourse towards a common purpose. Unfortunately, however, dialectic between the corporate and ecological agendas quickly superseded this optimistic discourse and created the dominant corporate narrative that exists today.

The purpose of this paper is not to wade into the grand political debate about sustainable development on a political or international scale. This paper is not focused on the discourse surrounding cap and trade, the natural resources of developing countries, or on differing environmental standards placed on developed nations. The message of sustainability transcends the grand debate and its two main tenants serve as a landmark for all to live by.

The intent of this paper is to localize the scale of the debate as critical theory regarding the sustainability efforts within the modern corporation. Corporations have ignored the basic tenants of the Brundtland Commission’s definition and focused on re-shaping sustainability to reflect pre-existing internal goals that are rarely independent of efforts to shape public relations or monetary incentives in the form of tax breaks. I will argue that they have, in fact, co-opted the definition of sustainability to further current business models.

The Narrative of Corporate Sustainability

Since the Brundtland Report, three main approaches to Sustainable Development have emerged (UN *et al.*, 2003):

- The *Three-P’s approach* views sustainable development as referring simultaneously to economic, social and environmental systems, all of which must be concurrently sustainable, because each of the Three-P’s is independently crucial and interconnected.
- The *Ecosystem Health approach* considers the economic and social systems as sub-systems of the global environment. The key focus here is that the health of those ecological subsystems must be protected and enhanced. This approach focuses on:

- The affects on ecosystems of human activities (material and energy extraction, physical restructuring, pollutant emissions, human appropriation of space and ecosystem productivity, etc.).
- The response of these ecosystems to these pressures.
- The *Resources and Capital approach* views sustainable development as development that ensures per capita national wealth. It broadens the concept of economic capital by integrating concepts from physical and social sciences to include measures of human, social, natural, and environmental capital.

Within the modern corporation, the Three-P's approach has become the most routinely implemented of these approaches to sustainability. Colloquially, it is more commonly referred to as "Triple Bottom Line," and stipulates three organizational outcomes: People, Profit, and Planet (See Figure 1).

Figure 1



Although the theory behind this approach is strong, the reality is that corporations focus inordinately on only one of the P's: Profit. People and Planet are too often relegated to functions of brand imaging, public relations, and/or risk reduction (Mohrman & Worley, 2010). The impetus for corporations to act in a manner that is sustainable to anything other than their bottom line often comes only in terms of face-saving after a disaster (e.g., the BP oil spill) or when incentivized to do so through progressive tax measures.

Worse still has been the co-opting of the term sustainability itself. The corporate zeitgeist has promoted the term “economic sustainability” which represents a step backwards in time to before the Brundtland Report was published. The goal of economic sustainability is quite plainly to establish profitability over the long-term. This unabashed morphing of the notion of sustainability has relegated the term to “doing what we’re already doing on into the future.”

Scholars have begun to take the corporation to task in recent years regarding their obfuscation of the intent of sustainability. Aras and Crowther (2009) have criticized the popular concept of Corporate Social Responsibility (CSR) and one of its central platforms, sustainable development. They argue that, under the guise of CSR, corporations have hidden their effect on the external environment and the consequent implications for the future. They go so far as to conclude, “corporate concern with sustainability is little more than rhetorical rather than a serious attempt to address the issues involved” (Aras & Crowther, 2009).

Even some of the best intentioned firms limit their sustainability efforts to initiatives such as revamping recycling standards, creating philanthropic foundations, reducing plastics used in processing etc. While the importance of these efforts should not be understated, they still fall short of the initial intent of the Brundtland Commission’s message. It has long been understood that the corporate agenda of profit maximization is largely at odds with the original intent of this message and is incompatible with the pursuit of the goals of sustainability. Indeed, the corporate incentive of maximizing shareholder or stakeholder value in the near-term provides little allowance for environmental degradation and even less for the world’s poor. It is within this dominant narrative of uncompromising objectives where the original intent of the Brundtland Commission has been lost.

In order for sustainability to gain a foothold in the corporate community it requires more than platitudes, incentivized self-interest, and marginal enhancements, it requires a strategic change. The Triple-Bottom-Line approach is gathering many doubters who have debated whether it simply creates confusion and is used as a tool for obfuscation rather than leading to tangible improvements. Others have gone further to hypothesize that a separation of the 3 P’s makes sense in order to ensure that strategic decisions would consider all three dimensions independently (Dyllick & Hockets, 2002).

A redesign of the corporate framework is required in order to build the necessary capacity to achieve the more complex set of sustainability outcomes. Sustainability represents a fundamental shift to the corporate agenda to a scenario where financial objectives are only one among equals of firm priorities. This is likely to be a radical shift even for companies that pride themselves on values, social responsibility, and environmental consciousness. However, in an increasingly global environment corporations must learn to recognize their interdependency within the larger system and pursue more than simple organization-centric sustainability efforts.

Empowering the dominant corporate narrative surrounding sustainability is a view of time that is linear or, at best, circular. The modern corporation exists within a double hermeneutic wherein it creates the constructed definition of time upon which it depends (Giddens 1987). As measured by corporations, temporality is defined by intervals of productivity, minute-by-minute ticker symbol reports, bi-monthly payroll runs, and quarterly earnings reports. Time for corporations is rigid, linear, and it depends on lessons learned from its past. To wit, the defining visual representation of a healthy corporation is a graphical depiction of its fundamental measure, net income, with a singular trajectory on a positive slope from some historical point.

Contrast this with the definition of time tacitly employed by organizations concerned with human affairs in the public sector. On a macro-scale, public sector initiatives depend on cyclical renewal and act as stewards of the financial, human, and ecological resources entrusted to their care. On a micro-scale, employees operate within a circular operational flow that remains largely independent of short-term, bottom-line pressure (take, for example, the DMV where renewal is the mission and where most of us can certainly attest to a lack of innate sense of urgency). Since public organizations do not face the commensurate competitive, bottom-line pressures as corporations, they are perhaps better positioned to incorporate a true conception of sustainability into their business models. Even this circular view of time, however, will be insufficient for affecting change to the corporate business agenda.

The Quantum Storytelling Approach

Quantum storytelling, on the other hand, encourages a more robust view of time that allows for a non-linear concept of the future flowing through the present and into the past. It also transcends the circular view of time since within a quantum spiral time occurs both downward and upward, is continuously flowing, and highlights increments as a part of a unified whole. For the sake of simplicity, a quantum spiral is often viewed as two opposing spirals (one going up and the other down) in reality, however, it is one entity where opposing environmental forces work to push up or pull down (Boje 2012). Rather than working towards changing the past to arrive at a different future, a view of quantum time allows us to envision our future as creating our past. This distinction is especially powerful when we attempt to free ourselves from the particularly powerful past narrative found in the case of sustainability.

The Quantum Storytelling approach also has a chance to reframe the narrative by infusing intersubjectivity back into the discussion. From a phenomenological perspective, intersubjectivity performs many functions. In particular, it allows for empathy, which in phenomenology involves experiencing another person (and we have been coerced to view the US corporation as a person) as a subject rather than as simply an object among objects. By doing so, the world is experienced as a shared instead of one available only to oneself (Stein, 1917).

Another important way Quantum Storytelling can assist efforts to redesign the basic framework of the modern corporation is by introducing Heidegger's concept of In-Being (Heidegger, 1992). Heidegger's ontology refers to Being-There or In-Being,

which involves intimate familiarity. For Heidegger (1992), all experience is grounded in care. A foundation of In-Being, intimacy, and care is essential for corporations to embody the interconnected message of sustainability.

For Boje (2012), the care and familiarity embedded within In-Being is infused within antenarrative to become “anteriority” (Boje, 2012). From anteriority, a spiral pattern of antenarrative can emerge wherein deviation-amplification and deviation-counteraction forces of discourse connect to immediate and prospective sensemaking opportunities. These forces can be used to renew the narrative of sustainability within the corporate context and make a new bet on its future.

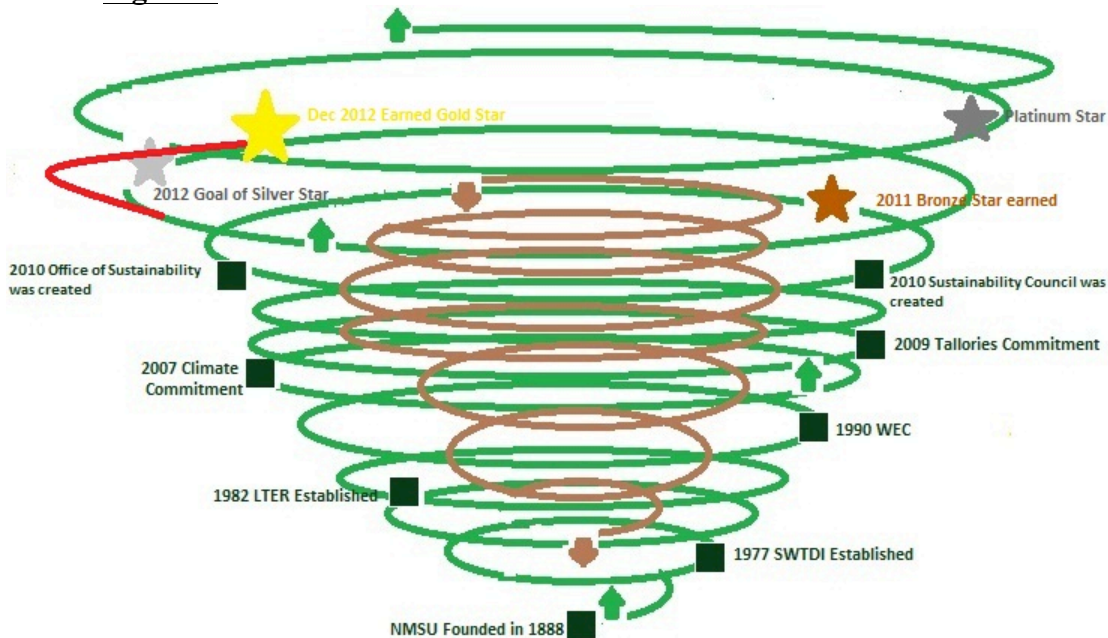
Quantum storytelling offers an alternative to the polarizing dialogue of the current narrative. As we have discussed, the dominant narrative surrounding sustainability has been politicized on the international level and co-opted by corporate agendas on the local level. Quantum storytelling embraces a critical theorist view that gives credence to other, more marginalized, voices that can be beneficial to the conversation. In the case of sustainability, this means leaning on the examples of others who have embraced the original concept as suggested by the Brundtland Commission.

Exemplar: the Quantum Spiral at NMSU

As an exemplar for this discussion, the sustainability efforts of New Mexico State University (NMSU) are outlined from a quantum storytelling standpoint. Loosely coupled systems (Weick & Quinn 1999) provide perhaps the most tangible atmosphere to foster a narrative that encourages voices from all parts of the organization. As a result, these systems often provide fertile ground for genuine sustainability efforts such as the one discussed at NMSU.

New Mexico State University is a major land grant and research-extensive institution classified by the federal government as Hispanic serving. NMSU was founded in 1888 and serves nearly 30,000 students between 4 satellite schools, 9 research facilities, and its principle campus in Las Cruces, NM. Perhaps due in part to its status as a land-grant, Hispanic serving institution, NMSU views sustainability as a central component of its institutional strategy and has embraced it wholeheartedly. Figure 2 below outlines the quantum spiral of sustainability efforts within NMSU since the university’s founding in 1888.

Figure 2



This quantum spiral is a visual representation of the ontological story of sustainability efforts at New Mexico State University. NMSU has thrived through a tempestuous history and continues to experience a good deal of turbulence as it struggles through leadership and identity challenges in the new millennium. Quantum spirals have provided NMSU with the means to conceptualize this turbulence and study it more effectively.

Through recent efforts and an organization committed to the goal of sustainability, NMSU has recently earned the Gold Star from the Association for the Advancement of Sustainability in Higher Education (AASHE). This recognition places NMSU within a select group of universities that have gone well beyond marginal enhancements to adopt a genuine culture of sustainability. "The rapid movement from STARS Bronze to STARS Gold is a clear demonstration of NMSU's commitment to becoming a leader of campus sustainability," said AASHE Executive Director Paul Rowland NMSU '88. "I am personally pleased to have supported the NMSU Sustainability Fund so that this kind of progress continues. It would great to see my alma mater become the first STARS Platinum institution. Go Aggies. Go Green."

It is no exaggeration to say that Storytelling was the prime mover behind NMSU's recent achievements toward building a sustainable organization. The University's Sustainability Committee used a Quantum Storytelling approach to bring together the disparate parts of the University system to acknowledge their interdependency and reshape strategic priorities. NMSU is a large, complex, and decentralized system where financial objectives are paramount so this was no mean feat. It is my belief that the NMSU example can serve as a model for corporations regardless of industry to utilize a QS approach to reshaping current strategic agendas to truly embrace the goals of sustainability.

CONCLUSION

Unfortunately, the past few decades have witnessed a reshaping of sustainability into yet another corporate buzzword that has been infused into strategic agendas rather than affecting a re-evaluation of current priorities based on its original message. I have argued in this paper that it is within the modern corporation where the definition of sustainability has been most twisted from its roots. In order for this vitally important concept to regain a foothold within the social discourse of our time, it is imperative that we work to free it from the dominant narrative that has held it hostage since the Brundtland Report of 1987.

Sustainability has been politicized at the highest levels of government and, even more damaging, has been co-opted on the local level within corporate strategic agendas. Our goal must be to re-tell the story of sustainability in order to recapture it for future generations. Through a Quantum Storytelling approach, I believe that the framework exists whereby we can successfully achieve this goal. Through Quantum Storytelling, we have the means to reshape the narrative to include meaningful voices, usher in an alternative view of a temporality, and reintroduce both intersubjectivity and care to the conversation in order to permit a more proper envisioning of our future. Taking the lessons from organizations such as NMSU where the goal of sustainability has been embraced provides a tactical framework by which to proceed.

REFERENCES

- Aras, G., Crowther, D., 2009. Corporate Sustainability Reporting: A Study in Disingenuity? *Journal of Business Ethics*, Volume 87.
- Atkinson, G., 2000. Measuring Corporate Sustainability. *Journal of Environmental Planning and Management*, Volume 43, Number 2.
- Bakhtin, M., M., 1986. Toward a Philosophy of the Act. *University of Texas at Austin Press*.
- Bauman, Z., 2000. Liquid Modernity. *Polity Press*, Cambridge, UK.
- Boje, D., 2007. Storytelling Organizations. *Sage Publications*.
- Boje, D., 2012. Quantum Storytelling. *Sage Publications*.
- Boje, D., 2012. Reflections: What Does Quantum Physics of Storytelling Mean for Change Management? *Journal of Change Management*, Volume 12, Number 3.
- Brundtland Commission Report, 1987. *United Nations*.
- Cooperrider, D., Barrett, F., Srivastva, S., 1995. Social Construction and Appreciative Inquiry: A Journey in Organizational Theory. *In the Book: Management and Organization: Relational Alternative to Individualism*
- Dyllick, T., Hockerts, K., 2002. Beyond the Business Case for Corporate Sustainability. *Business Strategy and the Environment*, Volume 11.
- Giddens, A., 1987. Social Theory and Modern Sociology. *Stanford University Press*.
- Heidegger, M., 1992., Translation by Kisiel, T., History of the Concept of Time: Prolegomena. *Bloomington, Indiana University Press*.
- Merleau-Ponty, M., 1945. The Phenomenology of Perception. *Routledge Press*.
- Mohrman, S., Worley, C., 2010. The Organizational Sustainability Journey: Introduction to the Special Issue. *Organizational Dynamics*, Volume 39, Issue 4.
- Stein, E., 1917., Translation by Stein, W., On the Problem of Empathy. *The Collected works of Edith Stein*. M. Nijhoff Publishers.
- Weick, K., Quinn, R., 1999. Organizational Change and Development. *Annual Review of Psychology*, Volume 50, Page 361.

Wheeler, D., Elkington, J., 2001. The End of the Corporate Environmental Report? Or The Advent of Cybernetic Sustainability Reporting and Communication. *Business Strategy and the Environment*, Volume 10.

Worley, C., Feyerherm, A., Knudsen, D., 2010. Building a Collaboration Capability for Sustainability: How Gap Inc. is Creating and Leveraging a Strategic Asset. *Work Paper published online*.