

***The Orthogonal Economy:  
Approaching Business and Sustainability from a Different Angle***

***by***

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Introduction

For decades the concept of sustainable development has been closely identified with market-based solutions and the implicit assumption that such solutions can and should be profit-making. However, there exists a virtually unrecognized and unstudied alternative business pathway to sustainable development that relegates profitability to a secondary or even lesser status. We have named this alternative the “Orthogonal Economy” because its members typically engage in conventional business activity utilizing traditional management tools, but approach profitability from a highly un-conventional angle, radically different than is found in mainstream business culture.

Our investigation of the Orthogonal Economy was not originally intended to be a moral critique of standard or mainstream business practices or assumptions. It began simply as an empirical analysis of an existing and quite widespread phenomenon that came into focus before our eyes as it emerged from the mists of late 20th century market triumphalism, non-profit activity, corporate social responsibility, and social entrepreneurship that surrounded us and in which ECOLOGIA has navigated for over two decades as an international organization promoting sustainable development.

After three years of examining the Orthogonal Economy (OE), our expectations surrounding it have changed. What appeared initially as a curiosity now demands our respect and most serious investigation. And, we hope that by revealing the existence and documenting the viability of this alternative economic reality we will raise challenging questions about modern business practices and assumptions and, by doing so, show an additional pathway to sustainability.

Recognizing the Limits of Market Based Solutions

International development and sustainable development literature since the end of the 20<sup>th</sup> century, and now well into the 21<sup>st</sup> century, recognizes the achievements of the private sector in wealth creation, innovation, and promoting efficiency. It also enthusiastically embraces the notion that the tools of business are directly applicable to solving social and

environmental problems through such mechanisms as public-private partnerships, social entrepreneurship, and market based policies.

We are not opposed to market based solutions to social and environmental problems. In our own work, such as promoting sustainable fiber production in Inner Mongolia, we have been pleasantly surprised to find solutions offered by creative entrepreneurs that are sometimes more effective than those promoted by NGOs (non-governmental organizations), GONGOs (government-organized NGOs) or government regulations. That said, in the very shadows of such successes, we have repeatedly come across failures of highly publicized and award winning market based initiatives such as micro-credit programs. And we have repeatedly found it difficult, even professionally harmful, to point out that many of these don't work, or even have negative consequences. Ironically, some of the most vehement defenders of market based solutions are not found within the business sector. They are found in academia, think-tanks, foundations, policy making arenas, and within non-profits where "brilliant ideas" sometimes matter more than positive impacts.

It was therefore with a sense of relief that we stumbled onto the Orthogonal Economy. It provided us with a business community with whom we could share our observations about, concerns with, and growing doubts over the universal embrace of many market-based assumptions, and most particularly our concern about over-selling the notion that the most viable and successful business solutions to sustainable development can and should be profit-making.

We almost missed the OE, even though it constantly reared its head all around us. Therefore we are not surprised that this phenomenon has not yet been discovered by economists, academics, or policy makers.

Part of the explanation for the near invisibility of this phenomenon is the emergence of the global culture of market-based economics that has become triumphant in recent decades. Notions such as "win-win" solutions and "do good while doing well" are not just aspirations and models for proponents of sustainable development; they have become virtually unchallenged assumptions about success equaling significant profitability. It is hard to discover something if you aren't looking for it. And no one had been looking for businesses that are highly impactful in the sustainable development arena while being what one might refer to paradoxically as "brilliantly un-profitable".

### The Tyranny of Profitability

If we told you that we had met an entrepreneur who worked hard to operate a business and that this business person was unable to draw a salary after working 60 hours per week, you

might well assume that the individual was: a) a bad business person, b) in the early stages of a start-up, c) in need of scaling up to profitability, d) a fool with more dollars than sense/cents.

But what if we told you that we had met a whole town full of such people? And that collectively their businesses were responsible for much of the unique quality of life in that town? And that down the road was another town with many similar businesses?

You might figure out that we were discussing our home state of Vermont, in the United States. And in an ah-ha moment of recognition, you might dismiss this model as the artifact of that odd little state where two former hippies, Ben and Jerry, launched a global brand name ice cream company. And where in 2015 America's only Independent Senator, Bernie Sanders, launched a presidential campaign as an avowed socialist. Connecting those dots would probably encourage many readers of this paper to dismiss the business phenomenon we have discovered. For surely, sceptics might conclude, it must have limited applicability and a very small impact in the wider scheme of things.

If indeed, the Orthogonal Economy were only found in Vermont, and only involved a handful of small cafés, book stores, and bed and breakfasts, it might well be little more than a charming and aberrant footnote in economic history.

But if businesses in the OE included publishers, medical suppliers, much of an entire state's dairy industry, an iconic artisanal cheese industry, countless community supported agriculture operations, and an award winning energy saving home building business, might sceptics need to reconsider? We did, after beginning to understand that many of Vermont's highly profitable mainstream businesses depend on the "Made in Vermont" brand name and image founded on the social capital of, and linked to the products and services created by, its Orthogonal Economy.

### The Broader Significance of the OE

Recognizing the importance of the OE, we began to wonder why, how, and how long large numbers of small and medium sized businesses would and could willingly operate in what we call the realm of "marginal profitability". We define marginal profitability as either losing money yearly and thus requiring infusions of financial support from outside the business, or operating with a very small profit, and therefore without the capacity to pay the owner-operator(s) a living wage.

It is important to note that most businesses in the Orthogonal Economy don't really expect to change this model soon. They generally don't want to "scale up", sell out, and become hugely financially successful if that means surrendering control or straying from their personal and social missions.

It was both challenging and rewarding to make this discovery. It was challenging because the prevailing culture so adamantly states that a ‘successful business’ makes a profit. The Orthogonal Economy business owners we meet almost universally share the fact that family members, business peers, and friends would “think we are crazy if they knew that we worked like this and didn’t make a significant profit”. Yet this is how they work, and work hard. Year after year they use other financial resources to keep their businesses afloat. Often one member of the household holds a mainstream job so that the entire household can support the marginally profitable business. Sometimes, but rarely, inherited money allows an entrepreneur to escape the need to turn a significant profit.

So why would so many people do this, and how do they do it year in and year out? The answers are part of our ongoing research. But one thing is clear, and has been the most rewarding part of our research. **These businesses demonstrate a commitment to promoting community well-being and sustainable development that eclipses anything we have seen in our work on corporate social responsibility (CSR) globally.** While most of the self-proclaimed socially responsible corporate world demands a business case for social responsibility before heading down that path, we are intrigued by OE entrepreneurs who navigate by a different compass, a different set of priorities.

Participants in the Orthogonal Economy have not rejected the notion of operating a sound business. They are not contrarians out to reject capitalism. In fact, entrepreneurs in the OE often have excellent business skills and have had or are having parallel successful business careers. They are as ferociously dedicated to entrepreneurship as their profit-making cousins. They have simply come to the realization that some business pathways to community building and sustainability are not highly profitable and are not likely to become so any time soon. They are mapping another business route to sustainability and their own personal quality of life. This alternative is not marginal, insignificant, or easily dismissed. Quite the contrary, this pathway presents a much needed challenge to widespread assumptions supported by mainstream corporate culture and business school thinking.

Businesses in the Orthogonal Economy force us to be far more nuanced about applying “business solutions” to global and local problems. We may need to be a lot more honest about if and when profit -seeking facilitates sustainable development, and about when profit seeking gets in the way.<sup>1</sup>

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<sup>1</sup> For example, as we present detailed concrete examples of and reports on the OE, it should become apparent that the phenomenon we describe is quite distinct from social entrepreneurship, social impact investing, B-corporations, and other variations on market-based sustainable business solutions that all hold onto the notion that significant profitability and sustainability or social responsibility are inherently reconcilable in the business world.

## The Orthogonal Economy Concept

Before we begin to answer the question, “so, then why do people do this?” we need to explain more thoroughly the origin of the concept “orthogonal” and why we chose this somewhat esoteric concept to characterize the phenomenon we are investigating.

The term “orthogonal” comes from mathematics and graphic representation. Quite simply, orthogonal means “at right angles to”. In graphing data on an  $x$  and  $y$  axis, the  $x$  axis is orthogonal to the  $y$  axis. Another less precise, but highly useful image of orthogonal would be geographic directions on a compass. The east-west axis is orthogonal to the north-south axis.

Businesses operating in the Orthogonal Economy are *not* in 180 degree opposition to mainstream business values and culture. They certainly do not disdain making a profit. Most wish they were more profitable and, like any conventional business, they constantly seek ways of increasing their profit margins. What makes these business owners distinct is their unwillingness to let profitability be the sole, or even dominant, guiding force in their business planning and operation.

Another way of visualizing this adjustment is to return to the compass image presented above. Imagine that magnetic north is the guiding principle of mainstream business. Magnetic north represents profitability. In the mainstream economy, the compass needle and thinking of the business owner are constantly pointing toward profitability. Try as one may to move in another direction (sustainability, social responsibility, etc.), the earth’s magnetic field (our business culture) will always point a business compass needle and business activity back in the same direction: the magnetic goal of maximizing profitability above all.

ECOLOGIA has encountered this line of thinking over years of work in the field of corporate social responsibility (CSR). Small local initiatives, global SR standards such as ISO 26000, countless social responsibility management and certification schemes, and global instruments such as the United Nations Global Compact have struggled to redirect “business as usual” away from single-minded bottom line pursuit of profit at the expense of the planet and human welfare. Yet even these well intended schemes inevitably argue that there is a “business case” for socially responsible and environmentally sustainable initiatives. As a result, executives of corporations typically limit their embrace of sustainability and social responsibility to activities that return on investment clearly and quickly, such as eco-efficiency programs, and workplace changes that increase worker retention and productivity. Some venture cautiously into community development when and if it is believed to enhance brand name and hence product value or consumer loyalty. The point is that every decision is ultimately guided by the compass needle pointing to maximizing profitability. The result, as presented in a U.N. Global

Compact analysis<sup>2</sup> is that social responsibility and sustainability initiatives have hit a plateau.<sup>3</sup> Many scientists and development experts would argue that this plateau is not an elevation so very far above the steamy valleys and abysses in which we find much of our planet's population dwelling.

Our ongoing research of the Orthogonal Economy is concerned with this crisis of the 21<sup>st</sup> century where “the economy” and the welfare of modern society and environmental health are too often at odds with one another. We are not critiquing the market economy, or profitability.<sup>4</sup> **We are simply describing a sector of the business world that is already guided by different, orthogonally re-oriented, principles that profoundly adjust the dominance of profitability in business decision making and activity.** In researching, documenting, and analyzing this economy, we hope to raise fundamental questions about the future of sustainability<sup>5</sup> initiatives, and to suggest the need for alternative and additional paths forward.

### The Culture of the Orthogonal Economy

Now to return to the question of why businesses in the Orthogonal Economy do what they do. Our preliminary research points to a constellation of values, some profoundly modern, many deeply traditional. Here is an emerging portrait of business owners in the OE:

- They are profoundly entrepreneurial and deeply committed to operating within a business framework; they do not want to operate non-profits dependent on grants. They are self-reliant and dedicated to preserving their independence, even when being so independent necessitates having another job or income source to support their orthogonal economy business activity.

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<sup>2</sup>The UN Global Compact-Accenture CEO Study on Sustainability 2013, page 4

[http://www.unglobalcompact.org/docs/news\\_events/8.1/UNGC\\_Accenture\\_CEO\\_Study\\_2013.pdf](http://www.unglobalcompact.org/docs/news_events/8.1/UNGC_Accenture_CEO_Study_2013.pdf)

<sup>3</sup> The proponents of market-based solutions for sustainable development often admit to their limited success. However, this admission does not seem to prevent them from continuing to eagerly explore and promote traditional market-based solutions to a wide range of issues including poverty, climate change, and sustainable food production.

<sup>4</sup> ECOLOGIA strongly advocated the inclusion of wealth creation as a socially responsible activity during the development of ISO 26000; it appears in ISO 26000:2010 Clause 6.8.7, “Community involvement and development: wealth and income creation.” See the ISO 26000 SR website: <http://www.iso.org/sr> Many NGOs and other international organizations had omitted wealth creation, reducing the “triple bottom line” (people, planet, profit) to a “double bottom line” of environmental and social responsibility. See <http://www.ecologia.org/isosr/fiduciarity.html>

<sup>5</sup> The Brundtland Commission definition of sustainability indicates that economic development should proceed so that the resources upon which it depends shall be preserved for future generations. See <http://www.un-documents.net/wced-ocf.htm> We include refinements by the International Union for the Conservation of Nature (IUCN), which recognizes that environmental restoration of many threatened resources may be required in order to preserve natural resources for future generations. See <http://www.iucn.org/about/>

- They derive enormous personal satisfaction from what they do, whether it be manufacturing energy efficient homes, operating a store or café, making cheese or growing food; they are motivated by pride in their craft. This explains why they work long days and weeks.
- They are deeply rooted in their communities and believe in the value of adding to the quality of community life.
- They believe that the human race simply can't make the transitions it needs in order to survive, without a major adjustment in how we live and do business, how we grow our food, etc. They aren't going to wait for the economy and profitability to catch up with their understanding of what needs to be done. They are doing what needs to be done by using and adapting a business platform.
- They live in close proximity to and routinely engage in face-to-face transactions with their customers and suppliers. They are not engaged in a world of abstractions, commodities and anonymous sales. Customer appreciation is an alternative/parallel currency in the orthogonal economy and a huge part of its reward structure.
- They struggle and improvise in their daily lives to find ways of financing their business activity, lowering costs, and minimizing losses. If and where possible they eke out some more profit so that they may continue to do business.
- They love solving problems, innovating, and learning new things daily. While outsiders might see a grinding routine, OE practitioners enjoy working out the details of fine tuning their business practices.
- Above all, they place values above making a profit.

It is important to understand that the Orthogonal Economy is not relegated to the back roads of rural America or to small towns. We are not looking only at cafés, bookstores, art galleries and retirement and hobby businesses. Our emerging research suggests that mainstream businesses including publishing, medical care, and manufacturing are involved.<sup>6</sup> A decade of work on CSR around the globe, including in China, has convinced us that the OE is a not a phenomenon unique to or limited to one small state in the United States, nor is it the select domain of the affluent western world. In fact, our earlier research revealed that a Chinese variant of the OE has roots in Chinese culture.<sup>7</sup>

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<sup>6</sup> Ongoing research findings and the results of numerous interviews will be made available as documentation in the coming year.

<sup>7</sup>China's Socially Responsible Entrepreneurs: Native Roots for Sustainable Development  
<http://www.ecologia.org/about/programs/ChinaSR06.html>

## Free-Rider or Economic Contributor

Finally, we return to the issue of the Orthogonal Economy's contributions to social capital and other mainstream economic activity. Some sceptics and social policy makers have asked us whether businesses in the OE fairly share the burden of operating within society. The concern appears to be that low-profit or no-profit businesses and business owners may not be paying their fair share of taxes, or that they may be unduly benefiting from social subsidies such as medical care or food support programs designed for those with low incomes. Our response to this concern has been to point to the fact that many of the largest big box store business models and service industry chain franchises rely heavily on subsidized medical services provided to part-time employees. They also often negotiate tax breaks before moving to a town or city. They routinely do all of this while applying aggressive downward pressure on wages and safety standards in globalized outsourced supply chains. **Therefore we welcome direct comparisons of the economic contributions and social capital generation of the Orthogonal Economy with more mainstream business activity.**

Ultimately, we respond to concerns about the OE businesses being free riders by returning to our original research interest. Living in a small New England town, we have come to understand that the businesses that give our Vermont cities, villages and countryside the unique character upon which our multi-billion dollar tourism, second home, and ski industry depend, are often examples of the orthogonal economy. More "mainstream" hotels, restaurants, resorts, and transport infrastructure all depend on hundreds and thousands of orthogonal economy businesses providing customers with artisanal and personalized services and products. In other words, the mainstream economy depends, to a very considerable degree, on the social capital of the Orthogonal Economy. Indeed, we eagerly anticipate studies of how the OE lays the foundations of trust needed to establish viable markets in developing market economies as well.

## Conclusion

The Orthogonal Economy is not just a window into an alternative sustainable business world. It is a doorway through which many have passed and many more may venture. For those weary of travelling too well worn and circuitous paths to sustainability, passing through this door may provide a welcome resting place, inspiration, and hope. In a world where extreme profit seeking has become a virtue, indeed almost a moral imperative, it just may be the case that recognizing and inhabiting a space where some reasonable balance of important values has been restored to the world of business will help us to promote the health of the planet and its inhabitants.





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If you wish to utilize the concept that we have coined, the “Orthogonal Economy”, we ask that you credit ECOLOGIA as the source, and that you let us know when and how you employ the concept. Before the posting of this paper, search engines for the term produced no hits. We look forward to the day when the idea of the Orthogonal Economy emerges as a beacon like a lighthouse in the fog. Meanwhile, we would like to be able to follow, and learn from, discussions of this idea we have launched.



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