The semiconducting principle of monetary and environmental values exchange

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Abstract: This short article represents the first attempt to define a new core cultural value that will enable engaging the business sector in humankind's mission to heal nature. First, I start with defining the problem of the current business culture and the extant thinking on how to solve environmental problems, which I called "the eco-deficit culture." Then, I present a solution to this problem by formulating the "*semiconducting principle*" of monetary and environmental values exchange, which I believe can generate "*an eco-surplus business culture*." This work adds one new element, the *eleventh cultural value*, to the ten core values of progressive cultures postulated by Harrison (2000).

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Introduction

Over three decades have passed since John Elkington, a leading authority on corporate sustainability and sustainable development, first presented the "triple bottom line" accounting framework under which businesses would be measured by their economic profitability, their contribution to environmental quality, and their actions toward social justice (Elkington, 1994, 1998; Jeurissen, 2000; Slaper & Hall, 2011). In that period, countless studies have warned of the disastrous consequences of a warming Earth and put forth proposals for global sustainability (Christensen & Olhoff, 2019; Lenton et al., 2020; Ripple et al., 2019; Steffen et al., 2015; Steffen et al., 2018). In the meantime, the three-pronged proposal has also become a prevalent benchmark in studies on sustainable business (Slaper & Hall, 2011). What is noteworthy is, even as a growing body of work has confirmed the positive impact of corporate social responsibility (CSR) on financial performance (Ferrell, Liang, & Renneboog, 2016; Friede, Busch, & Bassen, 2015; Margolis, Elfenbein, & Walsh, 2009; P, Subroto, T, & Saraswati, 2020), the debate remains on how to transform the voluntary nature of CSR into a widely-practiced mandate. This article suggests that such transformation requires approaching and dealing with environmental problems, including climate change, in an out-of-the-box manner. Along a similar vein of Elkington's multidimensional framework, I suggest moving beyond the technical fixes and conventional corporate practices toward making environmental value a core cultural value.

While the "triple bottom line" represents an important call for taking into account factors and values outside the corporate realm, its application has largely been studied under the lens of natural sciences, e.g., sustainability-related sciences, ecological economics, and ecology (Isil & Hernke, 2017). As human activities, which include but are not limited to excessive resources consumption and carbon dioxide emissions, are the major driver of the climate crisis (Lenton et al., 2020; Ripple et al., 2019), to build a new environment-oriented core value in our culture, it is necessary to incorporate insights from the social sciences and humanities as well as participants from such disciplines. As the Chief Executive of the British Academy, Hetan Shah (2020), points out, insights from sociology, psychology, literature, philosophy, and even theology could shed new light on our understanding of environmental issues, which would subsequently change our attitude and behavior.

On the premise that to heal nature demands viable solutions as well as a renewed mindset, I believe the solution must come in the form of a new core cultural value, supplementing the thesis of "culture matters" as espoused first by Harrison and Huntington (2001). To address climate change problems in the next decades, I suggest embracing a new cultural core value centered around environmental protection. This would be the eleventh value to supplement Harrison (2000)'s list of ten values—time orientation; work and achievement; frugality; education; meritocracy; community; strict societal ethic code; justice and fair play; and secularism.

On the need for reshaping our core cultural values

The emphasis on building a culture of environmental healing and protecting values is indeed inspired by Harrison and Huntington (2001). For this reason, "culture" is not used here as an all-encompassing term, one that is defined by Taylor (1920) as a complex set of everything in society from its practices,

knowledge, morals, and beliefs to institutions, custom, and law. Instead, this paper defines culture in subjective terms along the line of "values, attitudes, beliefs, orientations, and underlying assumptions prevalent among people in a society" (Huntington, 2001). Given that there is mounting evidence on the ways cultural factors shape socio-economic and political development, and thereby promoting human progress (Harrison & Huntington, 2001; Sapolsky, 2018), I suggest refreshing our understanding of culture and its role in our long-term quest to save nature.

This call is driven by the fact that the climate crisis is accelerating at an irreversible pace despite warnings from scientists worldwide, which dated as far back as Kendall (1992) and as recent as Ripple et al. (2019). We see that, on the one hand, it is true that scientists, policy-makers, and corporates have sought to bring about meaningful changes to current corporate practices, such as paying more attention to stakeholder value (Jensen, 2001) and social and environmental well-being (Elkington, 1994, 1998). On the other hand, one can argue that many such changes have not become entrenched in corporate cultures worldwide. A clear example is the inadequacy of mainstream economic textbooks in teaching climate change issues or recognizing the biases in traditional concepts such as negativities (Gills & Morgan, 2020). Arguably, this leads to the failure to prepare future business executives to adopt or create new ways of thinking about the environment in the corporate setting. On the premise of culture being a set of subjective values, mindsets, and ideas, I argue that a core environment-centric cultural value is needed to reshape human behaviors, particularly in the business sector.

Another reason is, Elkington devises his framework of the triple bottom line without knowing the existence of digital social networks. Social media has presented a new dimension for our environmental challenges. From an institutional perspective, organizations, especially corporates, have become hyper-mediatized under the rise of social media (Hoskins & O'Loughlin, 2015; Kaempf, 2013). Their strategic actions and plans demand appropriate media strategies. From a network perspective, today's problems such as climate change are highly politicized. Memes such as "climate change is a hoax" can spread very quickly due to the networked nature of our social media existence (Sarathchandra & Haltinner, 2020). Such a memetic problem demands multiple remedies at a systemic and structural level. Technical and legal fixes tend to be slow to scale up; thus, they cannot be the only lever to pull. Culture is the only area where quick, adaptive changes can be made to match the challenges posed by both the infosphere and the ecosphere, where all sectors operate. As laid out in Figure 1, cultural values lie at the core all of our major problems in the world.

Core cultural values re-envisioned

The following logical diagram (Fig. 1) shows that the presence of core cultural values, as situated within cultural studies and social sciences at large, could help address the challenging global problem of climate breakdown and existential risk for humankind. In
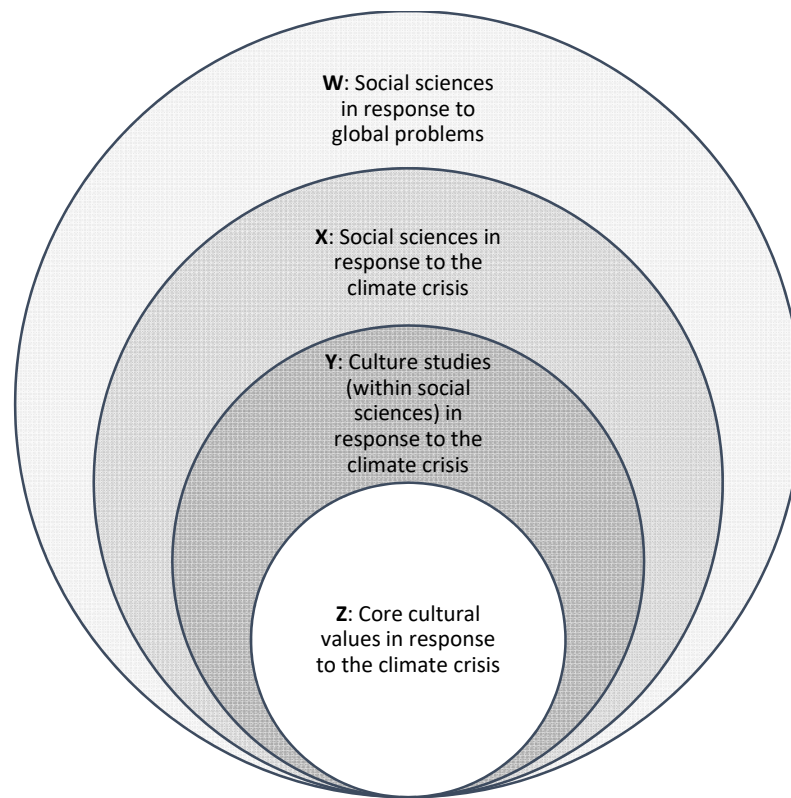
Figure 1. The logic of solving climate change problems based on a cultural value system

The texts in the logic diagram (Fig. 1) represent mathematical value sets, as elaborated below.

W: The very existence of humankind requires social sciences in tackling global problems (Shah, 2020).

X: Climate change problems constitute one of the most critical subsets of the most dangerous global problems (Victor, 2015). Therefore, solving climate change problems will need to embed social sciences in its system of equations.

Y: As part of social sciences, cultural research plays a crucial role in mediating society's responses to serious climate problems (Straughan & Dixon, 2012). This gives rise to our critically important question on cultural values of adaptation to climate change and environmental sustainability (Adger, Barnett, Brown, Marshall, & O'Brien, 2012).

Z: According to culture studies, cultural settings not only inform and define human behaviors but also define the core values grounding such behaviors, whether they be in families, communities, or society at large. Here is where the process of *mindsponge* offers insights. The *mindsponge* model explains the underlying process of values changes in society (Vuong, 2015).

According to the *modus operandi* of mindsponge processes, society needs to form a consensus in establishing key cultural values, which emerge to serve the task of finding efficient cultural responses

to the climate change and sustainability threats, as required by Y, and hence, the whole system from W to Y. Here is the catch: The system of core progressive values stated and widely adopted by Lawrence E. Harrison did not provide a nature-protecting (or healing) cultural element (Harrison, 2000). In fact, this seminal work barely mentioned today's most essential keywords, such as "environment" or "nature" or "sustainability."

What happens when Z turns out, actually, to be an empty set ($Z = \emptyset$)? It is not difficult to see that the whole system, built upon a set of zero elements, will collapse. And this is perhaps one of the main reasons why there is an increasingly louder voice, in both academia and policymaking circles, about the likely failure to deliver the promise of those Sustainable Development Goals (SDGs) dealing with the environmental problems.

Business sector re-imagined

This paper contends that the business sector holds the key to transforming core cultural values toward environmental healing. To engage the business sector in the taskforce for protecting and healing nature, improving sustainability conditions, one cannot ignore the corporate entity's *raison d 'être*: maximizing its profitability as its "bottom-line" (Vuong, Ho, Nguyen, & Nguyen, 2019; Vuong et al., 2021).

Fortunately, given the mindsponge *modus operandi* (Vuong, 2016; Vuong & Napier, 2015), this very profitability notion can be constructed to include a cultural element that serves our purpose. That means it is time to build a new notion of profitability measured by the degree of helpfulness in healing nature and improving sustainability conditions.

So now, the net profits will have the following form:

$$NNP = NMP + NEV,$$

where, *NNP* is the new notion of New Net Profits, *NMP* the normal Net Monetary Profits, and *NEV* the new notion of Net Environmental Value.

An emerging environment-healing business system will need to reward both types of profits. And the system will need to exhibit a feature, which I term the "*semiconducting principle*": the environmental value can be accounted for as a monetary one, but NOT vice versa. The current carbon trading system, for instance, has thus far lacked this very "semiconducting" property.

Here, I want to stress that the traditional philosophy or culture of the business sectors when thinking about profit is that profit equates to monetary profit. Thus, in this paradigm, a competent businessman or woman will conceive their business plan to make sure the profit is larger than the cost, which includes the payment for the "negative externalities" incurred via environmental damage (Krugman, 2010). Hence, from start to finish, such eco-deficit culture incentivizes business sectors to always strive for keeping the cost *it has to pay* lower than the *actual damage to the environment,* whether by lobbying or manipulating their tax accounts or performing green-washing campaign (Adi, 2018; Walker & Wan, 2012), etc. We want to move away from *that downward spiral of eco-deficits* to a

new *eco-surplus* culture, where the semiconducting principle is a norm: value created for the environment is rewarded with money, but NOT vice versa.

Final remarks: The eleventh cultural value

In 2001, Harrison and Huntington published one of the seminal works on how cultural values shape social progress and how culture has been ignored in many explanations of progress and the lack thereof. Their book concerns how to incorporate value thinking into development. Harrison (2000) outlines ten "values, attitudes, or mindsets that distinguish progressive cultures" from the static culture. They include: time orientation; work and achievement; frugality; education; meritocracy; community; rigorous societal ethic code; justice and fair play; and secularism. Besides these values, we need to consider *valuing the protection and healing of nature* among defining features of a progressive culture. I call it *the eleventh cultural value.*

When the eleventh cultural value is adopted, our nature-healing mission can

tap into the administrative efficiency and resourcefulness of the business sectors, whose ideas and practices must survive, evolve, and adapt in intense Darwinian market competition;

use the vast potential of the business sector's financial management, which will do the accounting based on the formula of "profits for the environment."

Thus, businesses will

exchange nature-nurturing value with a monetary reward, and…

help create trust and belief in the values of regeneration and the development of natural ecosystems in the wider community.

Finally, there will be quite some work to do before this initial idea can become applicable in practice. I want to conclude some theoretical questions which can spur a research direction. First, how do we move from the current eco-deficit business culture to an eco-surplus deficit culture? Then, are there measurable thresholds for company size that entails an easier adoption of a new culture? And, how do we reimagine the education of environmental issues, especially in business and economics programs, to foster the new cultural value (Gills & Morgan, 2020)? The challenge here is to mediate the widely accepted differences between businesses' main function of creating financial wealth for their shareholders and the expected function of making meaningful contributions to restoring ecological health. However, I trust that the presented concept could eventually benefit the current mission to save nature.

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