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TWO SNAPSHOTS REINFORCING SYSTEMIC THINKING & RESPONSIBILITY

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Abstract

Purpose – This paper aims to explore the concept of sustainable development through the lens of two United Nations (UN) publications, Our Common Future (1987) and the 25-year update Resilient People: Resilient Planet (2012). The analysis attempts to highlight how sustainable development requires a systemic understanding and this in turn necessitates an imperative of responsibility. To reinforce its case, the paper highlights how sustainable development has never been about saving the environment and to think so is naïve. In the final analysis, the paper outlines how a systemic understanding is a key concern for organisational leaders and in turn a responsible understanding of humanity's entwinement with, rather than separation from, all that surrounds us. Design/methodology/approach – This paper is a discussion paper that weaves together existing literature.

Findings – The aim of the paper is to reinforce systemic thinking and an imperative of responsibility. Practical implications – The arguments offered highlight how systemic thinking and the associated responsibility that comes with this view are necessary for realising sustainable outcomes. Originality/value – Weaving together and reinforcing arguments that highlight systemic thinking and responsibility.

Keywords – Sustainable development, Systemic thinking, Responsibility Paper type

Viewpoint

“effects keep adding themselves to one another, with the result that the situation for later subjects and their choices of action will be progressively different from that of the initial agent and ever more the fated product of what was done before” (Jonas, 1984, p. 7)

Introduction

The core of this paper is a discussion of the concept and implications of sustainable development as offered by two United Nations (UN) publications. The two publications were published 25 years apart, the first in 1987 and the second in 2012. The first document is *Our Common Future* (WCED, 1987); the second *Resilient People, Resilient Planet: A Future Worth Choosing* (UNSGHLPS, 2012). While these two publications, by no means, represent the entirety of thought, consideration and theorising regarding sustainable development it could be argued that these two publications are significant not least because many authors agree that sustainable development was brought to popular attention following the publication of *Our Common Future* (for example see: Mebratu 1998; Redclift, 2005; Steer and Wade-Gery, 1993). While the 2012 report, *Resilient People, Resilient Planet*, aims to “reaffirm...[the]...landmark report” that is *Our Common Future* (UNSGHLPS 2012, p.11) and as such the two reports can be viewed as a matching pair that illustrate some of the key considerations regarding sustainable development.

The relevance of these two reports to responsibility, in the broadest sense, is captured in the opening quote from Jonas (1984). That quote highlights how our world is a systemic one where all things are not separable into isolated, compartmentalised and bounded concerns. Rather everything has systemic interconnections; there is a seamless net of cause

and effect. Consequently, it can be argued that through a systemic understanding we are humbled and in turn realise that we are prime authors of our future and carry responsibility for ourselves and the impact of our actions on future generations. The challenge of systemic thinking and the associated responsibility is captured within the opening pages of *Our Common Future* (1987) with its highlighting of how only in the late 20th century has it been possible for humans to view the earth from space and that “historians may eventually find that this vision (seeing the planet from space) had a greater impact on thought than did the Copernican revolution of the 16th century” (WCED 1987, p. 1). Further when viewing the Earth from space we understand the planet as “a small and fragile ball dominated not by human activity and edifice but by a pattern of clouds, oceans, greenery and soils” (WCED 1987, p.1). Thus we understand ourselves as being part of a larger system and are in turn manoeuvred into a position of accepting full responsibility for ourselves, especially because our “inability to fit [our] doings into [the patterns of the clouds, oceans greenery and soils] is changing planetary systems” (WCED, 1987 p.1) and causing “life threatening hazards...which must be recognised and managed” (WCED, 1987, p.1).

As such while sustainability can be considered a secondary concept to responsibility (Robinson and Smith, 2012) it is our contention that a review of sustainable development through the snapshots of two key publications allows further understanding of the requirement for systemic thinking and thus responsible leadership. Not least because the humility enabled through viewing the earth from space “instructs us to think harder about how to reframe problems” (Jasanoff, 2007, p.33).

Aside from bringing forward a focus on the requirement for systemic understanding, the commentary that follows also outlines some of the rhetorical and narrative aspects of the two publications, *Our Common Future* (1987) and *Resilient People: Resilient Planet* (2012), particularly because as long as there is intent with human speech, rhetoric is always part of

communication (Norreklit, 2003). Thus in the following sections we not only provide a brief history of sustainable development but also highlight how *Resilient People, Resilient Planet* reinforces the call for systemic thinking but also has a change in tone, wherein the realisation of sustainable outcomes is viewed as a key requirement for business leaders. Finally the paper closes with some discussion and the challenge of systems thinking and responsibility being laid bare by our understanding of our world as a pale blue dot.

A Brief History of Sustainable Development

While this paper focuses primarily on two UN publications it is recognised that sustainable development as a concept does not begin and end with these two publications. For example, Shrivastava and Hart (1994) argued that sustainable development as a concept has its roots in the publication of *Silent Spring* (Carson 1962), a time in which it was recognised that although the post second world war boom had brought significant benefits, the boom had also realised significant negative effects (Shrivastava and Hart, 1994; Steer and Wade-Gery, 1993; Yates, 2012). However, even though many authors cite the 1960s as the beginning of sustainable development, the concept is argued by some to be even older. For example; Daly (1996) claims the roots of the concept lie within the impact upon society of the closing of the western frontier in the United States of America in the late 1800s and early 1900s. While Russell and McIntosh (2011) have claimed that aboriginal cultures and indigenous tribes have long recognized the interrelationships between the natural environment, society, and the economy and thus been practicing a form of sustainable development years before the closing of the western frontier.

Notwithstanding a history for the concept that may have begun in the 1960s or even earlier it appears that commentators agree the concept came to prominence with the

publication of *Our Common Future* in 1987 (for example see: Hopwood, Mellor, and O'Brien, 2005; Kates, Parris, and Leisorwitz, 2005; Lele, 1991).

Our Common Future (1987)

Our Common Future (WCED, 1987) is recognised as bringing sustainable development to prominence through its argument that it is “a global agenda for change” (WCED, 1987, p. ix) formulated in response to an “urgent call by the General Assembly of the United Nations” (WCED, 1987, p. ix). That urgency being reinforced by, in the text, references to the challenges of post Second World War construction, environmental disasters such as Bhopal and Chernobyl and depletion of the Earth’s ozone layer. In this regard the pervasiveness and all-encompassing nature of sustainable development is captured well in the following quote:

“The challenge of finding sustainable development paths ought to provide the impetus – indeed the imperative – for a renewed search for multilateral solutions and a restructured international economic system of cooperation. These challenges cut across the divides of national sovereignty, of limited strategies for economic gain, and of separated disciplines of science” (WCED, 1987, p. x).

This quote also highlights that sustainable development is not a choice, it is an imperative and responsibility for all; especially because the “responsibility for meeting humanity’s goals and aspirations [i.e., finding a sustainable development pathway because this is what has to be done] will require the active support of us all” (WCED, 1987, p. x). Thus sustainable development is a common endeavour, operating on an epic scale, within which humans need to work “for new norms of behaviour at all levels and in the interests of

all” (WCED, 1987, p. xiv). New norms of behaviour that require a greater level of responsibility; further if this responsibility is accepted a “new era of economic growth...[where that]...growth that is forceful and at the same time socially and environmentally sustainable” (WCED, 1987, p. xii) will be unleashed.

Thus sustainable development is a human centric story about humanity’s future goals and aspirations. It is to quote, “first and foremost...[a message]...directed towards people, whose well-being is the ultimate goal of all environment and development policies” (WCED, 1987, p. xiv). However, it is not about a narrowly defined anthropocentric understanding, because as indicated earlier, the text is clear that we humans now have to understand ourselves as being constitutive of a wider system; for example the Earth is “a small and fragile ball dominated not by human activity and edifice but by a pattern of clouds, oceans, greenery and soils” (WCED, 1987, p.1).

While a critical eye might argue might argue the notion of sustainable development is trapped within an economic growth paradigm, it is important to note that key to the growth is a more systemic understanding. As the text highlights “from space, we can see and study the Earth as an organism whose health depends on all of its parts” (WCED, 1987, p.1). And as such, this statement that has modern echoes with Lovelock’s (2006) Gaia theory is reinforcing that humans are part of the process of the Earth. In this regard the text is challenging understandings based upon a Cartesian dualism that splits humans and nature and treats them as separate bounded categories (Castree, 2002; Latour, 1999a, 1999b; Newton, 2002). Rather, the realisation of sustainable outcomes requires humans “to reconcile human affairs with natural laws and thrive in the process” (WCED 1987, p. 1). In short humans are not separate they are entwined co-constituters and thinking and understanding needs to reflect this.

Challenging Categorical Thinking

To enable sustainable development and continued economic growth, *Our Common Future* (1987) outlines that humanity needs to move away from categorical thinking. This move is a challenge to the conventions of modernity and the Cartesian dualism that ultimately separates the world into two categories: humans and nature (Castree, 2002; Latour, 1999a, 1999b; Newton, 2002). Whereby humans are a separate bounded category and nature is another separate bounded category.

To develop the argument, *Our Common Future* (1987) outlines how “until recently the planet was a large world in which human activities and their effects were neatly compartmentalised within nations, within sectors and within broad areas of concern (environmental, economic, social)...[however] these compartments have begun to dissolve” (WCED, 1987, p. 4). Further it argues that “ecology and economy are becoming ever more interwoven into a seamless net of causes and effects” (WCED, 1987, p.5) and the challenges to be overcome to realise sustainable development are both “interdependent and integrated” (WCED, 1987, p.9). However humanity’s ability to tackle these issues is limited as our institutions are “independent, fragmented [and] working to relatively narrow mandates with closed decision processes” (WCED, 1987, p.9). Thus sustainable development poses “problems for institutions, national and international, that were established on the basis of narrow preoccupations and compartmentalised concerns” (WCED, 1987, p.9).

In this regard, *Our Common Future* (1987) is implying that there is a misalignment between humanity’s ontology (reality) and epistemology (knowledge practices) especially because the “real world of interlocked economic and ecological systems will not change” (WCED, 1987, p. 9). However, in order to achieve sustainable development “the policies and

institutions concerned must [change]” (WCED, 1987, p.9). In this regard the challenge is that humanity’s theories, at least those governing our institutions, are not aligned to reality. In alternative terms the challenge being laid is that humanity needs to move away from a fractured, categorical epistemology to one that is reconcilable with a non-categorical ontology.

Consequently *Our Common Future* (1987) is arguing that everything is related, co-constitutive and entwined (Ingold, 2011). This entwinement is reinforced in *Our Common Future* through phrases such as “the environment is where we all live” (WCED, 1987, p. xi). A phrase that has behind it is an important assertion that that the environment is not something that is separate and at a distance to humans. Rather the environment surrounds humanity (Ingold, 2011) and therefore, humanity exists in the environment and is part of it. Thus as *Our Common Future* states “the environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to defend it in isolation from human concerns have given the very word environment a connotation of naivety” (WCED, 1987, p. xi).

In sum it can be argued that *Our Common Future* (1987) is indicating a move away from distinction and difference where things have intrinsic attributes and exist independently and in advance of their relations with anything else (Ingold, 2011). Rather *Our Common Future* (1987) is moving towards a consideration that things are not “bounded entities set aside from their surroundings” (Ingold, 2011, p.xv), rather things are “a nexus of creative growth and development within an unbounded and continually unfolding field of relations” (Ingold, 2011, p.x). In propagating this move away from categorical thinking towards understanding everything as a field of relations, *Our Common Future* (1987) is by extension challenging our understanding of what it means to be human. It is pointing us to consider humans as a bundle of intrinsic and extrinsic attributes, a process, a phenotype – a nexus of the relationship

between genes and environment (Ingold, 2011). This challenges Darwinian reductionism where humans are considered as merely an outcropping of genetic code (Ingold, 1994, 2011). It alludes to humans being conceptualised as a particular field of relationships between genetics and environment where each is not separable from the other. Consequently, while *Our Common Future* (1987) can be considered as an economic growth and human survival story, it is also a text that has ramifications regarding our theories and our understanding of what it means to be a human. However, even though *Our Common Future* may lead to challenges of our understandings of what it means to be human, it is as indicated earlier, clear that the goal of sustainable development is a “new era of economic growth” (WCED, 1987, p.1). In this regard sustainable development is a concept that is about ensuring that “the abundance that modernity has...accomplished” (Yates, 2012, p. 22) is able to continue. Or as Mitcham (1995) argues it is a “typically modern idea of progress [as] an indefinite and continuous superseding of the past” (p. 314).

Resilient People, Resilient Planet

The 2012 UN publication *Resilient People, Resilient Planet: A Future Worth Choosing* builds upon *Our Common Future* (1987). Its stated aim is to reflect on and formulate a new vision for sustainable growth and prosperity relative to that laid out in *Our Common Future* (1987). Thus, if *Our Common Future* sets a stage, *Resilient People, Resilient Planet* (2012) continues that but is also more specific. *Resilient People, Resilient Planet* (2012) outlines that sustainable development is about delivering a long term vision “to eradicate poverty, reduce inequality and make growth inclusive, and production and consumption more sustainable” (UNSGHLPS, 2012, p.6). To deliver this vision the

requirement, as per *Our Common Future* (1987), is to enable “green growth” (UNSGHLPS, 2012, p.7), where green growth has social and environmental costs fully accounted for. Further growth is only possible once a foundation of “human rights, basic needs, human security and human resilience are assured” (UNSGHLPS, 2012, p.6). In this regard the text is supporting the call for a more systemic understanding with humans as the key protagonists because as it argues “sustainable development is fundamentally a question of people’s opportunities to influence their future, claim their rights and voice their concerns” (UNSGHLPS, 2012, p.12). Further it argues that a key requirement to enabling sustainable outcomes is that the debate enters into the “mainstream national and international economic policy debate[s]” as then it will be “much harder to ignore” (UNSGHLPS, 2012, p.12). Thus it is acknowledging that economics does not exist in isolation but is part of a wider system, but also economics has, arguably, theoretical hegemony and economic arguments are key to enabling outcomes (Ferraro, Pfeffer and Sutton, 2005).

While *Resilient People, Resilient Planet* (2012) argues that sustainable development is a “new paradigm for economic growth, social equality and environmental sustainability” (UNSGHLPS, 2012, p. 6) it also is more specific in its direction, in particular it takes a more managerial turn. Thus unlike *Our Common Future*, *Resilient People, Resilient Planet* focuses on and develops recommendations. Recommendations where “active follow up” with “stakeholders” is now “*crucial* [emphasis added]” (UNSGHLPS, 2012, p.7). Further it emphasises that 56 “*concrete* [emphasis added] recommendations” (UNSGHLPS, 2012, p.12) need to be addressed “in a fresh and operational way” that shows how “the cost of inaction far outweighs the cost of action” (UNSGHLPS, 2012, p.13).

The 56 “concrete recommendations” (UNSGHLPS, 2012, p.12) are grouped into three distinct goals: (1) Empowering people to make sustainable choices; (2) Working towards a sustainable economy; and (3) strengthening institutional governance. Twenty-six of the

recommendations are within the first group and cover topics such as: reducing income inequality and gender inequality, enabling greater access to work opportunities for women, and fostering partnerships between government and business to enable an “ever-green revolution” (UNSGHLPS, 2012, p. 40). Group two includes thirteen recommendations that cover areas such as establishing price signals, sustainable procurement policies, respect for human rights, and how governments and businesses should share risk and shape future investment patterns. The remaining 17 recommendations, in group three, discuss strengthening institutional governance and cover topics such as: the increasing use of scientific advisors, increased participation of young people in government, and the development of a UN sustainable development strategy.

Throughout the recommendations, *Resilient People, Resilient Planet* (2012) reinforces the importance of business organisations and in turn the importance of “corporate strategists” (UNSGHLPS, 2012, p.22). Wherein corporate strategists are considered key agents in the development of new innovations, practices and technologies that can enable sustainable development. This thrusts upon these individuals and organisations a requirement for them to have a more systemic understanding and in turn a new level of responsibility.

Discussion

This paper opened with a quote from Jonas (1984) that has within it the understanding that a systemic understanding unleashes an imperative of responsibility. In this regard leadership and responsibility requires that consideration is given to deeds and acts, not as isolatable problems, but rather as part of an ongoing process. In short problems can't be solved only negotiated as the process will ensure new issues arise.

To develop its case regarding responsibility being underpinned by systemic thinking the paper has highlighted how two key publications, *Our Common Future* (1987) and *Resilient People, Resilient Planet* (2012) reinforce the primacy of humans as narrators of our future and a sustainable future is best realised by the embrace of a systemic understanding. Thus where sustainable development has been defined as “development which meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 8) a statement that ties in a systemic understanding by linking the past to the future and has parallels with Jonas’s (1984) quote. The challenge of this statement and the argument developed has been to show that sustainable development is a concept that defies conventional definition because it is not, in the standard modernistic sense a “form of stable phenomena existing outside of [its] representation” (Calas and Smircich, 1999, p.663). As such sustainable development requires a new way of understanding ourselves and our relationship with all that surrounds us. It is not a “scientific concept but a contested term in an essentially political discourse about human activities” (Cohen, Demeritt, Robinson and Rothman, 1998, p.52). It challenges modernity and promotes a more systemic, non-bounded understanding. An understanding where both primary and secondary qualities are given due consideration (Latour, 2013). Thus rather than primary qualities being given dominance in a modernist understanding, because secondary qualities are subjective and trivial. Both metrics (primary) and values (secondary) matter. The relative inarguability of numbers, as being key messengers of truth in modernity, is not hegemonic, rather in a systemic understanding ethics and morals matter too (Cummings, 2005).

The challenge of this systemic view is that it humbles us away from considering ourselves as a separable apex category. Rather it asks us to consider ourselves as systemically interconnected and part of a web of cause and effect from which we cannot separate ourselves. Thus we have to understand ourselves as key actors who are entwined

with all that surrounds us. Notwithstanding this systemic understanding at the core of sustainable development is a requirement for continued economic growth. Where that growth is facilitated by moving away from a “fractured epistemology” (Gladwin, Kennelly, and Krause 1995, p.874) of categorical thinking to a holistic perspective where humans have rethought their relationships with the planet (Banerjee, 2003, 2011; Gomis, Parra, Hoffman, and McNulty, 2011; Hoffman and Sandelands, 2005). Wherein we have reconsidered them in such a way that we understand, “the environment does not exist as a sphere separate from human actions, ambitions, and needs” (WCED, 1987, p. xi). As such and as emphasised sustainable development is not about saving “the environment”, rather it is about us saving ourselves in a manner where “human rights, basic needs, human security and human resilience are assured” (UNSGHLPS, 2012, p.6).

Resilient People: Resilient Planet outlines the key protagonists for enabling sustainable outcomes are business leaders and corporate strategists. These individuals have to accept new responsibilities, as are congruent with an expanded understanding of the impact of organisational actions on a systemically interconnected world. In this regard there is a requirement for a new type of leader, one who puts humanity as the central concern; but not one that considers humanity in isolated terms, but rather understands humans as part of a wider set of processes. In this regard sustainable development may offer the potential for managers and management to not rely on naïve conceptualisations that separate, but rather move to conceptualisations that connect. As such managers may be able to allow humanity to realise its “fullest potential” (Yates 2012, p.22); especially because as Sagan (1994) outlines with reference to an image of Earth as a pale blue dot, such an image “underscores our responsibility to deal more kindly with one another” (Sagan and Druyan, 1997, p.8) on a systemic planet.

End Quote

“there are no inputs from outside and no outputs to the outside; indeed there is no outside at all”

(Boulding, 1966, p.2).

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