

# *A vicious cycle of superficial conceptualization: Deconstructing nature in social innovation (policy) discourse*

**Hande Sinem Ergun\* and Seray Begüm Samur-Teraman\*\***

\* Marmara University 

\*\* Birmingham City University 

## ABSTRACT

Critical studies of social innovation (SI) reveal sustainability concepts are widely used by scholars, policy makers and practitioners on a superficial level (Eichler & Schwarz, 2019). Even if SI is mainly linked to social and economic dimensions, the relationship between SI and environment is still vague and needs further research. One possible reason for this disconnectedness would be the dominating anthropocentric assumptions instead of ecocentric assumptions? To fill this gap, this paper aims to explore the conceptualization of nature in SI documents. We do this through an analysis of United Nations (UN) publications, particularly, United Nations Development Programme (UNDP) Accelerator Labs. In addition, we consider how SI is understood, executed, promoted and how perceptions of nature affect SI. Eco-critical discourse analysis (ECDA) is adopted as an analytical approach for this study. This study utilizes texts as empirical material on SI published by the UN. The focus on the UN is appropriate, as they are a highly influential institution on national economies in shaping their SI policies and practices. Therefore, this study is undertaken on the basis that the discourse of these documents affects the SI discourse and practices of countries and the field. The contribution of this study lies in its effort to reveal embedded propositions in SI texts through language-driven analysis, then to discuss how a deeper understanding would regain the agenda for long-lasting socio-economic problems through an ecocentric critical discourse.

**Keywords:** Social Innovation; Sustainable Development; Ecocentrism; Policy Discourse; Ecocentric; Critical Discourse Analysis.

Proposal Submitted 24 January 2024, Article Received 15 May 2022, Reviews Delivered 18 October 2022, Revised 4 November 2022, Accepted 14 November 2022, Available online 16 May 2023.



## INTRODUCTION

The modern, and supposedly civilized way of organizing has proven to be ecologically and socially destructive (Heikkurinen *et al.*, 2016). Concepts like sustainability, sustainable development (SD), social innovation (SI), social economy, social entrepreneurship have however emerged as possible solutions to this destruction. Together with increasing impact of intergovernmental organizations, the interest in the sustainability field has also increased in line with research in the SI field. However, there are still significant global social and environmental problems, despite this immense interest on sustainability and academic efforts for developing knowledge network (Whiteman *et al.*, 2013).

Some SD related concepts, including SI, have emerged from anthropocentric mainstream organization and management thought, which seems to be the root cause of today's ecological problems (Heikkurinen *et al.*, 2016; Vlasov *et al.*, 2021). Therefore, it would be naïve to expect to solve the problems with the same mindset that already created them. Thus, if the underlying assumptions of innovation, technology and entrepreneurship are not exposed and questioned then the so-called solutions that are born from these concepts would not solve the problems and may even deepen the problems. Without changing the assumptions and conditions that create these problems in the first place, mainstream SI discourse and practices which are mainly market-and-technology driven become just quick "fixes" of the problems (Haskell *et al.*, 2021, Heikkurinen *et al.*, 2016, Vlasov *et al.*, 2021). The relationship between SI and environment is still vague, research on the conceptualization of nature and/or ecology in SI is still missing (Haskell *et al.*, 2021, Olsson *et al.* 2017). Although critical studies of SD and SI exist, many of them arise from an anthropocentric point of view and ecocentric criticism on this field is needed (Haskell *et al.*, 2021).

To fill these gaps and reach our aim, we've focused on the assumptions of SI reports of UNDP Accelerator Labs (hereafter AL) in terms of ecocentrism. We try to understand the underlying and implicit assumptions that may have negative impact on the diagnosis and may jeopardize the results of the practices these reports propose to solve. As per ecocentric discourse analysis (ECDA) (Stibbe, 2015) the texts give the impression of being ambivalent towards the perception of nature, while explicitly aiming to propose practices for SI, whereas implicitly reproduces the basic assumption sustaining the mindset and structure that generated the problems. The texts are also written in a way that aims to convince the reader to believe that this is the 'way things are', rather than adopting a particular perspective, in this case they are mainly neo-liberal technocentric.

## 1. ECOCENTRIC PHILOSOPHY

In the past century, economic growth, technological development, and prosperity have been achieved by human-beings at the expense of the natural environment and social equality. Today's idea of human development has proven to be destructive. The problems that we encounter are in fact cultural, as much as economic or technological, as developments are guided by values and culture. The way of how we perceive nature is also determined by our values and culture (Hoffman & Sandelands, 2005). Anthropocentrism and ecocentrism are two distinct environmental viewpoints that govern our understanding of, and relationships with, nature. In anthropocentrism, there is a fundamental duality between human and nature by keeping the human at the centre of everything on this earth, and everything surrounding earth is to serve the needs of humanity. Since the 16th century, the rise of capitalism, and the Industrial Revolution anthropocentric view is frequently presented as the only way of living, and human progress is the ultimate aim in this world (Mead, 2017). In anthropocentrism, everything is viewed and interpreted from the human experience and 'a thing' has value only if it is useful for human-beings. This mentality created egocentric organizing and ways of living (Purser *et al.*, 1995). There are serious attempts to modify anthropocentrism in terms of ecology. For instance, Stephens *et al.* (2019) proposed to recast "*social awareness*" to "*socioecological awareness*" and "*human emancipation*" to emancipation with the aim of converting ecological justice into practical action in the critical systems thinking framework. Another attempt was to distinguish between legitimate and illegitimate anthropocentrism and redefine the concept (Hayward, 1997). These rehabilitation attempts of anthropocentrism are valuable but of limited value to human utilization which is the driver of ecological destruction and is insufficient for a regenerative potential (Kopnina *et al.*, 2018).

However, from the perspective of ecocentric philosophy, humans are considered as a subsystem of the natural systems and are responsible from the health of the ecosystem (Purser *et al.*, 1995). Human beings are not privileged creatures of nature, and they are subject to same ecological rules as other creatures of nature. Nature has intrinsic value regardless of utility and value that humans ascribe to it. Hence, the preservation of nature should not be linked to its value to human beings, but rather its presence is valuable on its own. A holistic approach is a further characteristic of ecocentrism. Rather than studying biological organism in isolation from nature, ecocentrism considers the whole context, relationships, and interrelated processes. Ecocentrism requires acceptance of human and man-made objects' embeddedness in and dependency on the ecosystem. Ecocentrism emphasizes that most of the problems humans encounter today are the result of the separation of mind from nature (Heikkurinen *et al.*, 2016; Purser *et al.*, 1995).

As organizing and management fields are built upon anthropocentric assumptions, sustainability and related concepts derived from the same management field will just be the greening of intrinsically destructive business practices and creating unrealistic expectations for the improvement in the ecological situation. Positioning consumption and material acquisition as the "standard" way of living and promoting "green consumption" just changes the "colour" of the situation. Alienation from nature, materialist lifestyles and absence of caring non-humans and ecology results in ecological destruction and social inequalities. Therefore, according to an ecocentric worldview, a radical transformation of our worldview is urgently needed (Purser *et al.*, 1995) towards reconnecting human beings with nature and accepting that the embeddedness of humans in nature will change our relationship with ourselves, others and nature, our production of knowledge and technology, our decision making and living (Allen *et al.*, 2019). In terms of SI, understanding our anthropocentric mindset and discourse and evolving it into an ecocentric orientation could enable more desirable outcomes of SI.

### *Social Innovation in Critical Sustainability Discourse*

An innovation is called social when it solves a societal problem, benefits the society, prioritizes societal enrichment rather than private enrichment, enhances society's capacity to act and brings social transformation (Murray *et al.*, 2010; Sharra & Nyssen, 2011). Some also propose that SI has emerged as a response and remedy to a neoliberal ideology which causes social and ecological inequalities (Nussbaumer & Moulaert, 2007). SI is not limited to only solving occurring societal problems but also is expected to serve the transformation of a different society.

SI is not a new concept and entered the public discourse in the early 19<sup>th</sup> century with a narrative of the social innovator being a "social reformer" or "socialist" who challenges the established order (Godin, 2015). This political impression recently has been re-presented as a-political and as positive progress without questioning anything about the concept and its outcomes (Godin & Vinck, 2017). Approaching SI from an evolutionary perspective proves that SI was first used by sociologists to explain the diffusion of technological innovations in networked communities and the social effect of innovations (Ayob *et al.*, 2016). Collaboration at, and between, different levels of the society is a core concept for SI. Another important element of SI is the restructuring of power relationships within the society. Hence, social change is at the node of SI. SI can challenge the existing order and ruling elite and/or serve as a means of dealing with social inequalities (Schubert, 2019). In other words, collaboration leads to new forms of relationships which leads to innovation. Innovation also causes changes in relationships, creates social value and consequently creating societal impact (Moulaert *et al.*, 2005; Moulaert & MacCallum, 2019). The current western

'modern' orthodox where capitalism and the individualisation of society creates wealth disparities, and a blinkered view of the world is an enormous challenge to SI and social change. Within this context, SI is formulated as a way to deal with the consequences of modern late capitalism (Schubert, 2019).

Although contradictory views on SI and SD relationship exists, Millard (2018) argues that SI as a concept comes under the umbrella of sustainability and is mainly used as the practice of sustainable development (SD). As the interest in SD has increased with the promotion of UNDP Sustainable Development Goals, SI is also encouraged as the hope for all our social and ecological issues (Millard, 2018; Schubert, 2019) with UN necessitating the use of social innovation approaches to reach SDGs, making SI popular and nearly obligatory (Millard, 2018).

Critical studies of sustainability primarily criticize the lack of a universal agreement on the definition of sustainability, although it is a popular and 'politically correct' term amongst scholars and practitioners+. The vagueness of defining sustainability also enables the term to serve as the general rubric which suffers from ambiguity in theory and practice (Ala-Uddin, 2019; Hopwood *et al.*, 2005; Zygmunt, 2016). In fact, critical studies have shown that since the very beginning 'sustainability' literature, practices and research never questions the structures and relations that create these problems (either intentionally or unintentionally) (Carroll, 1991). Therefore, although sustainability is introduced to find solutions to the problems, it has remained far from solving them and seems to inadvertently empower the *status quo*. Studies also discuss the term 'weak sustainability' which emphasizes economic growth, objectification and utilisation of nature, and denial of existing power relations' responsibility (Bonnedahl & Eriksson, 2007). Thus, the UN's application of SD as a policy concept mainly fits to weak sustainability as it has been criticised by Adelman (2018) and Bonnedahl and Caramujo (2019) for being economically oriented, and ecologically modernizing, reenforcing the *status quo*. In this perspective, a balance between society and nature can be achieved and managed by sustaining economic growth through SD which is also called sustainable growth (Bonnedahl & Caramujo, 2019).

This notion of weak sustainability that seeks to protect nature at the same time as pursuing economic growth seems to be not working when the planetary limitations are ignored (Ayres *et al.*, 2001). On the other hand, strong sustainability calls for new ways of organizing beyond the current capitalist economy and accepts the embeddedness of society and economy in nature (Stål & Bonnedahl, 2016). Strong sustainability argues that natural resources cannot be substituted by human-made solutions and accepts the non-linearity of ecology (Steffen *et al.*, 2015). Haskell *et al.* (2021) argue that while studying SI, strong and weak approaches to sustainability

should be considered because the SD approach will provide the framework of how SI will be conceptualized and practiced. In their study, Eichler and Schwarz (2019) showed that most SI interventions fall into one or several SDGs and affects the interactions between SDGs. Furthermore, not all interactions are positive, as one improvement in an SDG (for example food production to end hunger) may lead to deterioration in another SDG (e.g., clean water and sanitation) (Franklin *et al.*, 2017). Indeed there are many contradictions when adopting a market and technology focused SI mindset to societal problems. For SI to serve SD, the embeddedness of society and economy in nature must be acknowledged. Otherwise, SI will become a tool to reinforce existing assumptions about human organizing that puts the market ahead of all other considerations (Haskell *et al.*, 2021).

As critical scholars, we need to be aware, as if the SI field is not opening pathways to radical transformations, then it might be supporting the existing structures (Olsson *et al.*, 2017). Therefore, it is reasonable to argue that the anthropocentric conceptualization of SI can be the reason that SI and SD is not achieving the desired outcomes. Putting 'humans' in the centre and objectifying everything to serve us denies the human dependency on ecology. If SI practice is not questioning the existing power structures in human organizing, underlying assumptions of human-nature relationship and offering new ways of connecting, then the desired outcome of societal change is unlikely to occur. Although the aspect of 'not to damage nature' is fundamental, SI can also be conceptualized in a way that it enables human-beings to adapt, regenerate and co-create with nature. Thus, why reducing negative impacts is important, it is more so that as human beings we should also have the capacity to be a positive contributor to nature.

## 2. METHODOLOGICAL ORIENTATION OF THE STUDY

The pattern of language is a helpful tool to understand the cognitive structures within people's minds and reveal their underlying stories (Stibbe, 2015). Our actions are based on our values and mentality, our values and mentality are influenced and expressed by language. Hence, language can encourage us to act in certain ways. As our aim in this study is to expose the assumptions underlying the dominant narratives and then establish the type of behaviour that is promoted in terms of ecocentrism.

Ecolinguistics proposes that our language is a helpful tool that can contribute to preserve (or damage) nature and helps search for new ways of expression that inspire people to flourish with nature. In short, language and ecology are interdependent. Our assumptions, values, beliefs, ideologies, and worldviews determine the relationship between each other, and nature and all these processes

are expressed through language. We do not want to undermine the fact that human beings are in fact active participants who can understand the real purpose of the texts they encounter, and develop their own meanings as stated by the New Materialist approaches (Donovan, 2018; Moore, 2017). However, critical discourse analysis can help us to deconstruct the stories within the discourses that make up our everyday life. These discourses are important as they influence us in our relationship with nature.

To make visible the underlying stories of United Nations Development Programme's, social innovation focused Accelerator Lab texts are analysed through ecolinguistic discourse analysis (ECDA), a method offered by Stibbe (2015). An ECDA method deconstructs texts to uncover the underlying stories and find out "*whether it encourages people to preserve or destroy the ecosystems that support life*" (Stibbe, 2015, p. 24).

According to Stibbe (2015) to reveal the "*stories-we-live-by*", texts are analysed in terms of ideologies, frames, metaphors, evaluations, identities, convictions, erasure and salience. Stibbe (2015)'s ECDA is a combination of different critical discourse analysis techniques and ecolinguistics. Under this technique, **ideologies** "*are stories shared by specific groups*" to make sense of the world. All institutions employ a specific language that is based on an ideology. **Framing** is "*the use of a story from one area of life (a frame) to structure how can other area of life is conceptualised.*" **Metaphors** are "*a type of framing which can be particularly powerful and vivid since they use a specific, concrete and clearly distinct frame to think about an area of life.*" **Evaluations** are used to differentiate between what is good and bad in a context. Most of the time evidence is not provided and taken for granted assumptions are emphasized as "*innovation is good*", "*economic growth is good*". These evaluations can become absolute truths in time, and we ignore to question them or their outcomes. **Identities** are provided to define a particular type of person. **Convictions** are about convincing the readers that "*a particular description of reality is true, likely, unlikely or false*". **Erasure** refers to the absences or in other words what is not presented or suppressed in the texts. **Salience** on the other hand is highlighting something as the most important and crucial. These eight types of stories are not separate, as they interact with each other. Therefore, this study is structured on the following framework: main frames are articulated as the first level analysis, then within each frame, decision of which metaphor, evaluation, identity, conviction, erasure and salience feeding the overall pattern is made as the second analytical level. Thirdly, interaction between human and nature including peripheric dynamics has been visualized to show the connections, direction and characteristics of the relationships.

### *Data analysis technique and steps*

In order to conduct an ECDA of SI in the context of sustainable development, 14 publications of the UNDP's AL materials are used including their SDG main policy text to make a thorough analysis. The underlying reason to select these texts is that they involve "praxis" based on the SI policy. UNDP AL's were established in 2019 under UNDP with the aim of being the "largest and fastest learning network on sustainable development challenges". In other words, they were created with the aim of substantially achieving UNDP SDGs. In the beginning they established 60 Lab teams in 78 countries, which increased to 91 Labs once they had added developing countries. Therefore, the UNDP ALs are designed to cultivate and implement SI systems to reach SDGs particularly in developing countries. These texts have already been issued as an extension of UNDP SI policy instrument principally to show the transformative role of Accelerator Labs in developing countries.

The texts, that frame the live accelerator labs, were taken from the organization's website (Please see Table 1. for further details)<sup>1</sup> they were read in detail by the authors at several times in a period from January till the end of May 2022 and then open coding was performed for each of the ECDA's eight types. To acknowledge the wider context, fourteen other UNDP reports and texts were purposefully included to obtain more inclusive analysis (Table 1).

**Table 1. Document Characteristics**

<b>Name of the document</b>	<b>Year of Publication</b>	<b>Number of pages</b>	<b>Document Label</b>
Innovating in an Uncertain World: One Year of Learning and Breakthroughs – 2020 Annual Report	July, 2020	37	ACCL_R1
The Fast and Curious: Our Story So Far	June, 2020	34	ACCL_R2
Strategy to Scale Social Innovation for Development	August, 2020	126	ACCL_R3
Strategy to Scale Social Innovation for Development (Toolkit only)	May, 2020	43	ACCL_R4
The Changing Nature of Work: 30 signals to consider for a sustainable future	APRIL ,2021	53	ACCL_R5
Collective Intelligence for Sustainable Development: Getting Smarter Together	May, 2021	53	ACCL_R6
Collective Intelligence for Sustainable Development: 13 Stories from the UNDP Accelerator Labs	May,2021	60	ACCL_R7
Grassroots Innovation: An Inclusive Path to Development	August, 2021	111	ACCL_R8

<sup>1</sup> <https://www.undp.org/acceleratorlabs/publications>



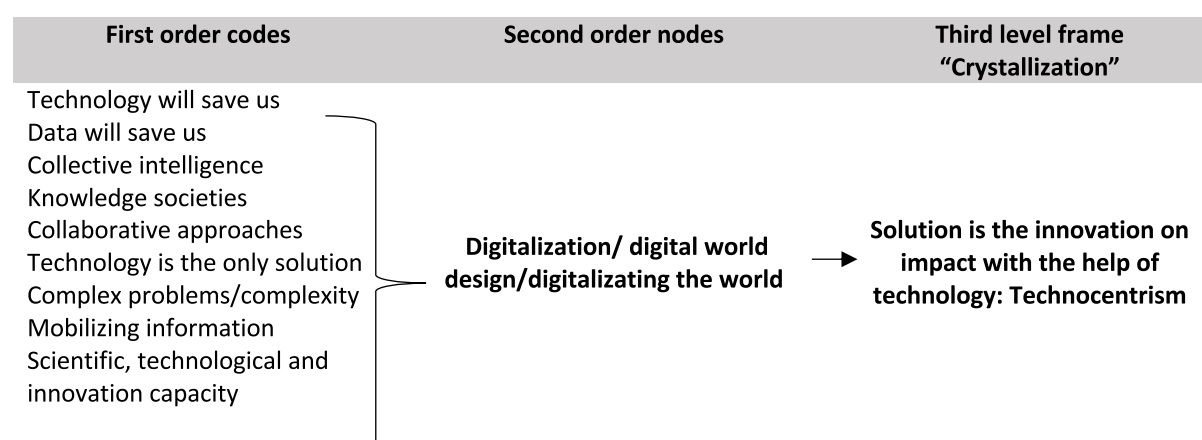
Lessons Learned from Applying the Data Powered Positive Deviance Method to Identify Grassroots Solutions Using Digital Data	October, 2021	24	ACCL_R9
The Data Powered Positive Deviance Handbook	November, 2021	138	ACCL_R10
Midterm Evaluation of the UNDP Accelerator Lab Network Project	February, 2022	62	ACCL_R11
Resolution adopted by General Assembly	September, 2015	35	UN_GA_REPORT
UNDP Accelerator Lab Brochure	N/A	16	ACCL_B
Total Pages: 792			

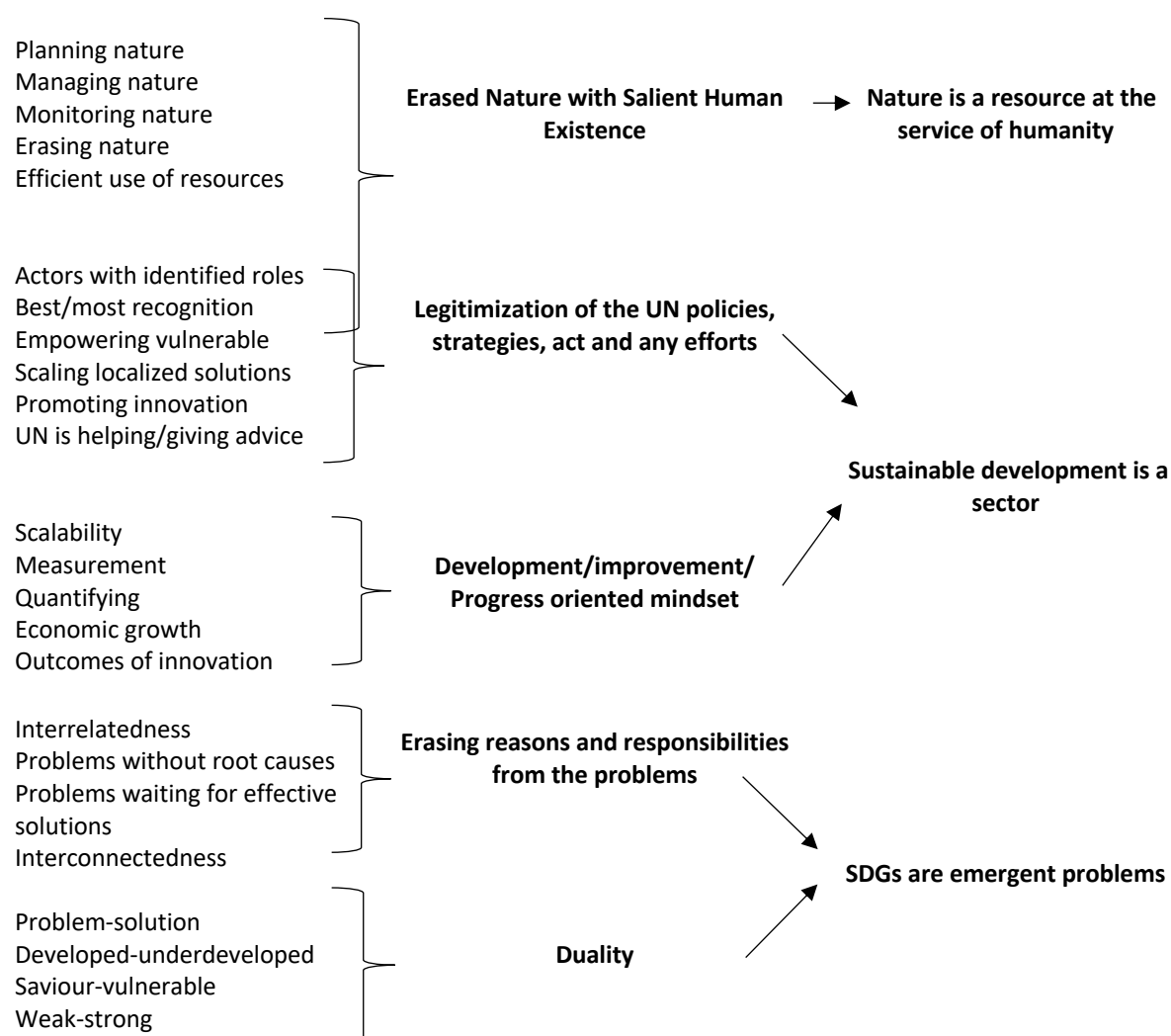
Source: elaborated by the authors (Ergun & Samur-Teraman, 2022).

Before creating the coding scheme, we derived word frequencies, performed extended lexical search with some key words which were selected based on researchers' own judgment such as technology, innovation, growth, nature, human, people, sustainability, nature etc., and lastly looked some of those key words in their context through utilizing MAXQDA 2020. The aim for this initial analysis is both to approach the data and as analysts to prepare for more detailed analysis.

Coding was conducted iteratively at three layers, starting with text-based N-Vivo coding, creating linkages among categories. During these analytical stages of coding, researchers were interacting with texts both independently and interdependently through creating mind maps to represent the coding structure. Further, researchers noted their feelings and created document memos separately after reading each text. Then, all memos were read and unified to represent each document. Texts were analysed through multiple shifts in the meaning of codes, feelings of researchers and changes in understanding about internal logic of the research. As a result of several analytical stages, we reached data driven first order codes, second order nodes and lastly third level frames as shown in the Figure 1. below.

Fig. 1: Analysis Path





Source: elaborated by the authors (Ergun & Samur-Teraman, 2022).

### 3. FINDINGS

This section provides four frames including representative excerpts from the texts, underlying assumptions, and document labels. There are four frames within the texts that feed anthropocentric neo-liberal technocentric ideology: nature is a resource which is impressively mentioned in the UN General Assembly Resolution; SDGs are emergent problems; solution is the innovation on impact reduction with the help of technology; and SD is a sector. The texts mainly emphasize entrepreneurialism in terms of innovation and technology, importance and necessity of economic growth, multiplication and expansion of social innovation which are the main components of neo-liberal technocentric discourse (Fougere *et al.*, 2017).

### *Frame 1: “Nature is a resource at the service of humanity”*

Under this frame “Nature” is conceptualized as a resource to be planned, managed, owned and used instead of a living being/organism, then it is stated as “ownership and control over land and other forms of property, inheritance, natural resources”, “achieve the sustainable management and efficient use of natural resources”, “climate change-related planning and management”, “sustainable use of terrestrial ecosystems, sustainably manage forests”, “forest management”. Besides this passivation of nature as something which could be sustainably managed, controlled, efficiently used, all throughout texts nature seems to be erased and human existence is salience and prominent in nature perception.

[...] How could the Accelerator Lab strengthen ocean-based economic sectors in a way that promotes the sustainable use of ocean resources? Throughout the year, the Lab focused on boosting a more sustainable form of tourism and supporting fisheries to generate income, reduce waste, and increase renewable energy use. (ACCL\_R1, p. 25)

Following excerpts strikingly represent dominance of “people” over nature, thus emphasize the logic of human-centeredness with a belief that humans will save nature.

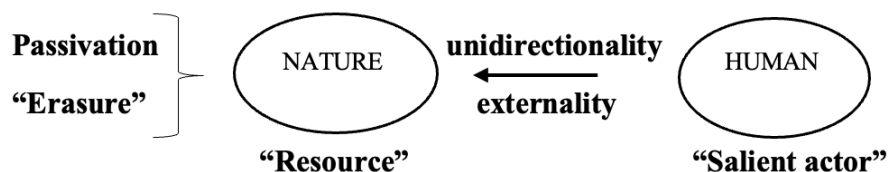
[...] It is an agenda of the people, by the people and for the people – and this, we believe, will ensure its success. (UN GA\_Report, p. 12)

[...] The future of humanity and of our planet lies in our hand. (UN GA\_Report, p. 12)

[...] They will be people-centered, gender-sensitive, respect human rights and have a particular focus on the poorest, most vulnerable and those furthest behind. (UN GA\_Report, p. 32)

As a summary all of these, Figure 2 characterize “nature” and “human” relationship under Framework I. According to the representation, nature is associated with humanity, but the relationship between human and nature is unidirectional, human being the salient actor and nature being an external resource.

**Fig. 2: Mind Map on Nature and Human Relationship for Framework I**



Source: this mind map is based on authors' own elaboration (Ergun & Samur-Teraman, 2022).

## *Frame 2: “SDGs are emergent problems”*

Under this frame, texts mainly focus on the problems rather than the roots, hence findings revealed that SDGs are framed as emergent problems that emerged out-of-nowhere which are threats to development, challenging and urgent, extrapolated from following excerpts:

[...] As we look at the speed of change around us, and the way many stubborn social and environmental problems morph into new (and usually more entangled) challenges, we're driven by the question – are there best practices for the challenges that we are now facing? (ACCL\_R2, p. 26)

[...] We're dealing with challenges that emerge and evolve. (ACCL\_R2, p. 26.)

Expressions include “climate change” “climate-related hazards” “natural disasters”, “desertification”, “deforestation”, “air pollution” seem to remove the responsibility for these situations and can be interpreted as if these problems do not have causes, happened on their own and have nothing to do with the way that human-beings are organized and living today. “External attribution” is used to connect cause and effect without an understanding of the real mechanisms operating behind the scenes.

The cases of environmental problems presented in the texts are considered problems only insofar as they affect people. “[...] The WHO has estimated that around seven million premature deaths globally are caused by air pollution every year...” convinces the reader that air pollution is dangerous for people, so it is an important problem to be solved. The reasons for air pollution are erased and in addition such phrases underline the mindset that natural issues are important only as long as they affect human beings.

[...] Global health threats, more frequent and intense natural disasters, spiralling conflict, violent extremism, terrorism and related humanitarian crises and forced displacement of people threaten to reverse much of the development progress made in recent decades. (UN GA\_Report, p. 5)

These emergent problems are not the result of “the development progress made in recent decades” rather they are threats to “development” as stated in Goal 13 (please see the Resolution adopted by the UN General Assembly). “Take urgent action to combat climate change and its impacts” and “combat desertification” particularly stated in SDG Goal 13 implies a metaphor with an underlying assumption that nature is something out there, separated from us and we should fear it and fight it if necessary.

In addition, the excerpt “the pandemic will turn back the clock on decades of progress, pushing 71 million people into extreme poverty in 2020” erases the responsibility of the economic system for the increased poverty. This also indicates

rested paradox in "problem and solution" duality, they are solely regarded as problems which were considered as positive concepts until today.

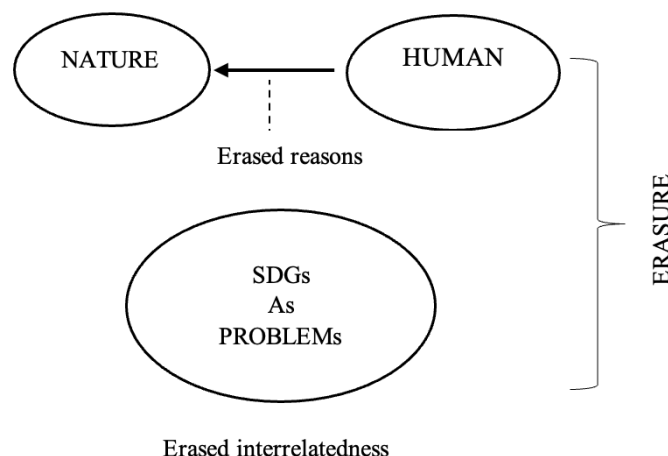
SDGs are labelled as threats and "ills", which is an evaluation that these problems are bad and can "reverse much of the development progress made in recent decades" which correspondingly means that development progress in recent decades is good and desirable.

[...] We started the UNDP Accelerator Lab network deliberately focusing on acceleration: building on what exists, rather than assuming that not-yet invented ideas or technologies are the cure to development ills. (ACCL\_R2, p. 14)

Despite acknowledging the interconnectedness of these problems, there are still questions about the "interrelatedness" aspect. Interconnectedness mainly refers "intertwined" and "connected at multiple points or levels", however interrelatedness is used when things have a mutual or reciprocal relation or it indicates parallelism, which then also be correlative.

[...] They are problems that aren't simple to solve. They are compounded by billions of actions and interactions. They change by the minute. They are complex. They are interconnected. (ACCL\_B, p. 2.)

**Fig: 3: Mind Map on Nature, Human and Problem Relationship for Framework II**



Source: this mind map is based on authors' own elaboration (Ergun & Samur-Teraman, 2022).

*Frame 3: "Solution is the "innovation" on the individualized impact reduction with the help of technology"*

Presenting the solution as merely reducing the impact via technology and innovation includes convictions and evaluations. The convictions and evaluations are mainly based on the complexity of the problems, and their solution rise in the collaborative approaches in innovation with the help of technology.

[...] These problems [...] can't be analysed with five -year-old datasets. And they won't be solved by a singular technological breakthrough. (ACCL\_B, p. 2)

[...] The spread of information and communications technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies, as does scientific and technological innovation across areas as diverse as medicine and energy. (UN\_GA\_Report, p. 5)

Statements in the texts emphasizing the importance of education, awareness-raising, human and institutional capacity, improvement on climate change mitigation, adaptation, impact reduction and early warning necessitate urgent action to combat climate change and its impacts, therefore seems to convince the reader that the solutions should be aimed at "impact reduction" instead of focusing on the root causes of these problems. It appears in the texts that when the solution is applied the problem will go away. Phrases like *"By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination"* (UN GA\_Report, p. 16)", "waste management" also aims to reduce the outcome rather than not producing and consuming hazardous chemicals and air, water and soil pollution and contamination or decreasing consumption or production to eliminate waste. *"Based upon these archetypes, the Lab in Ghana is designing a set of behavioural nudges to encourage and accelerate the adoption of recycling practice in the communities"* (ACCL\_R2, p. 25), excerpt withdrawn from UNDP Accelerator Labs Story document as an additional indication of erasing the impact of consumerism and salience of outcome on individualized behaviours.

Another conviction revealed from the texts is that the solutions are to be developed by people who are affected by the problems rather than the people that cause these problems therefore "Social Innovation" is conceptualized as 'with people, not for people' as seen in the following excerpt:

[...] By involving community volunteers in collecting and interpreting data, they also help those affected by pollution to see system dynamics and take action against environmental degradation. (ACCL\_R7, p. 9)

Among other convictions embedded in the texts including how Information and Communications Technologies (ICT) and globalization will benefit human progress also erases the ecological and social outcomes of such technologies.

[...] The spread of information and communications technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies, as does scientific and technological innovation across areas as diverse as medicine and energy. (UN\_GA\_Report, p. 5)

Findings also explicitly attributed higher meaning to "innovation" which is a saviour for humanity in this age against complicated problems. Thus, innovation will save us, everything is for innovation and economic growth and therefore the whole education system should be built on developing such skills is another conviction that are constantly repeated in the texts.

[...] The industries that provide these technologies will thrive in a world that is already dependent on a constant flow of innovation in all aspects of life. The knowledge and skills required to nurture this kind of growth will have to come from the existing workforce as well as younger generations who are still in the education system. (ACCL\_R5, p. 23)

[...] Effective education can provide citizens with the tools to help them become successful innovators and better prepare them for life outside of the classroom. (ACCL\_R8, p. 17)

Texts also emphasize mission for developed countries as "strengthening developing countries' scientific, technological and innovative capacities to move towards more sustainable patterns of consumption and production" (UN\_GA\_REPORT, p. 8), then solutions will appear. This again clearly erases the reasons and causes of these developing countries' problems and implies that consumption and production habits will stay the same only in a sustainable fashion.

[...] Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology. (UN\_GA\_Report, p. 26)

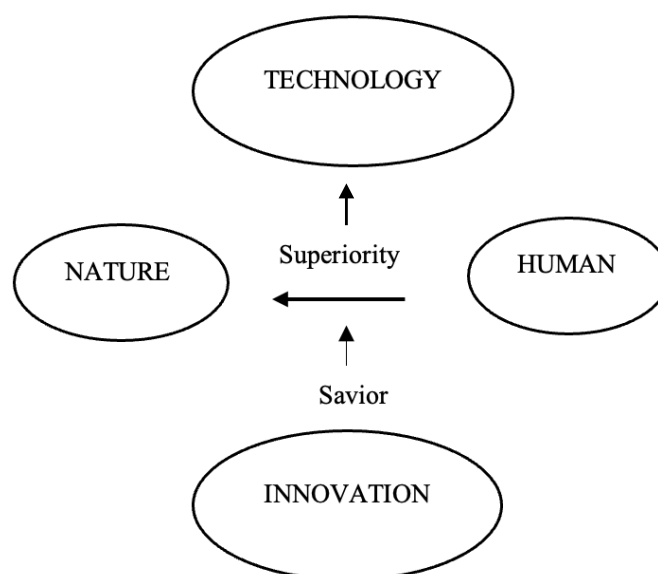
This conviction stresses a "collectivist approach" through collective intelligence which "can be understood as the enhanced capacity that is created when people work together, often with the help of technology, to mobilize a wider range of information, ideas and insights" (ACCL\_R6, p. 5). It plainly defines the solution as "Technocentrism" with its illustrated power as detailed:

[...] The power of technology means that machines can now perform some of the functions of intelligence that humans are not so good at – such as processing large volumes of data. (ACCL\_R2, p. 20)

Conviction of being faster and bigger also feeds this frame. Time constraints and salience of urgency seem to create a vicious circle which also includes many dead ends stopping humanity to go the so-called planned vision but with oxymoron strategies.

[...] We need to make faster and greater strides towards the SDGs, otherwise those goals will not be achieved by 2030. (ACCL\_R2, p. 20)

Fig. 4: Mind Map on Nature, Human and Technology Relationship for Framework III



Source: this mind map is based on authors' own elaboration (Ergun & Samur -Teraman, 2022).

#### Frame 4: "Sustainable development is a sector"

The texts frames "Sustainable Development is a sector" <sup>2</sup> in which various identities could be created. The UNDP AL reports reveal these actors and their identified roles. The UN positions itself as a saviour of the "poor and the vulnerable" without any mention about the non-human beings and nature, implying that these concepts are covered under the category of "being vulnerable":

[...] We are determined to mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people. (UN\_GA\_Report, p. 2)

Therefore, the field, actors and rules of the game have already been defined by the UN, which is the fundamental actor and has a right to define the complete sector with its strategic borders. In this sector "*people who are vulnerable must be empowered*" and "*support and strengthen the participation of local communities*", therefore the responsibility is placed directly on the vulnerable, and the real responsible performers of these problems are apparently erased.

Texts are also signalling a strategic challenge for the UN as "*how to better orchestrate a broad range of intelligence relevant to the SDGs – from science and data*

<sup>2</sup> In the study, a sector is used to refer to the division of the whole economy in which businesses engage in similar operating activities. The UNDP names Sustainable Development as a sector; therefore, we followed the same terminology for consistency.



*to public policy evidence and emerging findings from experiments – to help innovators on the groundwork more effectively*" (ACCL\_R6, p. 8). which is also making the UN the conductor of the sector. As an important intervention tool into this process, UNDP Accelerator Labs *"...is uniquely positioned to lead on this transformation"* (ACCL\_R3, p. 44) and *"The Labs are building on local solutions to see where breakthroughs are possible"* (ACCL\_R2, p. 17) to scale the local solutions which are emergent.

The method of how it would intervene in this process has already been articulated as follows:

[...] The UNDP Accelerator Labs focuses on three areas of innovation: 1) Grassroots innovation: building on the knowledge and ingenuity of women and men living in poverty and facing the effects of climate change, 2) Collective Intelligence: Tapping into the power of people, data and machines to get smarter together, 3) Portfolios of experiments: To intervene in complex systems, multiple safe-fail interventions are needed. (ACCL\_R8, p. 94)

UNDP becomes the leading actor in this sector and convinces the reader about its possible impact on the ever-changing world-order. The UNDP AL also aims for growth through the work of the Labs which are *a time-bound initiative to inject innovation into organizational DNA and taking innovation from a boutique venture to a corporate reflex*:

[...] UNDP has invested hundreds of millions of dollars to promote innovation through initiatives such as the Accelerator Labs and Innovation Facility and we see government adoption of innovation policy as a key ingredient to create the right incentives for bottom-up innovation as part of sustainable development. (ACCL\_R8, p. 93)

The metaphor "reflex" (mentioned in ACCL\_R11, p. 49) is interesting as it points an action performed without consciousness as a response to a stimulus. This is also humanizing the system and sounds risky as the time for more conscious responses are indeed needed.

The governments have been provided with a role of facilitator to increase investment in technology and innovation, with special emphasis on integrating innovation skills to education. However, the governments, especially of developing countries, are still facing significant *"challenges to achieve sustainable development"* (UN\_GA\_Report, p. 13) and they are also *"unfamiliar with the new sources of data available."* (ACCL\_R6, p. 7). Therefore, UNDP is helping them and advising them in that sense. From the texts, we are led to understand that government policy for innovation is regarded as a key ingredient to create the right incentives for bottom-up innovation as part of sustainable development.

If this is a sector, then SDGs are opportunities. This sector is also ruled by success and failure which is all about scalability of social innovation. This sector is also driven by ambition, competition, success orientation and being the *"best"*, *"most"*,

"fastest" etc. Performance of "positive deviance over time" seems to be constantly evaluated and whether they consistently outperform their peers is also checked. Acknowledging the importance of contextuality and intercultural diversity, bright minds, outperformers, positive deviants are the stars of this sector. Thus, the aim of UNDP AL is to find these positive deviants via technology and scale their innovations if they are "worthy of scaling"<sup>3</sup>.

[...] Positive Deviance: An approach that seeks to identify outperformers to understand and replicate their strategies and practices within a community. (ACCL\_R10, p. 6)

[...] This is specifically addressing the question: Is it worth scaling? If it is likely to fulfil certain goals, it is also likely to be worth scaling. (ACCL\_R3, p. 11)

This sector is believed to operate most effectively with collective intelligence in which the technology makes full use of human experience.

[...] We now need to fully harness the knowledge of the almost eight billion people on the planet – and disseminate their often-surprising solutions and innovative approaches. (ACCL\_R6, p. 4)

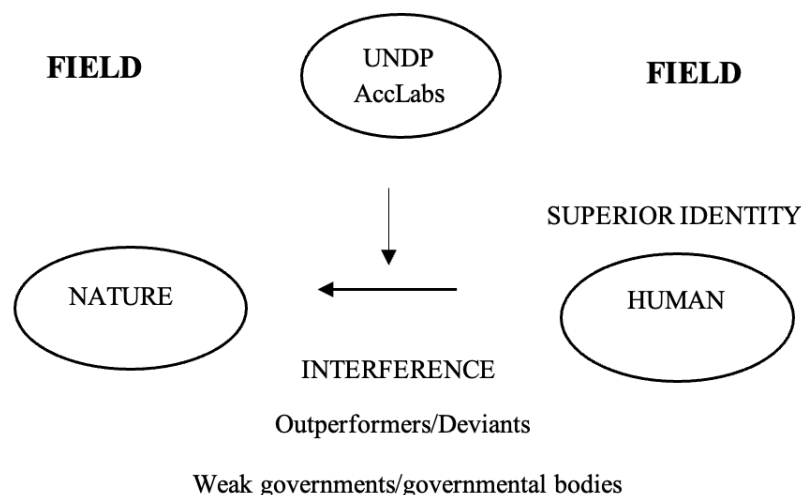
This idea behind this statement seems that if we can collect all of information and data about all the people on this earth, with the help of ICT and disseminate the innovations, all the problems will be solved.

The multiple identity of private sector companies is somehow erased in the texts in terms of their contribution to SDGS. However, they are encouraged, especially large and transnational companies "*...to adopt sustainable practices and to integrate sustainability information into their reporting cycle*". Further, their "*business missions are expected to be more involved in tackling burning global and social issues*" as "*private business activity, investment and innovation are major drivers of productivity, inclusive economic growth and job creation*". (UN\_GA\_Report, p. 29).

---

<sup>3</sup> Scaling is common concept in entrepreneurship which indicates a start-ups capacity to grow in a way that its revenues continue to rise faster than its costs.

Fig. 5: Mind Map on Nature, Human and UNDP Relationship for Framework IV



Source: this mind map is based on authors' own elaboration (Ergun & Samur-Teraman, 2022).

## CONCLUSION AND DISCUSSION

From an ecocentric perspective, the discourses of UNDP AL can be considered ambivalent; however ambivalent texts are not destructive, but they might be modified to encourage people to flourish with nature. In UNDP AL Reports, nature is framed as a resource to be "used" in a sustainable way, the reduction of overall consumption and production and/or concepts like "degrowth", "deconsumption", etc., are not mentioned at all, nor are the agencies and/or power relations and/or structures and/or mentalities that cause ecological destruction and societal problems.

Considering the ecosophy of the authors which seeks a global reduction in consumption and production and a redistribution of wealth from rich to poor, designing life and ways of living inspired by nature with the intention of enabling humans to become a better-adapted species for life on earth and flourish with nature for nature, the texts seem to be nowhere near it. The documents emphasize the anthropocentric way of human development and business as usual. Consequently, they are unsurprisingly written in an anthropocentric neo-liberal technocentric ideology. The expressions are obviously human-centred. The discourse in these documents employ the mentality that everything is an instrument for human-beings. Everything from nature to technology, human to social innovation are instruments that are valuable only if they can be utilized. The nature is regarded as a resource if it benefits the people, it is seen as a threat when it damages people. When the nature is framed as a resource at the service of human-beings or a threat we should "take action against", its value is determined in terms of the objects' degree of utilization and functionality which diminishes the objects' autonomous, intrinsic, and unique

dimensions. From the texts, in fact, human nature duality leads to the idea of human domination over nature which results in considering nature as resource affects all the other framings and conceptualizations in terms of SI. Human-nature duality also enables to remove the responsibility of humans from the emergence and evolution of the "problems". This problem mindset creates the perception that when the solution is found then the problem diminishes which is not the case most of the time in real life (Stibbe, 2015). Instead of a problem frame, predicament frame can be proposed which encourages people to come up with responses rather than seeing the world as a "problem" and rising with "reactions" (Stibbe, 2015).

We encounter the technocentric convictions of the texts in which the combination of technology, innovation and human will save the planet is further highlighted. The problem with this "innovation-led development" mentality lies in its tendency to evaluate innovation and technology as good without any deep questioning. This can be labelled as "innovation fetish", as harm caused by an innovation and an innovation mindset is not assessed. This innovation and technology fetish diminishes the value of a maintenance perspective and focuses on "improvement" of everything. Notwithstanding, technology and innovation in ecocentric sense can be an important tool for people to find ways to flourish with nature and coexist with other forms of life which would eventually make people a better adapted species for nature. Therefore, moving away from existing ambitious values of having more and growing more is required for such a transformation (Fromm, 1976).

We also encounter the emphasis on the outcome of SI. Although the word outcome is replaced with impact in scaling SI, the difference between the two are ambiguous. In an ecocentric text, intrinsic goals are more valuable as the extrinsic goals caused the ecological damage in the first place. The SI may not be "worth" scaling up, down or deep, however as every object is valuable and deserve support.

The capitalist society's obsession with competition and outcome achievement (Savran, 1998, p. 16) is obvious in the texts. If an innovation solves a problem now, then this is a successful innovation without considering the side effects of these fixes in terms of nature and future generations. Perhaps that's why animals and children are missing in the texts? In the texts, the need for being fast and urgent is emphasized. Although it may sound positive, fast way of living is in fact highly damaging for people and society. To deal with SDGs we might need new reflexes which are in alignment with nature and correspondingly not so competitive. Rather than achieving, being the best, most, fastest, biggest or considering the worth of things due their expansion capacity, we can move on to the value of small things, with modest steps and respecting the timing of nature.

These discourses do not encourage the reader to develop a deeper understanding of the issues and act in a regenerative way with nature (Cachelin *et al.*, 2010). Mühlhäusler (2003, p. 134) stated when *"the concepts... are studied in isolation from its makers or its effects, it can become a commercial commodity"*. In the case of the UNDP AL reports, the makers and the causes are erased, and SD is framed as a sector in which SI becomes a commodity. SI in fact substitutes *allowing people to imagine, and practically seek another conceptualization of nature and life*, in other words ecocentrism. Erasure of the key actors responsible for ecological destruction can lead to development of solutions at the wrong level (Schleppegrell, 1997). The current solutions are trying to fix the victims rather than the creators. Therefore, the reports encourage us to think and act about nature if we only encounter any "problem" caused by it. Since reduction in consumption with corresponding redistribution of wealth is not mentioned in the discourses, we can assume that the "buying mood" of people can continue as long as we can solve the problems created by buying and producing. As Bloor and Bloor (2007, p. 12) states, *"how ideologies can become frozen in language and find ways to break the ice"*, this way of approaching SI is the "neoliberal" ideologies frozen in language.

There is a need for urgent consideration of the human nature duality. It is obvious that we cannot solve the problems with the mindset that created them, we must rethink and encounter where nature stands in this relationship. Acknowledging our embeddedness in nature and designing our lives accordingly might be more regenerating than trying to apply the mainstream innovation concepts in a sugar-coated way, in this case "sustainable-coated" way. The discourses are driven by the mentality of entrepreneurship opportunity. The social innovators in the reports are not regarded as intermediaries of ecology but rather as separate individuals/groups that can dominate nature or society.

Conceptualizing and implementing SI based on four frames derived from the UNDP AL's documents moves the concept of SI far away from the notion of bringing societal change and solve these problems. The SD sector in fact can be regarded as a market innovation. A new market is created which can only develop patches to the issues and if the society keeps the same anthropocentric neoliberal technocentric mentality, this market has a great potential to grow. The current and mainstream SI becomes a substitute for discovering new ways of human organizing and living, in this case ecocentrism. Eventually, SI becomes the obstacle in natural SI and SD. In other words, SI and SD becomes oxymorons. It would be delusional to expect a different result from a sticking plaster since they are being conceptualized and applied with the perspectives that created these problems. By only expanding the behaviour of positive deviants and changing the behaviour of the victims, the societal change, as defined by UNDP and developed nations, is only required of the victims

of these problems not the perpetrators. As a macro societal change in our way of living is not encouraged within the texts, then the current way of living will create new victims.

Besides this study's contribution, we acknowledge that there is quite a long way to reach a complete understanding about what rests behind these discourses. The analysis of the documents might also be supported with in-depth interviews in the future with people who have engaged in shaping these documents in some way. Their views, feelings, assumptions, and/or personal opinions (might be captured easily or implicitly emerge both from casual and formal discussions) would have been valuable resource to deepen the understanding extrapolated from the texts. Besides UNDP AL's documents which were the main focus of this paper, the corpus for critical discourse analysis might be extended by including other reports issued by UNDP and related agencies.

In conclusion UNDP's SI discourse can be considered as a superficial discourse. Instead of a discourse that encourages examination of the current orthodox and anthropocentric views, looking for solutions to the causes of environmental concerns. On the contrary, UNDPs published reporting fails to challenge anthropocentrism, ignoring its failings. In this conceptualization SI can only serve as cosmetic repair. Unfortunately, the UN have failed to grasp that SI has great potential to support planetary regeneration. Our ecosophy should be about designing life and ways of living in alignment with an ecological paradigm, inspired by nature with an intention that enables humans to become better-adapted species for life on earth to flourish with nature for nature. This necessitates a global reduction in consumption and production and a redistribution of wealth from rich to poor. We call for a deeper understanding of the relationship between organisational behaviour and the planet, that involves the realisation of the reasons for our environmental problems, accepts our dependency on nature, and acknowledges nature's independency from us. There is a need for a perspective and praxis in the form of adaptation to ecological thinking. However, it would appear we are a long way from achieving this ambitious project where power lies in anthropocentrism that controls the dominant narratives we live within.

## REFERENCES

- Adelman, S. (2017). The Sustainable development goals. Anthropocentrism and Neoliberalism. In D. French & L. Kotzé (Eds.), *Global goals: Law, theory and implementation*. Cheltenham, UK: Edward Elgar.
- Ayres, R., Van den Berrgh, J., & Gowdy, J. (2001). Strong versus weak sustainability: Economics, natural sciences, and concisience. *Environmental Ethics*, 23(2), 155-168. <https://doi.org/10.5840/enviroethics200123225>
- Ala-Uddin, M. (2019). 'Sustainable' discourse: a critical analysis of the 2030 agenda for sustainable development. *Asia Pacific Media Educator*, 29(2), 214-224. <https://doi.org/10.1177/1326365X19881515>
- Allen, S., Cunliffe, A. L., & Easterby-Smith, M. (2019). Understanding Sustainability Through the Lens of Ecocentric Radical-Reflexivity: Implications for Management Education. *Journal of Business Ethics*, 154, 781-795. <https://doi.org/10.1007/s10551-016-3420-3>
- Ayob, N., Teasdale, S., & Fagan, K. (2016). How social innovation 'came to be': Tracing the evolution of a contested concept. *Journal of Social Policy*, 45(4), 635-653. <https://doi.org/10.1017/S004727941600009X>
- Bateson, G. (1991 [1975]). *Ecology of mind: The sacred. A sacred unity. Further steps to an ecology of mind*. New York: Harper Collins.
- Bloor, M., & Bloor, T. (2013). *The practice of critical discourse analysis: An introduction*. Routledge.
- Bonnedahl, K. J., & Eriksson, J. (2007). Sustainable economic organisation: simply a matter of reconceptualisation or a need for a new ethics? *International Journal of Innovation and Sustainable Development*, 2(1), 97-115. <https://doi.org/10.1504/IJISD.2007.016060>
- Bonnedahl, K. J., & Caramujo, M. J. (2019). Beyond an absolving role for sustainable development: Assessing consumption as a basis for sustainable societies. *Sustainable Development*, 27(1), 61-68. <https://doi.org/10.1002/sd.1862>
- Cachelin, A., Norvell, R., & Darling, A. (2010). Language fouls in teaching ecology: Why traditional metaphors undermine conservation literacy. *Conservation Biology*, 24(3), 669-674. <https://doi.org/10.1111/j.1523-1739.2010.01481.x>
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business horizons*, 34(4), 39-48.
- Donovan, J. (2018). Animal ethics, the new materialism, and the question of subjectivity. In A. Matsuoka & J. Sorenson (Eds.), *Critical Animal Studies: Toward Trans-Species Social Justice* (p. 257-274). Rowman & Littlefield Publishers.
- Eichler, G., & Schwarz, E. (2019). What Sustainable Development Goals Do Social Innovations Address? A Systematic Review and Content Analysis of Social Innovation Literature. *Sustainability*, 11(2), 522. <https://doi.org/10.3390/su11020522>
- Franklin, A., Kovách, I., & Csurgó, B. (2017). Governing social innovation: Exploring the role of 'discretionary practice' in the negotiation of shared spaces of community food growing. *Sociologia ruralis*, 57(4), 439-458. <https://doi.org/10.1111/soru.12126>
- Fromm, E. (1976). Altered states of consciousness and ego psychology. *Social Service Review*, 50(4), 557-569. <https://doi.org/10.1086/643427>
- Godin, B. (2015). *Innovation contested: The idea of innovation over the centuries*. Routledge.

- Godin, B., & Vinck, D. (Eds.) (2017). *Critical studies of innovation: Alternative approaches to the pro-innovation bias*. Cheltenham, UK: Edward Elgar.
- Haskell, L., Bonnedahl, K. J., & Stål, H. I. (2021). Social innovation related to ecological crises: A systematic literature review and a research agenda for strong sustainability. *Journal of Cleaner Production*, 325, 129316. <https://doi.org/10.1016/j.jclepro.2021.129316>
- Hayward, T. (1997). Anthropocentrism: a misunderstood problem. *Environmental Values*, 6(1), 49-63. <https://doi.org/10.3197/09632719776679185>
- Heikkurinen, P., Rinkinen, J., Järvensivu, T., Wilén, K., & Ruuska, T. (2016). Organising in the Anthropocene: an ontological outline for ecocentric theorising. *Journal of Cleaner Production*, 113, 705-714. <https://doi.org/10.1016/j.jclepro.2015.12.016>
- Hoffman, A. J., & Sandelands, L. E. (2005). Getting Right with Nature: Anthropocentrism, Ecocentrism, and Theocentrism. *Organization & Environment*, 18(2), 141-162. <https://doi.org/10.1177/1086026605276197>
- Hopwood, B., Mellor, M., & O'Brien, G. (2005). Sustainable development: mapping different approaches. *Sustainable development*, 13(1), 38-52. <https://doi.org/10.1002/sd.244>
- Kopnina, H., Washington, H., Taylor, B., & J Piccolo, J. (2018). Anthropocentrism: More than just a misunderstood problem. *Journal of Agricultural and Environmental Ethics*, 31(1), 109-127. <https://doi.org/10.1007/s10806-018-9711-1>
- Mead, T. (2017). *Bioinspiration in Business and Management: Innovating for Sustainability*. Business Expert Press.
- Millard, J. (2018). How social innovation underpins sustainable development. In J. Howaldt, C. Kaletka, A. Schröder & M. Zirngiebl (Eds.), *Atlas of Social Innovation: New Practices for a Better Future* (p. 41-43). Munich: oekom Verlag GmbH, Young Foundation.
- Moore, B. L. (2017). *Ecological literature and the critique of anthropocentrism*. Springer.
- Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation* (Vol. 24). London: Nesta.
- Moulaert, F., Martinelli, F., Swyngedouw, E., & Gonzalez, S. (2005). Towards alternative model (s) of local innovation. *Urban studies*, 42(11), 1969-1990. <https://doi.org/10.1080/00420980500279893>
- Moulaert, F., & MacCallum, D. (2019). *Advanced introduction to social innovation*. Cheltenham, UK: Edward Elgar.
- Mühlhäusler, P. (2003). *Language of environment, environment of language: a course in ecolinguistics*. London: Battlebridge.
- Nussbaumer, J., & F. Moulaert. (2007). L'innovation sociale au cœur des débats publics et scientifiques, In J.-L. Klein & D. Harrisson (Eds.), *L'innovation sociale* (p. 71-88). Québec: Presses de l'Université du Québec.
- Olsson, P., Moore, M. L., Westley, F. R., & McCarthy, D. D. (2017). The concept of the Anthropocene as a game-changer: a new context for social innovation and transformations to sustainability. *Ecology and Society*, 22(2), 1-14. <https://doi.org/10.5751/ES-09310-220231>
- Purser, R. E., Park, C., & Montuori, A. (1995). Limits to anthropocentrism: Toward an ecocentric organization paradigm? *Academy of Management Review*, 20(4), 1053-1089. <https://doi.org/10.5465/amr.1995.9512280035>
- Schlepppegrell, M. J. (1997). Agency in environmental education. *Linguistics and Education*, 9(1), 49-67.
- Schubert, C. (2019). Social innovations as a repair of social order. *NOvation: Critical Studies of Innovation*, 1(2019), 41-66.



- Sharra, R., & Nyssens, M. (2011). Social innovation: An interdisciplinary and critical review of the concept. Working paper. <https://www.semanticscholar.org/paper/Social-Innovation-%3A-an-Interdisciplinary-and-Review-Sharra-Nyssens/b46a2f4e83789220bda416fcb8ac01964156e73d>
- Stål, H. I., & Bonnedahl, K. (2016). Conceptualizing strong sustainable entrepreneurship. *Small Enterprise Research*, 23(1), 73-84. <https://doi.org/10.1080/14747731.2016.1161119>
- Steffen, W., Broadgate, W., Deutsch, L., Gaffney, O., & Ludwig, C. (2015). The trajectory of the Anthropocene: the great acceleration. *The Anthropocene Review*, 2(1), 81-98. <https://doi.org/10.1177/20530196145647>
- Stephens, A., Taket, A., & Gagliano, M. (2019). Ecological justice for nature in critical systems thinking. *Systems Research and Behavioral Science*, 36(1), 3-19. <https://doi.org/10.1002/sres.2532>
- Stibbe, A. (2015). *Ecolinguistics: Language, Ecology and the Stories We Live by*. Routledge.
- Vlasov, M., Heikkurinen, P., & Bonnedahl, K. J. (2021). Suffering catalyzing ecopreneurship: Critical ecopsychology of organizations. *Organization*, <https://doi.org/10.1177/13505084211020462>
- Whiteman, G., Walker, B., & Perego, P. (2013). Planetary boundaries: Ecological foundations for corporate sustainability. *Journal of Management studies*, 50(2), 307-336. <https://doi.org/10.1111/j.1467-6486.2012.01073.x>
- Zygmunt, T. (2016). Language education for sustainable development. *Discourse and Communication for Sustainable Education*, 7(1), 112-124. <https://doi.org/10.1515/dcse-2016-0008>