

EXPLORING THE CONCEPT OF SUSTAINABLE DEVELOPMENT: A NON-SCIENTIFIC, GROWTH-ORIENTED, AND ANTHROPOCENTRIC ONTOLOGY NORMALISED IN INTERNATIONAL LAW?

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References to sustainable development as an objective, goal, principle, or narrative are pervasive in law and policy documents at domestic, regional, and international levels. Nevertheless, the concept of sustainable development remains elusive due to, inter alia, the lack of clear definition for effective implementation, and the ongoing challenge of assessing its inherent sustainability. Against this background, this work aims at understanding to what extent the reliance on problematic conceptualisations of sustainable development has been progressively and aprioristically normalised in international law documents. Through documentary analysis, this work simultaneously clarifies why the concept of sustainable development is problematic and verifies its process of normalisation. Indeed, while tracing the origins of sustainable development, it sheds light upon the non-scientifically grounded ontology underpinning it and provides reflections upon the interests that its normalisation in law might serve. Findings reveal that while sustainability emerged from scholarly works, development and sustainable development largely originated from and crystallised in law and policy documents, reflecting the short-term interests of dominant actors. The study concludes that the reliance on the non-scientific, growth-oriented, and anthropocentric conceptualization of sustainable development might be inherently unsustainable. Meanwhile, traces of an alternative 'pure sustainability' paradigm continue sprouting in scholarly literature, and this opens some room for hope for a possible change.

Keywords: sustainability; development; sustainable development; documentary analysis; economic growth; pure sustainability paradigm

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I. SUSTAINABLE DEVELOPMENT: NOT SUCH A STRAIGHTFORWARD CONCEPT

The concept of sustainable development, underpinned by the paradigm of never-ending (but somehow ‘green’) economic growth, is nowadays mainly conceived as the result of the combination of seventeen Sustainable Development Goals (SDGs), and it finds large acceptance in most political, economic, but also university institutions worldwide.¹ Nevertheless, concerns have long been raised about the nature or theoretical soundness of the sustainable development concept.² Indeed, as far as its nature is concerned, sustainable development remains a fuzzy creature, referred to not only as a concept, but also as a goal, a principle, a context, and a narrative.³ To maintain the most possibly neutral position, this article will mainly refer to sustainable development as a concept.

¹ Jason Hickel, Giorgos Kallis, ‘Is Green Growth Possible?’ (2020) 25 *New Political Economy* 469.

² An outstanding analysis of the legal status of the concept of sustainable development has been provided in Vaughan Lowe, ‘Sustainable Development and Unsustainable Arguments’ in Alan Boyle & David Freestone (eds), *International Law and Sustainable Development: Past Achievements and Future Challenges* (Oxford 1999). According to Lowe, ‘the argument that the concept of sustainable development is now a binding norm of international law in the sense of the ‘normative logic’ of traditional international law as reflected in Article 38(1) of the Statute of the International Court of Justice is not sustainable’, 21.

³ Look at, *inter alia*, Juan Telleria and Jorge Garcia-Arias, ‘The Fantasmatic Narrative of “Sustainable Development”: A Political Analysis of the 2030 Global Development Agenda’ [2022] 40 *Politics and Space* 241; Matthew Humphreys, *Sustainable Development in the European Union - A General Principle* (Routledge 2018); United Nations, Paris Agreement (2015) Art.2(1); UN General Assembly, ‘Transforming our world : the 2030 Agenda for Sustainable Development’ (2015), A/RES/70/1; International Court of Justice, *Gabcikovo-Nagymaros* [1997], par.14 refers to the ‘concept of sustainable development’; Gro Harlem Brundtland, ‘Our Common Future: Report of the World Commission on Environment and Development’ [1987], UN-Document A/42/427.

Existing literature already provides a picture of the political role played by the concept of sustainable development, and describes how this concept has been used to legitimise neoliberal and capitalist interests.⁴ Moreover, the historical and philosophical processes driving the mutation of the concept of sustainable development have been tackled, and the weakness of its theoretical basis have been highlighted.⁵ Nonetheless, scholars have not engaged in providing an analysis of sustainable development and its two constitutive elements (sustainability and development) which asks questions of its empirical solidity and how its underlying ontology has been normalized in international law.⁶

⁴ Sara Lorenzini, *Global Development A Cold War History* (Princeton University Press 2019); Jason Hickel, 'The Contradiction of the Sustainable Development Goals: Growth Versus Ecology on a Finite Planet' (2019) 27 *Sustainable Development* 873; Lynley Tulloch, 'On Science, Ecology and Environmentalism' (2013) 11 *Policy Futures in Education* 100; Klauss Bosselmann, *The Principle of Sustainability: Transforming Law and Governance* (Routledge 2008); Carlos Castro, 'Sustainable Development – Mainstream and Critical Perspectives' (2003) 17 *Organization & Environment* 195.

⁵ Ben Purvis, Yong Mao, Darren Robinson, 'Three pillars of sustainability: in search of conceptual origins' (2018) 14 *Sustainability Science* 681; Iris Borowy, *Defining Sustainable Development for Our Common Future* (Routledge 2014); Jeremy Caradonna, *Sustainability: A History* (Oxford University Press 2014); Jacobus Du Pisani, 'Sustainable development – historical roots of the concept' [2006] 3 *Environmental Sciences* 83.

⁶ The underlying ontology of a concept, paradigm, or theory refers to the foundational understanding, conceptualization, and representation of reality upon which the concept, paradigm, or theory is built. The adopted ontology determines what the concept, paradigm, or theory considers as reality and what it excludes or overlooks. For more information about the need to reform the anthropocentric ontological structure upon which environmental law is built, look at: Emille Boulot and Joshua Sterlin, 'Steps Towards a Legal Ontological Turn: Proposals for Law's Place beyond the Human' (2021) 12 *Transnational Environmental Law* 277.

To fill this research gap,⁷ and to enrich the critical literature on sustainable development, the present study will try to understand to what extent a problematic conceptualisation of sustainable development, along with its underlying ontology, has emerged and been normalised in international law documents. This firstly requires clarifying why the concept of sustainable development is indeed problematic and, secondly, accounting for its entrenchment in international law while reflecting upon its consequences. Undoubtedly, a comprehensive examination of this kind would fall outside the scope of a scholarly article. Therefore, to simultaneously clarify why the concept of sustainable development is problematic and to make an initial, non-comprehensive assessment of its normalization in international law documents, this work will assess the concept of sustainable development through documentary analysis.

Indeed, documentary analysis permits granular assessment of the specific wording adopted in pivotal legal, policy, and scholarly documents that have shaped the conceptualisation of sustainability, development, and sustainable development since their early origin. It reconstructs these concepts while incorporating scientific and economic findings and keeping track of the materialisation, normalisation, and crystallization of political and economic interests within legal documents, all beneath the guise of sustainable development.⁸ This allows us to track the process of change undertaken by

⁷ While legal scholars such as Lowe (n 2), Bosselmann (n 4), Humphreys (n 3), along with Louis J Kotzé and Sam Adelman, 'Environmental Law and the Unsustainability of Sustainable Development: A Tale of Disenchantment and of Hope' (2023) 34(2) *Law and Critique* 227; Edoardo Chiti, 'Verso una sostenibilità plurale?' (2021) 25(3) *Rivista Quadrimestrale di Diritto dell'Ambiente* 130; Virginie Barral, 'Sustainable Development in International Law: Nature and Operation of an Evolutive Legal Norm' (2012) 23 *European Journal of International Law* 377, and Louis B Sohn, 'The Stockholm Declaration on the Human Environment' (1973) 14 *The Harvard International Law Journal* 424, have critically analysed the concept of sustainable development, none has approached it from the angle described above.

⁸ Aimee Grant, *Doing Excellent Social Research with Documents* (Routledge 2019).

this increasingly problematic concept, while shedding light on its entrenchment in international law documents and facilitating reflection upon the normalisation of its non-scientific-based ontology. However, such a deeper level of analysis comes at the cost of comprehensiveness. Documents for analysis will be selected based on their relevance in both policy and scholarly contexts, as well as their impact on public opinion or governmental action. Although this criterion is not based on a strict metric, it explains, *inter alia*, the decision to exclude case law from the analysis.⁹

The nature of this work is strongly interdisciplinary. While its findings are expected to stimulate discussion among scholars across various disciplines, its primary objective is nonetheless to contribute to legal scholarship. In fact, while the role of law as an instrument of crystallisation of worldviews and maintenance of power needs to be recognized,¹⁰ critical assessments of the concept of sustainable development have been scarce in legal research.¹¹ Thus, the fundamental contribution of this work is to enrich the legal literature debunking sustainable development, while providing arguments

⁹ As Verschuuren points out, despite the increasing role that the concept of sustainable development plays in courts, up until now ‘all cases have been decided by relying on more specific principles’. Moreover, in the Sofia Guiding Statements, the International Law Association underlines that there is, in the international jurisprudence, ‘a continued and genuine reluctance to formalise a distinctive legal status’ for sustainable development. Look at Jonathan Verschuuren, ‘The growing significance of the principle of sustainable development as a legal norm’ in Douglas Fisher (ed), *Research Handbook on Fundamental Concepts of Environmental Law* (Edward Elgar 2016); International Law Association, Resolution No. 7/2012, Statement n.1. Undoubtedly, the reluctance of courts to take a clear stance on this matter highlights the inherent challenges in defining and operationalising the concept of sustainable development, warranting further investigation.

¹⁰ David Kennedy, Martti Koskenniemi, *Of Law and the World* (Harvard University Press 2023); Martti Koskenniemi, ‘International law in the world of ideas’ in James Crawford & Martti Koskenniemi (eds) *The Cambridge Companion to International Law* (Cambridge University Press 2013).

¹¹ See n 7.

for both law scholars and lawmakers to move away from the non-scientific, growth-oriented, and anthropocentric sustainable development ontological box. Furthermore, this work could stimulate reflection on the pivotal role that scientific, rather than purely political, institutional apparatuses might (and should) play in shaping the theoretical foundations of legal and governance frameworks. Doing so will hopefully foster momentum for the theorisation of science-based legal ontologies, thus laying the groundwork for a genuinely sustainable international legal regime.

This work is structured as follows. The second section (II) will trace the history of the concept of sustainability by differentiating between two generations of sustainability documents. Section three (III) will focus on the genesis and spread of the currently mainstream conceptualization of development. Afterwards, section four (IV) will analyse the concept of sustainable development, giving due regard to its process of dilution and fragmentation. Section five (V) will highlight the main findings of this research. Finally, section six (VI) will reflect upon the features that new concepts, alternative to sustainable development and based on science rather than on the aim to pursue dominant parties' short-term interests, might present.

II. THE EMERGENCE OF SUSTAINABILITY: A SHORT CONCEPTUAL HISTORY

The relationship between a word and the meaning it reflects is not set in stone. As this section will elucidate, sustainability concerns emerged long before the term 'sustainability' was coined. Furthermore, the word 'sustainability' ended up assuming two similar, but anyway different meanings over time. This allows to identify two different generations of sustainability.

1. *The first generation of sustainability*

The word ‘sustainability’ comes from the composition of the Latin words *sub* plus *-tenere* and can be translated as to ‘hold up’, ‘to endure’.¹² Accordingly, the concept of sustainability reflects ‘the quality of being able to continue over a period of time’,¹³ and it is indeed translated in French with the word *durabilité*.

Given that we live in a world that is characterised by humans’ reliance on the consumption of limited resources, it is not surprising that sustainability issues have always affected humanity. As a matter of fact, it is possible to identify traces of sustainability concerns in ancient history.¹⁴

Different historical periods and geographical contexts have been characterised by concerns about the scarcity of different resources, and up until the modern age, at least in Europe, sustainability concerns mainly related to timber scarcity. Scholars such as Hughes and Thirgood shed light on the impact of ‘deforestation, erosion, and forest management [already at the times of] Ancient Greece and Rome’, while 17th-century writer John Evelyn warned about the risks arising from the loss of forests and the consequent lack of timber.¹⁵ Afterwards, it was always with the aim of addressing timber scarcities that Hans von Carlowitz, in his well-known *Sylvicultura Oeconomica*, coined the German word ‘*nachhaltigkeit*’

¹² Online Etymology Dictionary, ‘Sustainable’ <<https://www.etymonline.com/word/sustainable>> accessed 24 January 2023.

¹⁴ Most notably, in the Asian tradition (e.g., in Laozi’s Daodejing and in the Hindu manuscript, The Laws of Manu), and in the Western tradition (e.g., in Plato’s Politeia).

¹⁵ Donald Hughes and Jeremy Thirgood, ‘Deforestation, Erosion, and Forest Management in Ancient Greece and Rome’ (1982) 26 *Journal of Forest History* 2; John Evelyn, *Sylva, or, A discourse of forest-trees, and the propagation of timber in His Majesties dominions* (J. Martyn and J. Allestry, 1670).

(sustainability), to refer to the way in which the cultivation of timber should be practiced.¹⁶

Another relevant contribution comes from Thomas Malthus' *Essay on the Principle of Population*.¹⁷ In this work, the English economist witnessed the absolute scarcity of natural resources that, provided what he deems to be a human tendency to expand consumption, necessarily leads to a 'Malthusian Catastrophe'.¹⁸ What is particularly interesting about Malthus' work is the focus on food, as well as the economist's intuition about the necessity, for humans, to establish balanced relationships between food production and consumption patterns. From this point of view, it can be stated that Malthus has, to some extent, anticipated the topics addressed almost two hundred years later in Lester Brown's *Building a Sustainable Society*.¹⁹ In fact, Brown will also warn about the dangers of food 'demand [that] exceeds sustainable yields of biological systems'.²⁰ Nevertheless, one of the main limitations of Malthus' approach stands in his adherence to a considerable degree of determinism, which brings him to conclude that there is no way of preventing Malthusian Catastrophes.

Over the 19th and early 20th Centuries, the original attention on timber and food scarcity were replaced by a new focus on coal and oil, as they had become the new main energy sources.²¹ One work that clearly reflects the understanding of sustainability as a response to resource scarcity is *The limits*

¹⁶ Hans Von Carlowitz, *Sylvicultura Oeconomica* (Johann Friedrich Braun, 1713).

¹⁷ Thomas Malthus, *Essay on the principle of population as it affects the future improvement of society* (J. Johnson, 1798).

¹⁸ A Malthusian Catastrophe is a situation in which population growth surpasses the Earth's capacity to sustain it, leading to resource scarcity, famine, and societal collapse.

¹⁹ Lester Brown, *Building a Sustainable Society* (W. W. Norton & Company 1981) 6.

²⁰ *ibid* 6.

²¹ James Akins, 'The Oil Crisis: This Time the Wolf Is Here' (1973) *Foreign Affairs* <<https://www.foreignaffairs.com/middle-east/oil-crisis>> accessed 2 February 2023; Stanley Jevons, *The Coal Question* (Macmillan and Co. 1865).

of the Earth, written in 1953 by Henry Osborn.²² In this work, the US conservationist sheds new light on the problematic correlation between fixed resources on the Earth and increasing number of people.

As this subsection has clarified, the etymology of the term ‘sustainability’ reflects an early effort to address issues related to resource scarcity. Accordingly, it can be asserted that ‘sustainability concerns’ emerged in ancient times and were further developed as scholars from various disciplines began to explore the limitations of human activity on Earth and the negative consequences of exceeding the boundaries of ‘sustainability’. Nevertheless, in this early phase, ‘sustainability’ still did not imply anything different from the efficient administration of resources. The first generation of sustainability documents merely focuses on resource consumption, thus disregarding the broader issue of environmental degradation. Moreover, at this stage, sustainability is characterised by a strongly anthropocentric approach, as it does not conceive of nature as a subject endowed with intrinsic value, but rather as an object which shall be appropriately administered for the benefit of humans.²³ Finally, the first generation of sustainability, while focusing on the material scarcity generated by the limits of the Earth, never focused on the ‘artificial scarcity’ generated by the (already back then) dominant growth-oriented, capitalist economy.²⁴ Indeed, as Kallis pointed out, ‘capitalism cannot operate under conditions of

²² Henry Osborn, *The Limits of the Earth* (Little, Brown and Company 1953) 17.

²³ This study acknowledges that animist views, implying an ‘ontology of inter-being’, were prevalent in human cultures throughout history. However, this passage notes that, until the mid-20th century, eco-centric visions were not reflected in the first generation of sustainability discourses. For more information, look at, Jason Hickel, *Less is More* (Windmill Books 2021) 64.

²⁴ This study acknowledges that, as Bookchin stated ‘capitalism can no more be “persuaded” to limit growth than a human being can be “persuaded” to stop breathing’. This implies that any critique of growth-oriented economies inherently extends to a critique of capitalist economies. See Murray Bookchin, *The Ecology of Freedom: The Emergence and Dissolution of Hierarchy* (Elèuthera 2017) 262.

abundance'.²⁵ Therefore, Hickel observes, 'scarcity had to be *created*' to justify an economic system based on eternal expansion.²⁶

Acknowledging that the condition of scarcity that humanity experiences is not entirely exogenous to humans, but also the product of a human artefact (*i.e.* the voracious capitalist economy) is a crucial insight. Indeed, this implies that, contrary to what Malthus claimed, sustainability concerns can actually be addressed, and sustainability could be achieved, provided we undertake, among other things, a rethinking of the economic systems we live in.

A new approach to sustainability, both eco-centric and system-oriented, will materialise, since the second half of the 20th Century, into a second generation of sustainability. This new generation emerged also as a consequence of the insights coming from disciplines such as ecology and ecological economics from the late 19th and early 20th Century.²⁷

2. *The second generation of sustainability*

Advancements in hard sciences strongly enlarged scholarly awareness of the complex equilibrium that ties humans to nature.²⁸ This awareness spread across various disciplines and, in the latter half of the 20th century, synergies between ecological findings and economic studies led to the emergence of the first works ascribable to the realm of ecological economics. Examples of early work in ecological economics work include William Kapp's *The Social*

²⁵ Giorgios Kallis, *Limits: Why Malthus Was Wrong and Why Environmentalists Should Care* (Stanford Briefs 2019) 66.

²⁶ Hickel (n 22) 232.

²⁷ Purvis et al. (n 5).

²⁸ These advancements include Ernst Haeckel's coinage, in 1866, of the German word *oekologie* (in English 'ecology'), Charles Elton's first reference to 'food chain' and Eugene Odum's adoption of a systematic approach to the analysis of ecology. Look at: Charles Elton, *Animal Ecology* (The Macmillan Company 1927); Eugene Odum, *Fundamentals of Ecology* (Saunders 1953).

Cost of Private Enterprise,²⁹ and Nicholas Georgescu-Roegen's *The Entropy Law and the Economic Process*.³⁰

Kapp claimed, in contrast with mainstream environmental economists, that it is structurally impossible to internalize negative socio-environmental externalities of enterprises within the existing competitive and profit maximization-oriented economic system. Roegen's work emblematically revolves around the concept of entropy and it contends that classical economic models, which often assume infinite resources and perpetual growth, are incompatible with the second law of thermodynamics.³¹ The works by Kapp and Roegen represent a clear example of critique to the mainstream competitive and growth-oriented economic system. Moreover, they contributed to bridging the gap between scientific knowledge of the natural world and the evaluation of the 'sustainability' of different forms of socio-economic organizations.

A few years later, in 1962, the biologist Rachel Carson published *Silent Spring*.³² Considered one of the early promoters of the contemporary environmental movement, *Silent Spring* focuses on the detrimental effect of the indiscriminate use of pesticides. Carson's work is not solely directed to field experts, and it paved the way to the second generation of sustainability conceptualizations. Despite never mentioning 'sustainability', *Silent Spring* has undoubtedly pioneered a new mode of conceiving the sustainability issue. Indeed, it is not only endowed with warnings on the importance of

²⁹ William Kapp, *The Social Cost of Private Enterprises* (Hannah Institute for the History of Medicine 1950).

³⁰ Georgescu-Roegen, *The Entropy Law and the Economic Process* (Harvard University Press 1971).

³¹ The second law of thermodynamics states that the total entropy (i.e. level of disorder) of an isolated system always increases over time or remains constant in ideal cases. According to Roegen, a growth-oriented economy is incompatible with the entropy law because it inherently involves processes that increase entropy by transforming valuable, low-entropy resources into high-entropy waste.

³² Rachel Carson, *Silent Spring* (Houghton Mifflin 1962).

limiting human impact on the natural environment but it is also embedded with references to ‘ecology’ and the recognition of the intrinsic value of nature. In Carson’s book, it is the ‘beauty’ of nature,³³ not its monetized economic value, that is to be framed as a central point of concern. This emerges, *inter alia*, when she states that

there is a steadily growing chorus of outraged protest about the disfigurement of once beautiful roadsides by chemical sprays, which substitute a sere expanse of brown, withered vegetation for the beauty of fern and wildflower, of native shrubs adorned with blossom or berry.³⁴

What is also relevant about *Silent Spring* is the attention dedicated to the inter-generational issue. As Carson observes, ‘the new generations suffer for the poisoning of their parents’, but ‘future generations are unlikely to condone our lack of prudent concern for the integrity of the natural world that supports all life’.³⁵

Ten years later, the publication of three documents marked a turning point in the history of the conceptualization of sustainability. Firstly, in 1972, *A Blueprint for Survival* was published by The Ecologist.³⁶ This document, explicitly supported by more than thirty scholars, has strongly reshaped the entire sustainability discourse. It was one of the first environmentalist publications adopting a blatantly critical posture against the industrial, economic-growth-oriented forms of society. This is evident in the very first statement of the article, positing that ‘the principal defect of the industrial way of life with its ethos of expansion is that it is not sustainable’.³⁷ In line with Carson’s work, *A Blueprint for Survival* is strongly grounded on the findings of the ecological sciences. It is particularly careful about the intergenerational issue and neatly distinguishes between the negative

³³ *ibid* 14.

³⁴ *ibid* 44.

³⁵ *ibid* 15, 23.

³⁶ The Ecologist, *A Blueprint for Survival* (Penguin Special 1972).

³⁷ *ibid* 2.

consequences arising from the exhaustion of natural resources and the disruption of ecosystems. For example, one passage in the publication states:

[r]adical change is both necessary and inevitable because the present increases in human numbers and per capita consumption, by disrupting ecosystems and depleting resources, are undermining the very foundations of survival.³⁸

The greatest innovations brought about by *A Blueprint for Survival* are the mainstreaming of the word ‘sustainable’ and the concern about growth. While the authors mainly link the word ‘sustainable’ to society and agricultural methods, they relate concerns about growth primarily to the environmental risk arising from an increasing population, rising consumption, and production growth.³⁹ In the authors’ words: ‘[i]ndefinite growth of whatever type cannot be sustained by finite resources. This is the nub of the environmental predicament’.⁴⁰

The incompatibility between sustainability and growth is also the keystone of another 1972 work, *The Limits To Growth*.⁴¹ This publication takes up and further deepens many of the issues raised in *A Blueprint for Survival*. Moreover, having been commissioned by the Club of Rome,⁴² the work represents, in Ulrich Grober’s view,⁴³ the first appearance of the sustainability discourse on the global stage. In line with previous ‘sustainability’ works, *The Limits To Growth* is built upon the awareness of the necessity to limit human impact on Earth, and it aims at identifying a model allowing the

³⁸ *ibid.*

³⁹ *ibid* 6 and 9.

⁴⁰ *ibid* 3.

⁴¹ Donella Meadows, Dennis Meadows, Jorgen Randers, William Behrens, *The Limits to Growth* (Universe Books 1972).

⁴² As its official website states, ‘[t]he Club of Rome is a platform of diverse thought leaders who identify holistic solutions to complex global issues and promote policy initiatives and action to enable humanity to emerge from multiple planetary emergencies’. <<https://www.clubofrome.org/about-us/>> accessed 17 February 2023.

⁴³ Ulrich Grober, *Sustainability: A Cultural History* (Green Books 2012).

establishment of a sustainable economic and ecological system. Importantly, in the work published by the Club of Rome, the critique to the growth-oriented economic system is even stronger and deeper than in previous works. Economic growth here is not only framed as incompatible with environmental protection but also as *alternative* to the maintenance of ecological and social sustainability.⁴⁴ As the authors assert:

⁴⁴ Meadows et al. (n 48). The impossibility to decouple economic growth from environmental damage, as well as the weak correlation between global economic growth and human wellbeing have not only been reinforced in subsequent editions of the book (see *The Limits to Growth: The 30-Year Update* (Chelsea Green Pub 2004)), but also in separated and more recent works as Oliver de Schutter, ‘Eradicating poverty beyond growth’ [2024] UN Document A/HRC/56/61; European Parliamentary Research Service, ‘Beyond Growth – Pathways towards sustainable prosperity in the EU’ [2023]; Aljoša Slameršak, Giorgos Kallis, Daniel O’Neill, and Jason Hickel, ‘Post-growth: A Viable Path to Limiting Global Warming to 1.5°C’ (2023) 6 *One Earth* 458; Federico Savini, ‘Post-Growth, Degrowth, the Doughnut, and Circular Economy: A Short Guide for Policymakers’ (2023) 7 *Journal of City Climate Policy and Economy* 22; Lorenzo Fioramonti, Luca Coscieme, Robert Costanza, Ida Kubiszewski, Katherine Trebeck, Stewart Wallis, Debra Roberts, Lars Mortensen, Kate Pickett, Richard Wilkinson, Kristín Ragnarsdóttir, Jacqueline McGlade, Hunter Lovins, Roberto De Vogli, ‘Wellbeing Economy: An Effective Paradigm to Mainstream Post-growth Policies?’ (2022) 192 *Ecological Economics* 107260; Èloi Laurent, ‘Going Beyond Growth to Social-ecological Well-being’ (2022) 101 *Ekonomiaz* 57; European Environmental Agency, ‘Growth without Economic Growth’ [2021] <<https://www.eea.europa.eu/publications/growth-without-economic-growth>> accessed 2 March 2023; Joan Moranta, Cati Torres, Ivan Murray, Manuel Hidalgo, Hilmar Hinz, and Adam Gouraguine, ‘Transcending Capitalism: Growth Strategies for Biodiversity Conservation’ [2021] 35 *Conservation Biology* 1246; Hickel (n 22); Helmut Haberl, Dominik Wiedenhofer, Doris Virág, Gerald Kalt, Barbara Plank, Paul Brockway, Tomer Fishman, Daniel Hausknost, Fridolin Krausmann, Bartholomäus Leon-Gruchalski, Andreas Mayer, Melanie Pichler, Anke Schaffartzik, Tania Sousa, Jan Streeck, Felix Creutzig, ‘A Systematic Review of the Evidence on Decoupling of GDP, Resource Emissions, Part II: Synthesizing the

[i]f the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth on this planet will be reached sometime within the next one hundred years. [...] It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future.⁴⁵

A third document which was published in 1972 and which is worth mentioning in this context, is the Stockholm Declaration on the Human Environment (hereinafter the 1972 Declaration or the Stockholm Declaration). In fact, the Declaration of 1972 was among the earliest soft-law instruments based on sustainability concerns. Notably, the Declaration recognizes the importance of limiting the impact of human action on Earth which, if ‘heedlessly applied, [...] can do incalculable harm to human beings

Insights’ (2020) 15 *Environmental Research Letters* 065003; Giorgos Kallis, Vasilis Kostakis, Steffen Lange, Barbara Muraca, Susan Paulson, Matthias Schmelzer, ‘Research on Degrowth’ (2018) 43 *Annual Review of Environment and Resources* 291; Timothée Parrique, Jonathan Barth, François Briens, Christian Kerschner, Alejo Kraus-Polk, Anna Kuokkanen, Joachim Spangenberg, *Decoupling Debunked: Evidence and Arguments Against Green Growth as a Sole Strategy for Sustainability* (European Environmental Bureau 2019); Hickel, Kallis (n 1); Hickel (n 4); Kate Raworth, *Doughnut Economics* (Chelsea Green Publishing 2017); Anitra Nelson and Rico Lie, *Green Growth: Ideology, Political Economy, and the Alternatives* (Routledge 2016); James Ward, Paul Sutton, Adrian Werner, Robert Costanza, Steve Mohr, Craig Simmons, ‘Is Decoupling GDP Growth from Environmental Impact Possible?’ (2016) 11 *PLOS ONE* e0159270 ; Giacomo D’Alisa, Federico Demaria, Giorgos Kallis, *Degrowth: A Vocabulary for a New Era* (Routledge 2015); Tim Jackson, *Prosperity without Growth? The Transition to a Sustainable Economy* (Earthscan 2009); Serge Latouche, *Le pari de la décroissance* (Fayard 2006). Importantly, these studies acknowledge the necessity for less industrialized countries to achieve certain levels of growth. However, they demonstrate that the correlation between GDP growth and human well-being reaches a saturation point relatively quickly. Consequently, the relentless pursuit of GDP growth in most industrialized nations, and its adoption as a global policy objective, is associated with escalating environmental degradation and increasing social inequalities.

⁴⁵ *ibid* 23.

and the human environment'.⁴⁶ Furthermore, it borrows the focus on the role of ecosystems and the adoption of the intergenerational perspective from the sustainability discourse.⁴⁷

Despite this, the approach of the 1972 Declaration remains closer to the 'development' than to the 'sustainability' strain, for reasons which will be better addressed in the following section. At this stage, it will suffice to identify two caveats. First, being the earliest legal (instead of scholarly) document addressing sustainability concerns, the Stockholm Declaration 'was based on a complex preparatory process, during which agreement was reached among the major groups of countries'.⁴⁸ Therefore, it emerged as a synthesis of the political interests of States interacting at the UN level and, differently from sustainability documents, it was not the result of a process of interaction among (at least formally) neutral researchers. Secondly, and as a consequence, the content of the Stockholm Declaration is only indirectly linked to the sustainability discourse. It never explicitly refers to sustainability, and it dogmatically presents economic development, understood as economic growth, as the main solution to both poverty and environmental degradation.

The first generation of sustainability documents was characterized by a remarkably anthropocentric approach, a focus on resource depletion, and an acritical acceptance of the existing economic system. By contrast, the second generation presents a focus on ecological elements, a distinction between environmental pollution and natural resource depletion, and a bold critique against growth-based economic systems. Crucially, this new interpretation of sustainability upholds a very specific ontology, emphasizing consideration for future generations and recognizing the inherent conflict between a

⁴⁶ Report of the U.N. Conference on the Human Environment, from the U.N. Conference in Stockholm, Sweden [Stockholm Declaration] (Stockholm, 16 June 1972) Statement 3.

⁴⁷ *ibid* Principle 2.

⁴⁸ Sohn (n 7) 424.

growth-oriented society and a ‘sustainable society’. Still, in line with the first generation of sustainability documents, the second flourished in the realm of scholarly works while remaining quite apart from political institutional environments.

III. THE ORIGINS OF DEVELOPMENT

The origins of the concept of development deserve investigation, as well as the different meanings that this word assumed over time. After tracing the imperialist roots of the concept, this section will focus on the development narrative adopted by the US since the onset of the Cold War, it will refer to the crisis that the concept of development experienced during the 1970s, and to its subsequent search for new legitimacy.

1. Progress, civilization, and development until the establishment of the UNDP

The concept of development has more recent origins than the concept of ‘sustainability’ and this also emerges when looking at its etymology. In fact, the word development comes from the Old French (16th Century) *desveloper*, composed of *des-* (undo) and *veloper* (wrap up) which originally meant, according to the *Online Etymology Dictionary*, ‘unfurl, unveil, show, make visible’.⁴⁹ Interestingly, while the concept of *substinere* (to endure, to last over time) was intuitively applicable to the field of natural resource administration, the same can hardly be said about the concept of *desveloper*. In turn, the Old French word could find room for application in the realm of politics, even more when applied to narratives aimed at justifying some political action in the name of an ideal, mission or goal which will indeed ‘unveil’ or ‘make itself visible’ just at the end of a process.

While the concept of development was mainstreamed in the realm of politics in the aftermath of the Second World War, its roots can already be found in

⁴⁹ Online Etymology Dictionary, ‘Develop’ <<https://www.etymonline.com/word/developer>> accessed 18 March 2023.

older concepts such as progress and civilization.⁵⁰ Undoubtedly, both the narratives on progress and civilization entail a linear conceptualization of time, as well as the claimed necessity to adopt allegedly neutral (technological and institutional) instruments and values to trigger a progression towards a future which is supposedly better for all. Both narratives on progress and civilization, Du Pisani argued, have their origin in the Hebrew and Christian ideals of salvation.⁵¹ Indeed, with the secularization of European societies taking place during the Modern Age, the ideal of salvation through revelation has been replaced by the ideal of salvation through science.⁵² This led von Wright to state that the idea of progress is nothing more than ‘a secularized heir to the Christian ideal of salvation’.⁵³ And a peculiar conceptualization of progress, declined in terms of industrial and technological advancement, lead to the emergence of the capitalist culture.⁵⁴

The exaltation of progress was reinforced by the long tradition of Western self-identification and self-positioning on the top of a cultural, political, and civilization hierarchy. In particular, the Western rhetoric on civilization tended to frame as civilized any industrialized society glorifying the values of scientific and technological progress in the name of the achievement of an ever-increasing material wellbeing. At the same time, any society refusing the abovementioned values was framed as uncivil, savage, and

⁵⁰ See Lorenzini (n 4).

⁵¹ Du Pisani (n 5).

⁵² Umberto Galimberti, *Il Tramonto dell'Occidente* (Feltrinelli Editore 2005).

⁵³ Georg Henrik von Wright, ‘Progress: Fact and Fiction’ in Arnold Burgen, Peter McLaughlin, Jürgen Mittelstraß (eds) *The Idea of Progress* (Walter de Gruyter 1997) 5.

⁵⁴ The capitalist culture is characterized by what Fraser calls the ‘stark division between the two realms’,⁵⁴ i.e. the realm of economy, conceived as the realm of creative and beneficial human action, and the realm of nature, reduced to a realm of self-replenishing stuff. See Nancy Fraser, ‘Climates of Capital: For a Trans-Environmental Eco-Socialism’ (2019) 116 *New Left Review* 5.

therefore in need of help. This specific mindset led Jules Ferry to describe ‘colonization as a political duty the superior races had toward inferior ones, particularly in the promotion of science and progress’.⁵⁵ Furthermore, Rudyard Kipling argued in his poem ‘The White Man’s Burden’ that ‘Americans [had] to take up the burden of civilization, even though this meant being hated by subject peoples’.⁵⁶ Nonetheless, as Gandhi put it, in contrast to the alleged superiority of the West, ‘this civilization takes note neither of morality nor of religion, [it solely] seeks to increase bodily comforts, and it fails miserably even in doing so’.⁵⁷

Having in mind the political and cultural roots from which the concept of development emerged, according to Lorenzini, it was ‘only after 1945 [that] economic growth [became] crucial in developed countries and economic development a fundamental political goal’.⁵⁸ With the outbreak of the Cold War, different narratives on development emerged, and newly independent countries found themselves forced to adhere to specific development models.⁵⁹ It was ultimately the liberal US-led development model that prevailed and globally spread at the end of the Short Century.⁶⁰ Indeed, while initially entrenched in international agreements predominantly involving the Western Bloc, this model persisted beyond the Cold War era, and paved

⁵⁵ Lorenzini (n 4) 10.

⁵⁶ *ibid.*

⁵⁷ Mahatma Karamchand Gandhi, *Hind Swaraj or Indian Home Rule* (Jitendra T. Desai 1938) 34.

⁵⁸ Lorenzini (n 4) 9.

⁵⁹ *ibid.*

⁶⁰ While the history of liberalism is complex and multifaceted, it is important to note that the core tenets of liberalism align closely with those of capitalism. They include strong anthropocentrism, the centrality of private property, and the advocacy for market deregulation.

the way for adopting liberal development models even in former socialist states.⁶¹

One of the first blatant manifestations of the liberal idea of development can be found in the inaugural speech of US President Henry Truman in 1949. After framing the US as ‘pre-eminent among nations in the development of industrial and scientific techniques’, Truman stated, ‘events have brought our American democracy to new influence and new responsibilities’.⁶² In this context, the US President launched the famous Point Four, asserting that the US should ‘foster capital investment in areas needing development’, where people live ‘in conditions approaching misery’, and whose ‘economic life is primitive and stagnant’.⁶³

Truman’s discourse is not only a perfect example of how the US narrative on development has tended to self-rank its own system of production at the top of an allegedly objective and linear process of human improvement, but it also highlights the parallel between development, economic development, and economic growth.

Indeed, in Truman’s words, the US has a duty to ‘embark on a bold new program [...] for the improvement and growth of underdeveloped areas’; this should be done in order to ‘increase the industrial activity in other nations’.⁶⁴ Thus, while ‘development’ was typically reduced to ‘economic development’, as Purvis et al. observe, ‘from the 1950s, “economic development” became almost synonymous with “economic growth”, which in turn had become a major goal of Western economic policy’.⁶⁵ Notably, in his discourse, Truman also states that, while ‘the material resources which

⁶¹ For example, agreements establishing the World Bank, the International Monetary Fund, and the General Agreement on Tariffs and Trade.

⁶² Henry Truman, ‘Inaugural Address’ (1949) <<https://www.trumanlibrary.gov/library/public-papers/19/inaugural-address>> accessed 12 April 2023.

⁶³ *ibid.*

⁶⁴ *ibid.*

⁶⁵ Purvis et al. (n 5) 4.

[the US] can afford to use for assistance of other peoples are limited, [...] imponderable resources in technical knowledge are constantly growing and are inexhaustible'.⁶⁶ Such a passage is emblematic, as it manifests absolute faith in the capacity of technology and human rationality to overcome the limits of the Earth. It thus provides a basis for the optimistic conceptualization of the relationship between economic growth and nature which will become the leitmotif of the concept of sustainable development.

In line with Truman's discourse is Walt Rostow's *The Stages of Economic Growth – A Non-Communist Manifesto*.⁶⁷ Defined by Lorenzini as 'the Bible' of Modernization theory,⁶⁸ Rostow's work was published in 1959, when he was serving as speechwriter to President Eisenhower. In his work, the US economist claimed the existence of five stages of growth, which would lead 'traditional societies' to turn into 'high-mass consumption societies'.⁶⁹ Such a type of society firstly materialised, according to Rostow, in the US of the 1920s, and it is characterised by the appearance of 'not only new leading sectors but also vast commitments to build new social overhead capital and commercial centres'.⁷⁰

Finally, it is relevant to mention both the UN General Assembly (UNGA) Resolutions 1710 of 1961 and 2029 of 1965, which established the UN Development Decade and the UN Development Programme (UNDP). Indeed, these are among the first international legal documents allowing the mainstreaming of the US development model at the UN level. Unsurprisingly, these Resolutions received some criticism from socialist countries (which were promoting their own narrative on development).⁷¹

⁶⁶ Truman (n 56) 4.

⁶⁷ Walt Rostow, 'The Stages of Economic Growth: A Non-Communist Manifesto' (1959) 12 *The Economic History Review* 1.

⁶⁸ Lorenzini (n 4) 60.

⁶⁹ Rostow (n 79) 11.

⁷⁰ *ibid* 11.

⁷¹ Lorenzini (n 4).

Most notably, Mr. Makeev, representative of the USSR at the UNGA in 1965, when justifying the reasons for abstaining from Resolution 2029, stated that:

[b]right horizons and extraordinary prospects for the future have been mentioned. We are not inclined to share such enthusiasm *a priori*. We see as yet no cause for these panegyrics. [...] If the Development Programme proceeds in the same way, then we shall have nothing good to say about the development programme either.⁷²

Interestingly, none of these UN documents really provide any explicit definition of development, while they both maintain and globally spread the equation between development, economic development, and growth. Specifically, the 1961 Resolution designates the UN Development Decade as a ten-year-long initiative aimed at accelerating ‘progress towards self-sustaining growth of the economy of the individual nations [...] so as to attain in each under-developed country a substantial increase in the rate of growth’.⁷³ Afterwards, the 1965 Resolution launches the UNDP ‘to support and supplement the national efforts of developing countries in solving the most important problems of their economic development, including industrial development’.⁷⁴ It appears, then, that there is little room in UN assistance programmes for application in any realm of development which is not explicitly economic.

The concept of development has traditionally played a political role, which can be inferred, *inter alia*, by looking at the nature of the documents enshrining it. Unlike those elaborating on the concept of ‘sustainability’, development documents mainly belong to the political sphere. The US narrative tended to equate development to economic development and growth. This has put the US system of production and consumption at the apex of a development hierarchy, and it has promised that any society will

⁷² UNGA, ‘1383rd Plenary Meeting – Official Records’ (1965) at 15.

⁷³ A/RES/1710 (XVI 1961) para 1.

⁷⁴ A/RES/2029 (XX 1965) preamble.

achieve the status of ‘high mass consumption society’ once having followed the ‘five stages of growth’. Nonetheless, while narrating this story, the concept of development remained silent on the ecological impacts of both growing natural resource exploitation and environmental degradation.

2. The first crisis of development and the search for a new identity

As it was the case for the history of ‘sustainability’, the 1970s also represented a turning point for the history of ‘development’.

Firstly, the reaction to the US and the USSR’s developmental attitude was reflected by the unprecedented activism of so-called ‘developing’ states. Since the 1950s, these states strived to find autonomy in the international arena and worked to create their own interpretation of development. This led to the organization of the Bandung Conference in 1955, the creation of the Group of 77 in 1962, the beginning of the so-called African Decade in the 1960s, and the launch of the ‘Declaration on the Establishment of a New International Economic Order’ in 1974.⁷⁵ These events surely represent ambitious, though not completely successful, efforts from the ‘periphery of the World’ to take distances from mainstream narratives on development.⁷⁶ On the one hand, neo-Marxist scholars such as Immanuel Wallerstein and Vijay Prashad underline that the process started in Bandung ultimately failed to emancipate historically dominated countries from historically dominant ones, as it failed to successfully tackle the capitalist structures of the

⁷⁵ A/RES/3201 (S-VI 1974).

⁷⁶ The distinction between states positioned in the ‘centre’, ‘periphery’, and ‘semi-periphery’ of the global economy has been elaborated by Immanuel Wallerstein in the context of World System Theory. This theory considers the global economic system as a global social system, in which industrialized capitalist states from the centre, to maintain their position of domination and pursue the path of capital accumulation, need to extract resources from peripheral states, thus condemning them to a position of exploitation and subalternity. For more information, look at Immanuel Wallerstein, *The Modern World-System* (Academic Press 1974).

international economic system favouring the interests of the Global North.⁷⁷ On the other hand, the Bandung process played, as a minimum, a significant symbolic role. It became clear that less industrialized countries had taken awareness of their historical condition of subjugation, and were reclaiming a new position in world politics, trying to turn, at least in theory, from objects to subjects of development policies.

Furthermore, since the early 1970s, the ‘sustainability’ discourse has played a role in shaping the conceptualization of ‘development’. During the 1970s, the explosion of two global energy crises and the non-materialisation of the promised benefits of economic growth-based development plans in less industrialized countries led to publications contesting the traditional conceptualization of development.⁷⁸ As the Frankfurt School philosopher Erich Fromm observed in his book *To Have or To Be*, the ‘Great Promise of unlimited progress’ had failed as it was understood that:

- a) Unrestricted satisfaction of all desires is not conducive to well-being; [...]
- b) Economic progress has remained restricted to the rich nations, and the gap between rich and poor nations has ever widened.
- c) Technical progress itself has created ecological dangers and the dangers of nuclear war, either or both of which may put an end to all civilization and possibly to all life.⁷⁹

Having become clear that the US development model was not the only possible one, and that developmental and environmental considerations could no longer be addressed as two impermeable and independent dimensions, the Stockholm Declaration has served as a springboard to rebrand the concept of development. Back in 1973, scholars such as Sohn enthusiastically described the 1972 Declaration as ‘the most successful

⁷⁷ *ibid*; Vijay Prashad, *The Darker Nations: A People's History of the Third World* (The New Press 2007).

⁷⁸ Tulloch (n 4); Purvis et al. (n 5).

⁷⁹ Erich Fromm, *To Have or to Be* (Continuum 1976) 2.

international conference held in recent years’.⁸⁰ Indeed, the Declaration attempts to resolve the ontological divide between the development and sustainability dimensions, as it affirms that: ‘[t]he protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world’, and that ‘Man’s capability to transform his surroundings, if [...] wrongly or heedlessly applied [...] can do incalculable harm to human beings and the human environment’.⁸¹ These two passages are undoubtedly relevant, as they both frame the well-being of people and economic development as dependent on the (human) environment and, most importantly, recognize that human action can negatively affect the environment.

However, the Stockholm Declaration remains a development-oriented document, and this clearly emerges, *inter alia*, from Statement 4, stating that ‘in the developing countries most of the environmental problems are caused by under-development’.⁸² Such a passage not only showcase the 1972 Declaration’s undue focus on developing countries’ environmental problems,⁸³ but it also aprioristically frames development as a remedy to environmental issues. In this regard, it is Sohn himself who admits that the statement presents:

an increased emphasis on development in the sentences relating to the industrialized countries. Instead of urging them to provide a speedy solution of the pollution problems at home, the new text stresses the need to help the developing countries to reduce the gap between them and the developed countries.⁸⁴

⁸⁰ Sohn (n 7) 423.

⁸¹ Stockholm Declaration (n 40) Statements 2–3.

⁸² *ibid* Statement 4.

⁸³ And this in the 1970s, when the vast majority of environmental pollution was caused by so-called ‘developed’ countries.

⁸⁴ Sohn (n 7) 444.

This approach of the 1972 Declaration is reinforced in further passages such as Principle 8, stating that '[e]conomic and social development is essential for ensuring a [...] working environment for man'. Similarly, Principle 9 affirms that '[e]nvironmental deficiencies generated by the conditions of under-development and natural disasters pose grave problems and can best be remedied by accelerated development'.⁸⁵

For the sake of thoroughness, the 1986 UN Declaration on the Right to Development should be mentioned (hereinafter the Development Declaration or the 1986 Declaration).⁸⁶ This declaration represents the first legal document recognizing (although in a non-binding fashion) a human right to development. Despite having been produced more than ten years after the Stockholm Declaration, the Development Declaration adopts a more traditional approach, especially when it comes to framing the relationship between development and sustainability. Indeed, the Development Declaration does not reference sustainability, future generations, or the environment. While this return to the roots of the concept of development could be seen as a backwards step, it could also be interpreted as the result of the creation of a declaration whose establishment was mainly in the interests of less industrialized countries and was therefore not a part of the Western effort to reshape and update its narrative on development. Importantly, just one year after the passage of the 1986 Declaration, the UN will openly embrace a new narrative on development, termed sustainable development, which will more strongly echo the approach of the 1972 Declaration.

The 1970s represented a crucial decade for the history of both sustainability and development. The important changes taking place in this period can be summarised in two phases. On the one hand, the publication of works such as *A Blueprint for Survival* and *The Limits to Growth* brought the sustainability discourse further than ever from the development discourse. They shed light

⁸⁵ *ibid* Principles 8–9.

⁸⁶ Declaration on the Right to Development (4 December 1986) UNGA RES 41/128.

on the conflict between environmental protection and any conceptualization of development intended as economic growth. On the other hand, the adoption of the Stockholm Declaration can be interpreted as an effort made by the development strain to get closer to the sustainability issue. This soft-law document, however, while adopting a more comprehensive and environmentally concerned approach, strongly relies on a techno-optimistic and growth-oriented attitude. While the 1972 Declaration raises concerns about the environmental consequences of headless human activities, it simultaneously presents development itself as the solution to environmental degradation. The portrayal of development, primarily framed as economic growth, as a remedy for environmental problems foreshadows the conceptual framework that will underlie the emergence of sustainable development.

IV. FROM DEVELOPMENT TO SUSTAINABLE DEVELOPMENT

The process of rebranding development culminates in the making of the concept of 'sustainable development'. As well as the Stockholm Declaration's conceptualisation of development, sustainable development focuses on social and environmental issues, while presenting economic development, intended as economic growth, as a solution to both. However, the meaning of sustainable development also changed over time. This section will highlight both its progressive departure from environmental considerations, and the process of fragmentation and dilution it undertook.

1. The emergence of sustainable development and its first appearance on the international stage

Like the concept of development, sustainable development has its own relevant ancestors, most notably, the concepts of sustainable society and eco-development. Along with sustainable development, both of these concepts start by acknowledging the dangers of environmental degradation and

identifying the characteristics that the social and economic systems should incorporate to avoid environmental catastrophe.

Quite in line with the sustainability strain, the 1980 work *Building a Sustainable Society* by the agronomist Lester Brown focuses on the importance of avoiding ecological dangers.⁸⁷ This work expresses concerns for future generations and focuses on the identification of those features which societies require to be truly sustainable. In this regard, Brown is quite clear in stating that

economic stresses have their roots in environmental deterioration and resource scarcities [which are] indicators of unsustainability, [and] evidence that humanity cannot continue on the current path.⁸⁸

Indeed, in line with Meadows et al., Brown believes that abandoning the continuous pursuit of economic growth is a crucial step towards the realization of a sustainable society. He asserts that ‘sustainability rather than endless growth [should be conceived] as a goal’,⁸⁹ therefore framing sustainability and growth as two alternative options rather than as one unified goal. However, he also optimistically forecasts that ‘once policymakers recognize that the economic choice is often between growth and sustainability, growth is likely to subside in importance as a policy goal’.⁹⁰ His forecast has yet to materialise.

The concept of eco-development, for its part, was coined by the Secretary General of the Stockholm Conference of the Human Environment, Maurice Strong.⁹¹ It has been further elaborated and mainstreamed in works such as *Stratégies de l'écodéveloppement* by economist Ignacy Sachs.⁹² Unlike sustainable society and sustainable development, the concept of eco-

⁸⁷ Lester Brown, *Building a Sustainable Society* (W. W. Norton & Company 1981).

⁸⁸ *ibid* 146.

⁸⁹ *ibid* 309.

⁹⁰ *ibid* 128.

⁹¹ See Koula Mellos, *Perspectives on Ecology* (Palgrave Macmillan 1988).

⁹² Ignacy Sachs, *Stratégies de l'écodéveloppement* (Éditions de l'Atelier 1980).

development was coined by a businessman, before being elaborated upon by scholars. As the term itself suggests, eco-development gravitates around the concept of development. Hence, it comes without surprise that eco-development lacks a firm opposition between sustainable society and an economic system based on perpetual growth. Nonetheless, the concept of eco-development remains far from the US's traditionally paternalistic and capitalist-oriented definition of development. This is apparent as eco-development manifests as 'a critique of economic concentration and political centralisation on the global level and above all a programme of economic and political decentralisation'.⁹³

Against this background, the first explicit reference to sustainable development appears neither in a scholarly work nor in multilateral UN documents. As pointed out by Peter Sand, first references to sustainable development 'began to appear in treaties in the 1980s', while the 'principle' of sustainable development was first mentioned in the 1992 European Economic Area (EEA) Agreement.⁹⁴ Still, the first document having a global reach and referring to sustainable development is the World Conservation Strategy – Living Resource Conservation for Sustainable Development, published in 1980 (hereinafter the 1980 Strategy) by the International Union for the Conservation of Nature (IUCN). This policy document, while already referring to sustainable development in its subtitle, does not provide any definition of sustainable development. Furthermore, the 1980 Strategy frames sustainable development both as a self-standing objective to be achieved 'through the conservation of living resources',⁹⁵ and as a means for the achievement of 'living resource conservation'.⁹⁶ Nonetheless, whether it is an aim or a means, it appears that sustainable development is directly

⁹³ Mellos (n 83) 60.

⁹⁴ Peter Sand, 'Towards Sustainable Development in Scandinavian Treaty Practice' (1993) 3 *Yearbook of European Environmental Law* 252.

⁹⁵ IUCN, *World Conservation Strategy – Living Resource Conservation for Sustainable Development* (IUCN 1980) 4.

⁹⁶ *ibid* 6.

related to resource conservation and, by extension, to the environmental dimension.

In line with the sustainability discourse, the 1980 Strategy underscores the necessity to acknowledge the Earth's limited resources, as well as the importance of both safeguarding ecosystems and accounting for the needs of future generations. Furthermore, it recognizes the need to 'integrate conservation with development', thus providing guidelines for the implementation of sustainable development.⁹⁷ In this regard, sustainable development is conceived as that kind of development which is not 'inflexible and needlessly destructive' and, therefore, does not cause environmental damage and does not impair nature conservation.⁹⁸ It follows that the 1980 Strategy recognizes the fundamental role of the environmental dimension, as well as the main 'contribution of living resource conservation to human survival'.⁹⁹

However, the 1980 Strategy mainly refers to the environment as a 'resource', and it frames development and conservation as 'equally necessary for our survival'.¹⁰⁰ Furthermore, in a similar fashion to the Stockholm Declaration, the IUCN document states that 'much habitat destruction and overexploitation of living resources by individuals, communities and nations in the developing world is a response to relative poverty'. Hence, the document continues, 'it is as necessary for conservation as it is for development that [...] trade be liberalized' and that 'economic and social growth be accelerated'.¹⁰¹ Therefore, in line with the 1972 Declaration, the 1980 Strategy mainly focuses on environmental destruction taking place in developing countries, and it presents the liberal receipt of growth and trade liberalization as the solution to both environmental and societal problems.

⁹⁷ *ibid.*

⁹⁸ *ibid.*

⁹⁹ *ibid.* 4.

¹⁰⁰ *ibid.* 8.

¹⁰¹ *ibid.* 54.

Evidently, the 1980 Strategy overlooks that most global pollution was (and still is) caused by Western countries who drive environmental degradation, *inter alia*, through global investment and trade in the name of growth and development.¹⁰² Instead, the IUCN document establishes a win-win ontology in which economic development, intended as economic growth, will be beneficial for achieving human well-being and provide a solution to overriding environmental issues.

2. The mainstreaming at the UN level: from an instrument for the pursuit of environmental conservation to an objective concerned with human beings

The concept of sustainable development first appeared at the UN level in 1987 through the publication of the ‘Our Common Future’ Report, also known as the Brundtland Report, from the name of the Special Commissioner who worked on it.¹⁰³ Similar to the IUCN Strategy, the Brundtland Report frames sustainable development both as an objective and as a means.¹⁰⁴ However, while the IUCN Strategy framed sustainable development as a means for achieving environmental conservation (as well as an objective to be achieved through resource conservation), the Brundtland Report underscores that the objective of sustainable development is both poverty eradication and environmental protection. Specifically, the Report states that, ‘the satisfaction of human needs and aspirations [and not environmental protection] is the major objective of

¹⁰² Christian Dorningera, Alf Hornborg, David J. Absona, Henrik von Wehrdena, Anke Schaffartzikd, Stefan Giljumf, John-Oliver Englera, Robert L. Feller, Klaus Hubacekh, Hanspeter Wieland, ‘Global patterns of ecologically unequal exchange: Implications for sustainability in the 21st century’ (2021) 179 *Ecological Economics* 106824.

¹⁰³ The World Commission on Environment and Development, also known as Brundtland Commission (from Gro Harlem Brundtland, chairperson of the Commission) was established in 1983 through UNGA Resolution 38/161.

¹⁰⁴ Sustainable development is framed as an objective, *inter alia*, in Brundtland (n 3) 12.

development'.¹⁰⁵ This marks a departure from the original, purely environmental focus of sustainable development.

Importantly, the Brundtland Report provides the first and still mainstream definition of sustainable development. It is defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.¹⁰⁶ Thus, at the cost of anthropocentrism, the report turns the inter-generational approach into a cornerstone of the sustainable development discourse. The report also relies on intra-generational equality, as it states that 'sustainable development requires meeting the basic needs of all'.¹⁰⁷ Lastly, and in line with the traditional 'sustainability' strain, the Brundtland Report acknowledges, at least by façade, the importance of limiting human impact on Earth, as it affirms that 'the concept of sustainable development does imply limits'.¹⁰⁸ However, the Report continues, 'not absolute limits, but limitations imposed by the present state of technology and social organization'.¹⁰⁹ Therefore, the Report manifests absolute faith in human progress, and in particular in the capacity of 'technology and social organization' to 'make way for a new era of economic growth'.¹¹⁰

In line with the assumptions underpinning both the Stockholm Declaration and the IUCN Strategy, the report frames economic growth as the panacea for economic, environmental, and social issues by stating that:

'If large parts of the developing world are to avert economic, social, and environmental catastrophes, it is essential that global economic growth be revitalized. In practical terms, this means more rapid economic growth in both industrial and developing countries, freer market access for the

¹⁰⁵ *ibid* 37. Emphasis on the lack of environmental focus has been put in brackets.

¹⁰⁶ *ibid* 37.

¹⁰⁷ *ibid* 15.

¹⁰⁸ *ibid*.

¹⁰⁹ *ibid*.

¹¹⁰ *ibid*.

products of developing countries, lower interest rates, greater technology transfer, and significantly larger capital flows'.¹¹¹

Evidently, beyond equating development to economic growth, the report preaches 'sustainable development' as the solution to the evils arising, *inter alia*, from both environmental degradation and poverty. However, the document does not provide any evidence that efficiency gains brought about by technological innovation will be sufficient to halt environmental degradation. Similarly, it offers no proof of the necessity (or at least adequacy) of pursuing economic growth, in both industrial and developing countries, to achieve poverty eradication and environmental protection. This allows scholars as Castro and Purvis et al. to mark the Report's approach as blatantly ideological.¹¹²

The Brundtland definition of sustainable development surely had the fortune of appearing on the international stage at a particularly favourable historical juncture. Indeed, with the fall of the Berlin Wall in 1989 and with the implosion of the USSR in 1991, the states-sponsored ideological competition between the liberal and communist conceptualizations of development had come to an end. With the end of the Cold War, the liberal US-led idea of development could easily spread at the planetary level, even in parts of the globe that were formerly part of the Soviet bloc.

In this post-Cold War context, the Earth Conference on Environment and Development took place in Rio. As Castro observes, this Conference 'counted on the participation of most of the nation-states on earth, the majority of which were governed by elites committed to the neoliberal agenda'.¹¹³ The Rio Conference gave birth to several relevant legal documents. However, due to limited space, this research will specifically focus on the Rio Declaration, which, being the homologous of the Stockholm Declaration of 1972 but having been produced after the

¹¹¹ *ibid* 66.

¹¹² Castro (n 4); Purvis et al. (n 5).

¹¹³ *ibid* 197.

publication of the Brundtland Report, strongly contributed to reshaping the concept of sustainable development.

While the 1992 Declaration does not provide any new definition of sustainable development, this soft-law document underscores the relevance of the intergenerational approach,¹¹⁴ and highlights the importance of involving women, young people, and indigenous communities in the path towards sustainable development.¹¹⁵ Under Principle 7, it also recognizes that so-called ‘developed countries’ bear special responsibilities ‘in view of the pressures their societies place on the global environment’.¹¹⁶ It therefore recognizes, for the first time in a UN document, that allegedly developed countries are the most responsible for environmental degradation. Nonetheless, the Rio Declaration never questions the economic-growth-oriented conception of sustainable development. On the contrary, it frames economic growth as being complementary to sustainable development. This clearly emerges from Principle 12, which affirms that ‘states should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries’.¹¹⁷

Another novelty introduced by the Rio Declaration can be found in Principle 1, stating that ‘human beings are at the centre of concerns for sustainable development’.¹¹⁸ Therefore, while the IUCN Strategy put Sustainable Development in relation to environmental conservation, and the Brundtland Report framed sustainable development as an objective to be pursued mainly for eradicating poverty, but also for the benefit of the environment, the Rio Declaration clearly frames sustainable development as an objective gravitating around human beings. By doing so, the Declaration

¹¹⁴ United Nations Rio Declaration on Environment and Development (13 June 1992), 31 I.L.M. 874 (1992) Principle 3.

¹¹⁵ *ibid* Principles 20–22.

¹¹⁶ *ibid* Principle 7.

¹¹⁷ *ibid* Principle 12.

¹¹⁸ *ibid* Principle 1.

shifts the focus away from environmental protection while relegating it to an ‘integral part of the development process’.¹¹⁹ The Rio conceptualization of sustainable development, then, quite clearly presents sustainable development as the heir of traditional development while inheriting very little from the concept of sustainability. Environmental protection, which must be addressed through ‘economic growth and sustainable development’, is only instrumental for the benefit of humans.¹²⁰ Environmental protection has been explicitly turned into a part of the development process, at the centre of which there are human beings and no longer the preservation of natural ecosystems and life on Earth.

Evidently, two main features characterise the concept of sustainable development during its first phase of mainstreaming at the UN level. Firstly, ‘sustainable development’ has been generated in (and reshaped by) international institutions rather than in independent scholarly works. Thus, as it was the case for development, and differently from sustainability, the conceptualization of sustainable development emerges from the mediation of political actors’ interests, and it is not the output of politically independent and theoretically solid research works. Secondly, the concept of sustainable development is consistently underpinned by the belief (not grounded in scientific research) that development (equated to economic development and, by itself, to economic growth) is not only compatible but essential to achieving sustainability. The problems arising from the establishment of this ontology, normalised also in subsequent version of the sustainable development concept, will be better discussed in the following sub-section.

At this point, it is important to highlight two main changes that the concept of sustainable development experienced during its first twelve years of existence. Firstly, over time, sustainable development has been increasingly framed less as a means and more as a self-standing objective. Importantly, becoming an aim in itself, sustainable development enhances the strength of

¹¹⁹ *ibid* Principle 4.

¹²⁰ *ibid* Principle 12.

the its own rhetoric, and it can justify a stronger involvement of ‘developed’ states in the domestic affairs of ‘less-developed’ ones. Secondly, this subsection has noted how the sustainable development discourse started to shift its focus towards human well-being in the Brundtland Report, and it ended up with the Rio Declaration’s view that human beings, rather than nature, are the main object of concern for sustainable development. This shift led to the gradual de-prioritization of environmental protections and prioritisation of a ‘development process’ aimed at improving human well-being through the means of economic growth. This brought scholars such as Tulloch to claim that documents such as the Brundtland Report and the Rio Declaration transformed sustainability ‘from a marginal counter-hegemonic radical movement into a platform for legitimating neoliberal universalising project’.¹²¹

3. Towards fragmentation: amidst pillars and goals

Despite its progressive distancing from the environmental focus and its theoretical weakness, until the end of the 20th Century, sustainable development was framed as a unitary concept. This is to say that, during the ‘90s, sustainable development was conceived as a comprehensive concept that different actors had to pursue by taking account of the complex (though optimistically framed) set of relationships tying environmental, social, and economic elements. However, such an approach was about to change at the dawn of the new millennium.

Indeed, in 2002, the Johannesburg Declaration on Sustainable Development framed the three ‘pillars of sustainable development’.¹²² These pillars were categorised as economic development, social development and

¹²¹ Tulloch (n 4) 108.

¹²² Report of the World Summit on Sustainable Development, from the U.N. Conference in Johannesburg, South Africa [Johannesburg Declaration] (Johannesburg, 4 September 2002) Annex.

environmental protection.¹²³ Interestingly, it was in this document that environmental protection was first conceived as just one of three (and more precisely as the third) pillars of sustainable development. Moreover, two pillars out of three do not refer to sustainability but solely to development. Crucially, the 2002 Declaration describes the three pillars of sustainable development as ‘mutually reinforcing’, and it thus contributes to the enhancement of the ontological artefact framing economic development, social development, and environmental protection as positively interacting with each other.¹²⁴ However, according to Purvis et al, ‘one problematic facet of this conceptualisation is its lack of theoretical development’.¹²⁵ In fact, despite having been presented by the UN as a paradigmatic truth, no proof of the solidity nor the achievability of the alleged synergy between the economic, social, and environmental dimensions has ever emerged from the literature. Again, in the words of Purvis et al.,

The depiction of the economic pillar in terms of an economic growth goal, placed on equal footing with social and environmental factors, despite the wealth of critical literature, can be seen as an embodiment of the ideological win–win scenario of sustainable growth.¹²⁶

Having this in mind, it is possible to identify two consequences arising out of this mutually reinforcing-pillars conceptualization. Firstly, it leaves no room for identifying balancing instruments,¹²⁷ as it remains ontologically blind to trade-offs among economic, social, and environmental interests. This situation, though, is particularly problematic. Indeed, as Chiti observes, ‘the balancing of diverse and potentially divergent public interests’ is

¹²³ *ibid.*

¹²⁴ *ibid* Annex.

¹²⁵ Purvis et al. (n 5) 6.

¹²⁶ *ibid* 12.

¹²⁷ I.e. legal or policy instruments aimed at adequately balancing economic, social, and environmental stakes.

essential for implementing a transition towards sustainability.¹²⁸ Secondly, the three-pillars conceptualization finally dismantles the once unitary understanding of sustainable development. In fact, until 2002, any actor who wanted to pursue sustainable development had to pass along the way of environmental considerations. By contrast, from Johannesburg onwards, three mutually reinforcing pillars of sustainable development exist, so that the enhancement of any of them would logically represent a way towards the pursuit of the overall sustainable development objective.

The fragmentation of sustainable development, however, reached its apex in 2015 when the UN General Assembly adopted the '2030 Agenda for Sustainable Development'. Being an heir of the Millennium Declaration, the 2030 Agenda further increases the number of goals (from eight to seventeen) and explicitly labels the goals as 'Sustainable Development Goals'.¹²⁹ It is crucial to observe that naming any goal as a 'Sustainable Development Goal' constitutes a major step in the process of dilution and dissembling of the concept of sustainable development. Indeed, putting the 'sustainable development' label on any single goal brings to the emergence of seventeen different declinations of sustainable development.

The framing of the '2030 Agenda' confirms the distancing of sustainable development from the originally dominant environmental concern. Indeed, with wording that is strongly reminiscent of Principle 1 in the Rio Declaration, the Preamble of the '2030 Agenda' states that 'eradicating poverty [...] is the greatest global challenge and an indispensable requirement for sustainable development'.¹³⁰ While this phrasing stresses the importance ascribed to the social dimension, its lack of references to the environment also confirms the departure from the original priority attributed to environmental conservation. Lastly, the ancillary role of the

¹²⁸ Edoardo Chiti, 'Managing the Ecological Transition of the EU: The European Green Deal as A Regulatory Process' (2022) 59 *Common Market Law Review*, 16.

¹²⁹ UN General Assembly (n 3).

¹³⁰ *ibid* Preamble.

environmental dimension also emerges from the analysis of the SDGs list. Indeed, out of seventeen Sustainable Development Goals, only three are fully devoted to nature protection, and have been formally put on the same footage of goals as Goal 8, on economic growth, and Goal 9 on infrastructures and industrialization. Moreover, the positioning of environmental goals at the lower end of the list (i.e. goals number 13, 14 and 15) may suggest a further marginalization of their centrality in the overall framework.

Another feature of the ‘2030 Agenda’ stands in its depiction of all seventeen SDGs as ‘integrated and indivisible’.¹³¹ Therefore, the Agenda frames objectives such as, for instance, global economic growth (goal 8) and life on land (goal 15), as ‘linked to each other and interdependent’.¹³² However, even in this case, the alleged interdependence among the elements composing sustainable development is aprioristically recognized as a dogmatic truth, and it is not backed by any kind of empirical evidence.

Moreover, as it is built around the belief that there should be a continuous improvement of all targets enshrined in each SDGs, the ‘2030 Agenda’ relies on a progressive conceptualization of time and history, which blatantly echoes the traditional development rhetoric. Simultaneously, the Agenda inherits very little from the equilibrium-oriented sustainability model, and this contributes to explaining the reasons behind its incapacity to acknowledge the existence of tensions among different SDGs.

Finally, the 21st Century has brought to an unprecedented fragmentation of the once unitary concept of sustainable development. This process, which materialised into the identification, in international law documents, of sustainable development pillars and goals, led to a further distancing of sustainable development from the once central environmental concern. Furthermore, moving on the same trajectory travelled by the (once

¹³¹ *ibid.*

¹³² *ibid* Declaration.

development, and then) sustainable development concept since 1972, both the ‘Johannesburg Declaration’ and the ‘2030 Agenda’ equate development to economic development. This form of development must be achieved through perpetual economic growth which, by itself, will allegedly settle environmental and social problems for the benefit of all humans. Nonetheless, the reliance on such as stark as shaky assumptions poses incredibly high risks. In fact, if the belief in the synergic relationship between different Sustainable Development Goals (which has already been starkly criticised by several scholars) will prove to be misplaced,¹³³ environmental degradation, biodiversity loss, climate change, as well as all social goals that the Agenda 2030 claims to prioritize, will be irretrievably exacerbated in the effort to pursue the panacea of eternal economic growth.

V. THE ANALYSIS RESULTS: TWO FINDINGS AND TWO REFLECTIONS ON THEIR CONSEQUENCES

After tracing back and analysing the documents making the history of concepts such as sustainability, development, and sustainable development, this research has noted that a problematic conceptualisation of both sustainable development and its underlying ontology has emerged and been normalised in international law and policy documents. This assertion arises from two primary findings, which prompt reflection upon their consequences.

First, it has been observed that, differently from sustainability documents, which emerged from the work of scholars and researchers, almost all relevant works contributing to the making and reshaping of the concepts of development and, most importantly, sustainable development, have emerged from institutional apparatuses of political nature, and crystallised in

¹³³ Hickel (n 4). The conflict between economic growth on the one hand, and environmental and social protection on the other, has been outlined in a plethora of works. See n 46.

international law and policy documents. This simple information not only showcases that international legal documents have played a pivotal role in mainstreaming and normalising sustainable development. It also suggests that its very theorization was the result of a process of mediation of political stakes and not the outcome of a scientifically driven dialogue.

Second, linked to the peculiar institutional origin of the concept of sustainable development is its lack of theoretical grounding. As a matter of fact, the creation of a politically acceptable narrative on sustainable development has been prioritised over considerations about its adherence to material reality. As this study pointed out, the concept of sustainable development, while progressively downplaying the centrality of the environmental dimension, has always been anchored to the assumption that a somehow environmentally-sound economic development, declined in terms of global and perpetual economic growth, will lead to a progressive solution to environmental problems, as well as to the eradication of poverty. Nonetheless, the assumption that perpetual and global economic growth can be driver of both environmental and social recovery has poor theoretical basis, and it has been starkly criticized by several scholars and research institutions.¹³⁴

Therefore, instead of reflecting the findings of ‘best available scientific knowledge’,¹³⁵ the concept of sustainable development seems to legitimise, justify, and normalise the currently growth-oriented economic system serving the economic and political interests of dominant international actors. In fact, with its persistent depiction of economic growth as necessary for improving both social wellbeing and environmental protection, the sustainable development ontology seems to be instrumental for the

¹³⁴ *Supra* n 46.

¹³⁵ The Preamble of the Paris Agreement (2015) states that the ‘response to the urgent threat of climate change’ needs to be based on ‘best available scientific knowledge’.

mystification of what the UN Special Rapporteur on extreme poverty De Schutter calls ‘the ideology of growthism’.¹³⁶

It follows that that the concept of sustainable development is built on shaky grounds, and this generates, by itself, two main consequences. First, the normalisation of its assumptions in international law documents, by imposing its underlying ontology, precludes relevant actors (i.e. policymakers, judicial institutions, NGOs, enterprises, scholars, etc.) from grasping the existing tensions between the wide range of environmental, social, and economic interests in place. As a consequence, it prevents not only the adoption, but even the active search for those balancing instruments over which it would be necessary to rely in order to make political, judicial, and economic choices in a sustainability-oriented system. Second, despite being an heir to the concept of development, ‘sustainable development’ has to a large extent substituted the sustainability concept, and it has led several either *façade* or genuine environmentalist subjects towards the, at best theoretically weak if not fallacious, path of green growth pursuit and SDGs achievement. Should for this reason be deduced that the sustainability concept has irretrievably succumbed to the sustainable development one?

VI. THE DEFINITIVE OVERTHROW OF SUSTAINABILITY ON BEHALF OF SUSTAINABLE DEVELOPMENT?

In the author’s view, the sustainability paradigm did not go extinct, and it was not completely absorbed by the sustainable development concept, despite the auspices of the (sustainable) development proponents. Indeed, insights from hard sciences,¹³⁷ while being largely ignored by legislators and

¹³⁶ De Schutter (n 46) 1.

¹³⁷ Will Steffen, Katherine Richardson, Johan Rockström, Sarah Cornell, Ingo Fetzer, Elena Bennett, Reinette Biggs, Stephen Carpenter, Wim De Vries, Cynthia De Wit, Carl Folke, Dieter Gerten, Jens Heinke, Georgina Mace, Linn Persson, Veerabhadran Ramanathan, Belinda Reyers, ‘Planetary Boundaries: Guiding Human

policymakers, continue underscoring the importance of maintaining an ecosystem-approach, they highlight the insurmountable limits posed to human action by the very existence of Planetary Boundaries, prove the impossibility of reconciling environmental protection with the paradigm of infinite economic growth, and ultimately manifest the existence (and resistance) of a sustainability paradigm which is alternative to the sustainable development one.

Furthermore, legal scholarship has not been completely impermeable to the sustainability push coming from the realm of scientific research. Indeed, while Bosselmann, already in 2009, argued in favour of a ‘sustainability principle’, which shall be based on the centrality of the ecological dimension,¹³⁸ Ross discussed about ‘ecological sustainability’, that is alternative to ‘the early interpretations of sustainable development [which] fail to address either the fact that there are limits to the earth’s resilience or our cultural and moral failure to curb our consumption’.¹³⁹ The idea of grounding legal regimes on ‘systems-based ecological boundaries’ is also the core tenet of ecological law.¹⁴⁰ This thriving discipline, initiated by scholars such as Garver, Anker, and Maloney, draws from the insights of ecological

Development on a Changing Planet’ [2015] 347 *Science* 736; Linn Persson, Bethanie Carney Almroth, Christopher Collins, Sarah Cornell, Cynthia de Wit, Miriam L. Diamond, Peter Fantke, Martin Hassellöv, Matthew MacLeod, Morten Ryberg, Peter Jørgensen, Patricia Villarrubia-Gómez, Zhanyun Wang, Michael Zwicky Hauschild, ‘Outside the Safe Operating Space of the Planetary Boundary for Novel Entities’ (2013) 110 *PNAS* 6348; William Clark, ‘Sustainability Science: A Room of Its Own’ (2007) 104 *PNAS* 19300; Paul Crutzen and Eugene Stoermer, ‘The “Anthropocene”’ (2000) 41 *Global Change Newsletter* 17.

¹³⁸ Bosselmann (n 4).

¹³⁹ Andrea Ross, ‘Modern Interpretations of Sustainable Development’ (2009) 36 *Journal of Law and Society* 33.

¹⁴⁰ Geoffrey Garver, ‘The Rule of Ecological Law: The Legal Complement to Degrowth Economics’ [2013] 5 *Sustainability* 317.

economics. It emphasizes the ‘primacy of ecological integrity’ and underlines that ‘global ecological limits constrain the economic and social spheres’.¹⁴¹

Afterwards, it was Chiti to identify ‘sustainability of ecosystems’ as one of the goals which should be introduced at the EU level for the realization of the European Green Deal. As the scholar points out, however, such a change in the EU framework is potentially problematic as it opens the room for conflicts between ‘sustainable development, on the one hand, [and] ecological primacy, on the other’.¹⁴² Finally, Kotzé and Adelman reflected upon the possibility of mainstreaming the concept of ‘*buen vivir*’, i.e. ‘an indigenous onto-epistemology that could offer an alternative to sustainable development’ by substituting developmental universalistic attitude with polycentrism, anthropocentrism with biocentrism, and Cartesian social-nature dualism with a deification of *Pachamama* (i.e. Mother Earth).¹⁴³

Despite the variety of names and shapes under which the abovementioned concepts materialised, they all embody what might be called a ‘pure sustainability’ paradigm. This paradigm, being alternative to sustainable development and based on a scientifically grounded ontology, acknowledges the impossibility to decouple economic growth from environmental degradation, the unnecessary to pursue perpetual global economic growth in order to satisfy basic human needs, and coherently puts ecological primacy as the central element of any policy which has the potential to affect the natural environment. The ‘pure sustainability’ paradigm, to be reinforced through further theorisation in scholarly works, might play a role in the process of substitution of the sustainable development concept. Indeed, it might lead the action of public regulators in the formation of new laws and policies, it could inspire the work of courts

¹⁴¹ *ibid* 319. See, *inter alia*, Kirsten Anker, Peter D. Burdon, Geoffrey Garver, Michelle Maloney, Carla Sbert, *From Environmental to Ecological Law* (Routledge 2021).

¹⁴² Chiti (n 120) 18.

¹⁴³ Kotzé, Adelman (n 7) 239.

while formalizing standardized judicial instrument, and it might give rise to the establishment of a pure sustainability principle.

It would be naïve to disregard the difficulty that the mainstreaming of the pure sustainability paradigm would imply, especially if one considers that the sustainability discourse has traditionally been disregarded by political stakeholders. Nevertheless, if this has historically been the rule, as advocating for pure sustainability has long been politically inconvenient (since it implied high costs for present generations with the benefit of future generations), this might no longer be the case. Indeed, it may be time to understand that yesterday's tomorrow is today. What has always been referred to as the future generation which will pay the cost of unwise (in)actions is the currently young generation, i.e. the generation of those who will likely be alive in 2100 and will directly suffer, among the other things, the consequences of living in a World populated by over 10 billion people, whose seas may have fifty times more microplastics than nowadays, in which 27% of vertebrate biodiversity got lost, and where global average temperatures are 2.7°C above the pre-industrial level.¹⁴⁴ Day by day, the cost of inaction goes higher, as well as the benefits of action, even when referred to the short-term. This might make the call into question of the sustainable development concept politically acceptable and could lead to the emergence of legal documents

¹⁴⁴ Max Roser, Lucas Rodés-Guirao, 'Future Population Growth' (2019) *Our World in Data* <<https://ourworldindata.org/future-population-growth#licence>> accessed 1 May 2023; World Economic Forum, 'Ocean plastic pollution threatens marine extinction says new study' (2022) <<https://www.weforum.org/agenda/2022/02/extinction-threat-ocean-plastic-pollution/>> accessed 20 April 2023; European Commission, Joint Research Centre 'Ecosystems might lose 27% of vertebrate diversity by 2100' (2022) <https://joint-research-centre.ec.europa.eu/jrc-news/ecosystems-might-lose-27-vertebrate-diversity-2100-2022-12-16_en> accessed 20 April 2023; Alves Bruna, 'Global warming projections by 2100, by scenario' (2023) <<https://www.statista.com/statistics/1278800/global-temperature-increase-by-scenario/#:~:text=Based%20on%20policies%20and%20actions,2.7%20degrees%20Celsius%20in%202100>> accessed 19 April 2023.

finally relying on a pure sustainability paradigm. In this context, there will be huge room for law and governance scholars to investigate over the best ways for defining, mainstreaming, and operationalizing the pure sustainability paradigm.

