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ARAŞTIRMA MAKALESİ
RESEARCH ARTICLE

Sustainability as the Foundation of Secular Morality and Legal Responsibility

Seküler Ahlakın ve Hukuki Sorumluluğun Temeli Olarak Sürdürülebilirlik

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ABSTRACT

This study explores the foundation of morality through the lens of sustainability, diverging from traditional approaches such as utilitarianism and deontology. It argues that sustainability itself underpins moral and legal responsibility, proposing it as a guiding principle for both. Building on Aristotle's concept of phronesis, the study addresses linear time, will, and causality as essential components, with free will assumed due to the probabilistic nature of physical reality rather than determinism. The framework of morality is thus constructed around sustainability, with tools and methods from sustainability impact assessment applied to moral evaluation. This approach offers a metaethical foundation for normative ethics and provides a novel analytical link between sustainability and morality. Finally, it connects legal responsibility to sustainability, explaining how behaviors evolve into norms through customary law. Accordingly, the foundation of legal responsibility lies in preventing unsustainable practices from becoming normative. The study establishes sustainability as an essential principle in moral and legal philosophy.

Keywords: Sustainability ethics, Metaethics, Probabilistic free will, Philosophical constructivism, Legal responsibility, Customary law

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ÖZ

Bu çalışma, ahlakın temelini sürdürülebilirlik perspektifinden inceleyerek faydacılık ve deontoloji gibi geleneksel yaklaşımlardan ayrılmaktadır. Çalışma, sürdürülebilirliğin ahlaki ve hukuki sorumluluğun temelini oluşturduğunu öne sürerek, her ikisi için de yol gösterici bir ilke olarak önerir. Aristoteles'in *phronesis* (pratik bilgelik) kavramından yola çıkan çalışma, lineer zaman, irade ve nedensellik gibi temel unsurları ele almakta ve fiziksel gerçekliğin olasılıksal doğasından hareketle özgür iradeyi determinizme karşı varsaymaktadır. Bu bağlamda, ahlakın çerçevesi sürdürülebilirlik etrafında şekillendirilmiş, sürdürülebilirlik etki değerlendirmesi araçları ve yöntemleri ahlaki değerlendirmeye uygulanmıştır. Bu yaklaşım, normatif etik için bir metaetik temel sunmakta ve sürdürülebilirlik ile ahlak arasında özgün bir analitik bağ kurmaktadır. Son olarak, hukuki sorumluluğu sürdürülebilirlik ile ilişkilendiren çalışma, davranışların teamül hukuku yoluyla nasıl normlara dönüştüğünü açıklamaktadır. Buna göre, hukuki sorumluluğun temeli, sürdürülemez uygulamaların norm haline gelmesini önlemeye dayanmaktadır. Çalışma, sürdürülebilirliği ahlak ve hukuk felsefesi için temel bir ilke olarak konumlandırmaktadır.

Anahtar Kelimeler: Sürdürülebilirlik etiği, Metaetik, Olasılıksal özgür irade, Felsefi inşacılık, Hukuki sorumluluk, Teamül hukuku

INTRODUCTION

Today, the concept of sustainability takes center stage in law, economics, environmental, and social science policies, especially within the framework of the United Nations' goals. Conceptually, sustainability involves attributing value to certain elements and striving for their continuity despite external influences that unfold over linear time. At its core, the notions of "reference value" and "temporal responsibility" constitute the key components of this concept. The philosophical equivalents of these components can be traced back to Ancient Greece, particularly in Aristotle's distinction between theoretical and practical reason.

In the theoretical realm, knowledge emphasizes the concept of causality, as it pertains to understanding the "cause." In contrast, practical reason involves constructing a system of reference values—such as "good" and "bad"—in the fields of morality and politics, grounded in theoretical knowledge. Aristotle's term phronesis at this point encompasses both foresight and virtue. The concepts within phronesis address how theoretical knowledge is applied to temporal changes.

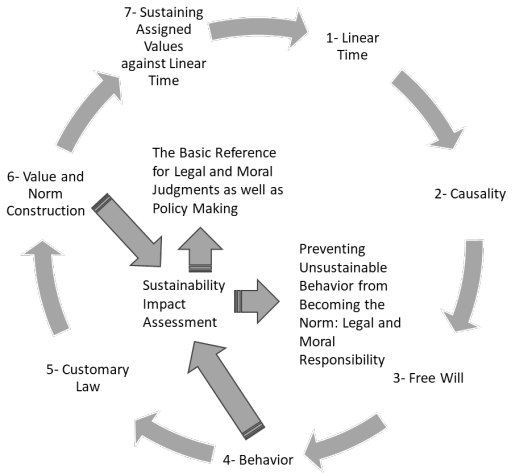
Thus, an understanding of causality equips individuals with the ability to predict, while secular morality and politics are shaped by assigning values to various elements in relation to the individual, society, and the environment. A clear parallel exists between today's refined concept of sustainability and Aristotle's phronesis. This connection also raises the question of sustainability's role in determining what is considered "good" and "bad." Given that value assignment (axiology) is relatively flexible and based on external factors, sustainability is best established through a relational method rather than a fixed one.

Consequently, secular morality is not a categorical imperative, as Kant suggested, but rather a social, relative, and relational construct that varies according to the values people assign. In this view,

behaviors that ensure the sustainability of assigned values despite the passage of time and external influences are considered good, while behaviors that undermine them are considered bad.

The deontic aspect of secular morality is the duty to sustain assigned values. The moral evaluation of behavior is closely linked to the concept of "custom" in legal systems. Factors such as the visibility of the behavior, its social impact, and its acceptability as an exception determine its capacity to set norms. As long as this capacity exists, every behavior falls within the scope of law and morality in terms of its impact on both social and planetary sustainability. This, in turn, establishes a justification that rejects the mystical and cosmic understanding of justice, which can be seen as the foundation of secular responsibility.

The notion of an interactive relationship between rules and actors here points to a constructivist norm architecture. This architecture also entails an interactive relationship between applied ethics and normative ethics, presenting an innovative metaethical proposal that justifies secular morality. The diagram below conveys the methodology of this study. (Table 1)



What is the basis of morality and legal responsibility? When addressing this research question, the differences between the two concepts may initially seem more prominent. However, this study emphasizes the functional similarities between morality and legal responsibility rather than their differences. Both serve economic, environmental, and social sustainability. Thus, sustainability becomes both the reference value and the operational principle for both. To clarify this, the study will first explore the concept of phronesis within the historical context of philosophical thought.

I. ESTABLISHING SECULAR MORALITY: PHRONESIS

Aristotle is a virtue ethicist. In establishing the concept of virtue, he refers to the purpose of human beings that aligns with their nature, which he calls *eudaimonia* (flourishing or happiness). This purpose is not objective but rather represents a subjective satisfaction that he describes as the "good

life" (eu zen), one that is self-sufficient *(autarkes)1.* Accordingly, instead of an understanding that sees man's greatest purpose as resembling God and striving for this through asceticism, Aristotle posits that living well is the foundation of happiness. In addition to the inherent satisfaction individuals find in living well, he explains life's relationality through the function *(ergon)* argument. Every being has a function, and virtue refers to actions appropriate to that function[2].

Aristotle distinguishes two types of virtues: intellectual *(dianoetic)* virtues, which relate to reasoning, and ethical or character *(eudaimonic)* virtues, which follow reason but do not themselves involve reasoning[3]. The intellectual virtues, which are particularly relevant to our topic, are divided into two categories: theoretical and practical[4]. A person can only fulfill their nature through the combination of theoretical and practical wisdom. An individual who possesses theoretical intelligence—knowledge of causes—also demonstrates practical wisdom by acting correctly.

Aristotle views thinking as the defining characteristic of human beings. The knowledge of causes gained through thinking constitutes theoretical wisdom, which is central to intellectual virtues. Practical wisdom, which enables correct action in everyday life, is guided by the insights provided by theoretical wisdom. This is why Aristotle believes that the elderly possess more advanced practical wisdom due to the experience they accumulate over time[5].

The reason Aristotle regards *phronesis* (practical wisdom) as the most fundamental virtue is that ethical virtues cannot be correctly applied without practical wisdom, which reflects the virtue of thought[6]. For Aristotle, virtue is an intellectual matter. What separates the theoretical from the practical aspects of this matter is the confrontation of movement or time with human will in the practical realm. This means that practical wisdom is at the core of morality, as it involves understanding the relationship between elements that change over linear time and human will. Practical wisdom requires knowledge of the causes that guide it. Acting in accordance with practical wisdom means performing actions that align with one's function.

The construction of Aristotle's ethical system in this way highlights these key elements: linear time,[7] causality, and free will. These elements are crucial for understanding how phronesis, or practical wisdom, allows us to navigate the complexities of human action in a world with ever-changing environmental and social realities.

1 Richard Kraut, 'Aristotle's Ethics' The Stanford Encyclopedia of Philosophy <https://plato.stanford.edu/archives/fall2022/entries/aristotle-ethics/> Access: 28 September 2024.

2 Aristotle, W. D. Ross and J. O. Urmson, *The Nicomachean Ethics* (Oxford University Press 1980) 1097b-1098a.

3 Ibid 1103a1–10.

4 Ibid 1139a3–8.

5 Ibid 1141b-1142a.

6 Solmaz Zelyüt, *İki Adalet Arasında* (Vadi Yayınları 1997) 147.

7 The concept refers to the observation of entropy as it unfolds in linear time, establishing causality through the relationship of priority and posteriority. For the relation of entropy to probability, see Greg M Anderson and David A Crerar, 'Statistical Interpretation of Entropy' in *Thermodynamics in Geochemistry: The Equilibrium Model* (Oxford Academic, Oxford University Press 1993)

A. LINEAR TIME

The relationship between logical principles and reality in a state of change has been studied since the pre-Socratic philosophers. Heraclitus, with his idea that "everything flows" (*panta rhei*), explained formation through the conflict of opposites[8]. In contrast, Parmenides conceived of existence as a static state, separating empirical knowledge from metaphysics[9]. He grounded the absoluteness of existence in verbal logic. According to the principle of identity, it is undeniably true to say "existence exists," rather than asserting that it does not exist or that it both exists and does not exist[10]. In this sense, Parmenides argues that the state Heraclitus refers to as "formation," which includes both existence and non-existence, contains a contradiction[11]. If we follow this line of thought, we cannot logically claim that something does not yet exist—that it both exists and does not exist[12]. Therefore, existence is abstracted from time, rendering it immobile, indivisible, and absolute.

Another example of the conflict between time and logic is Zeno of Elea's paradoxes. In cases where the results obtained by mathematical or abstract reasoning contradict observational data, it is not scientifically accepted today to base conclusions on abstract reasoning alone. Predicting, generalizing, assuming, as well as the use of mathematics and logic, are methods specific to humans. Whether the deductive results produced by these methods have validity in nature is, of course, a problem that cannot be overlooked. Additionally, Zeno's paradoxes should be appreciated for fostering doubt about observation and common sense.

One of these paradoxes, the bisection paradox, suggests that a target can never be reached because, at each step, one must first halve the distance and then halve the remaining distance, resulting in an infinite series. This was presented as an argument supporting the impossibility of movement. Bertrand Russell addressed this paradox of infinite series by distinguishing between philosophical infinity and mathematical infinity (i.e., limits) with his theory of positive infinity[13].

The fact that logic, one of the languages developed as a method of thinking, can sometimes contradict the nature we observe was noted by philosophers even before Aristotle. The most fundamental example of this is the change observed in nature over time, which contrasts with Parmenides' principle of identity. The notion that existence is inherently contradictory was also put forward by Heraclitus and the Sophists[14]. Dialectical logic emerged by accepting this contradiction.

8 Ahmet Arslan, *İlkçağ Felsefe Tarihi-I Sokrates Öncesi Yunan Felsefesi* (İstanbul Bilgi Üniversitesi Yayınları 2018) 190.

9 Ibid 213.

10 Ibid 220-221.

11 Ibid 224-225.

12 Hermann Alexander Diels, *Griechisch und Deutsch von Hermann Diels. Herausgegeben von Walther Kranz* (Weidmannsche Hildesheim 1974) B. 8; Arslan (n 8) 226.

13 Bertrand Russell, *Our Knowledge of the External World* (Routledge 2009) 146 ff. See also Wesley C. Salmon, *Zeno's Paradoxes* (University of Minnesota Press 1970)

14 Ahmet Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (İstanbul Bilgi Üniversitesi Yayınları 2017) 54-55.

Aristotle, however, did not view logic as a tool disconnected from nature[15]. Unlike Parmenides, who denied change, and the Eleatic school that followed him, Aristotle did not consider change as a mere transition from one state or position to another. Instead, he saw it as a continuous process[16]. For example, he explained the transition of a woman from not being a mother to becoming a mother by asserting that she is a "potential mother" even when she is not yet a mother. This potential, according to Aristotle's theory of existence, is inherent from the beginning, demonstrating that change is not an abrupt shift but a realization of inherent capacities[17].

Lange opposed the potential inclusion of something that does not exist into the concept of existence[18]. Here, the fundamental issue in the philosophy of being, which belongs to metaphysics[19] rather than physics, is the tension between the movement observed in nature and the mind, which is believed to be an absolute and timeless source of knowledge. In this tension, what elevates the mind is the consensus on the fallibility of observation. This has led to the dominant view that existence, or "truth," is grasped not by observation, but through reason.

Nevertheless, Aristotle did not deviate toward developing observation techniques or questioning the unproven axiom of identity. However, unlike Parmenides, he did not view existence as entirely timeless or reject the notion of change. Aristotle saw matter as the subject of change and form as its predicate. For instance, water is a matter, and heat is a form[20]. While he regarded God as pure form without matter, he rejected the idea of arche because he did not accept formless matter[21]. The change we observe in nature is the transformation of matter, and matter itself means the capacity to change. Form, on the other hand, is unchanging[22]. Although we can only know matter through form, matter itself cannot be known directly[23]. For example, the eye does not enable vision simply because it is suitable matter. Instead, we say that the eye sees because its form assigns that function to its matter. In other words, function defines matter[24].

"Being" is a profound term that encompasses the existence of both substances and particulars[25]. Aristotle divided being into categories. These categories, to which particulars belong, are substances. There is no transitivity between particulars and categories, nor between different categories themselves. The categories of being also permeate the logic of language. A category serves as both a

15 Octave Hamelin, *Le Système d'Aristote* (F. Alcan 1931) 92-93; Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 59.

16 Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 139.

17 Ibid 150.

18 Ibid 153.

19 Although modern science accepts its existence as a basic assumption, string theory, which is based on mathematical calculations, is not accepted as science because it cannot be observed. See Peter Voit, *Not Even Wrong* (Vintage 2007)

20 Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 140.

21 Ibid 143.

22 Ibid 143.

23 Ibid 144.

24 Ibid 149.

25 Ibid 123.

predicate and a carrier[26]. For example, Socrates is a human, but "human" is not Socrates[27]. Similarly, Socrates, as a member of the human category, cannot simultaneously belong to the animal category[28]. Aristotle, who sought to comprehend the external world through logic, viewed particulars as the subject of knowledge and universals as the subject of science[29]. However, unlike Plato, he did not regard universals as an independent category of being. The world we perceive is being itself. When we speak of science, necessary propositions are made possible through an understanding of reason and wisdom. Otherwise, there is no factual necessity inherent in the nature we observe[30].

The physical world, as understood by Aristotle, includes the sublunar realm. For him, the celestial bodies and God, which are perfect beings beyond the moon, are not part of nature but are subjects of astronomy and metaphysics[31]. In the physical, sublunar world, there are human-made and natural beings. While natural beings are subject to change, those created by humans (artifacts) change in proportion to the natural elements within them[32]. Inactivity in nature is not absolute; it refers to the non-use of the potential to move, rather than a complete lack of movement[33].

According to Aristotle, the change that matter undergoes in nature is not the essence of nature itself. The essence of nature is form**,** and form does not change. For example, individuals change in terms of their education or lack thereof, but humanity itself does not change as a form[34]. Although matter changes, we understand it according to its function and form**,** which also includes its potential. Thus, natural science is not merely the study of matter or form as descriptive entities,[35] but rather the knowledge of cause (*aitia*)**,** which encompasses both[36].

It is important to note that Aristotle did not fully perceive matter in natural science as the observation of particulars but rather as an element of universals[37]. He makes a fourfold distinction in the knowledge of causes:

-Material cause refers to the substance out of which something is made.

-Formal cause refers to the shape or essence inherent in the being.

-Efficient cause (transcendent cause) is the agent or force that initiates movement or change.

26 Aristotle, *Categories* (Saffet Babür tr, İmge 1996)

27 Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 69.

28 Ibid 68.

29 Ibid 79. The idea that there can be no science of particulars is not because they are unique, but because they have matter. For the subject matter of science of God, who is not material but particular, see Ibid 104.

30 Ibid 81-82. For the expression of causality in nature with the words cause, effect, causality, interaction, and logical justification with the words reason, consequence, reasoning, see also ibid 88-89, 100.

31 Ibid 116.

32 Ibid 164.

33 Aristotle, *Physics* (Saffet Babür tr, Yapı Kredi 2019) II, 1; Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 165.

34 Aristotle, *Physics* II. (n 33) 7.

35 Ibid 194 a 12; Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 170.

36 Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 169.

37 Ibid 172.

-Final cause is the purpose or end towards which the change is directed.

For Aristotle, in explaining change and formation, the final cause (the goal of the process) and the formal cause (what completes the being) are of paramount importance[38]. The order in nature *(dia ti)* he assumes is not conscious or aimed at the "good," but points to an unconscious purpose**.** However, there is no strict determinism in the sublunar world driven purely by matter, as Aristotle addresses necessity at the level of reason and logic rather than material inevitability[39].

From Aristotle's thought to modern times, Newtonian mechanics, which treated space and time as absolute, served as the foundational physics doctrine in Europe for centuries. England's technical advancements—particularly James Watt's development of the steam engine for industrial purposes—sparked the Industrial Revolution[40]. This innovation led to significant studies by French and German engineers in the field of thermodynamics, focusing on the theory of heat and energy[41].

One of the key principles established was the conservation of total energy, presented as a fundamental law of nature[42]. It was also demonstrated that in spontaneous processes, the ratio of heat to temperature tends to increase, highlighting the concept of entropy[43]. Ludwig Boltzmann (1844–1906) observed that this increase in entropy also manifested in the disorder and dispersion of molecules. The absolute rise in entropy,[44] as it relates to the potential distribution of energy within isolated systems, became a foundation and a measure for understanding linear time[45].

Albert Einstein (1879–1955) published his theories on systems with uniform linear motion (special relativity) in 1905 and systems with accelerated motion (general relativity) in 1915[46]. According to these theories, gravitational fields bend the path of light, which has a constant speed, and an observer approaching the speed of light experiences time slowing down. Consequently, space and time came to be understood as interconnected, a concept now known as spacetime[47]. Through this framework, Einstein suggested the existence of a deterministic nature at a universal level, though one that varies according to the observer. However, this deterministic perspective was not without its limitations.

Phenomena that contradicted the wave theory of light prompted efforts by scientists like Max Planck (1858–1947), J.J. Thomson (1856–1940), and Ernest Rutherford (1871–1937) to offer alternative

38 Ibid 174 ff; Aristotle, *Physics* II (n 33) 3,7; Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 179.

39 Arslan, *İlkçağ Felsefe Tarihi-III Aristoteles* (n 14) 187 ff.

40 Stephen F. Mason, *A History of the Sciences* (Umur Daybelge tr, Türk Tarih Kurumu 2013) 252-253.

41 Ibid 447-451.

42 Ibid 456.

43 Ibid 455.

44 Ibid 456.

45 On time and causality, see Hans Reichenbach, *The Rise of Scientific Philosophy* (Cemal Yıldırım tr, Fol 2019) 166-177. For the effect affecting the cause as an exception to linear time, see "Wheeler's Delayed-Choice Experiment"; Jian-Shun Tang and others, 'Realization of Quantum Wheeler's Delayed-Choice Experiment' 6 Nature Photonics 600

46 Mason (n 40) 502.

47 Ibid 503-505.

explanations[48]. As technology advanced and atomic and subatomic particles entered the realm of observation, it became evident that nature operates differently than previously understood.

In 1926, Erwin Schrödinger (1887–1961) introduced the quantum wave equation, unveiling the mechanics of an isolated quantum system[49]. Two years later, Werner Heisenberg (1901–1976) proposed his Uncertainty Principle, asserting that one could only know either the speed or position of subatomic particles with certainty, but not both[50]. This marked a significant departure from Einstein's view, which held that the mechanism underpinning linear time-dependent changes in the universe was simply not fully understood. However, Einstein's belief in an incomplete mechanism was challenged by further observations, which demonstrated that probability patterns are a fundamental aspect of reality[51].

In fact, the 2022 Nobel Prize in Physics was awarded to researchers who proved quantum probability calculations, directly refuting the notion of a "hidden mechanism" (which Einstein referred to as *spukhafte Fernwirkung,* or "spooky action at a distance") behind the behavior of entangled particles[52]. This discovery established that the underlying nature of the universe is probabilistic rather than deterministic[53]. The next chapter will examine how the probabilistic universe model allows for free will.

B. CAUSALITY AND FREE WILL

Parmenides' deterministic conception of being essentially negates the role of human will, mechanizing the fundamental element of morality and responsibility. By viewing existence as unchanging and absolute, Parmenides eliminates the space for human agency, reducing the capacity for moral choice and responsibility to mere outcomes of a rigid, predetermined system. This approach mechanizes morality, making it dependent on external forces rather than individual will. In contrast, the way humans perceive nature is closely tied to the meaning they assign to their own will. For instance, in Socrates' thought, viewing the external world through the lens of "good" leads to the assumption that nature itself has a purpose directed towards good. This perspective represents one of the earliest deviations from a purely mechanical understanding of nature, introducing the idea that humans project values onto the world based on their own experiences and conceptions of morality.

48 Ibid 506-509.

49 David J. Griffiths, *Introduction to Quantum Mechanics* (Pearson Prentice Hall 2004)

50 Werner Heisenberg, *Encounters with Einstein: And Other Essays on People, Places, and Particles* (Princeton Science Library 1989)

51 Arthur Fine and Thomas A. Ryckman, *The Einstein-Podolsky-Rosen Argument in Quantum Theory* (Stanford 2020)

52 https://www.nobelprize.org/prizes/physics/2022/press-release/ Access: 08 December 2022.

53 For the view that quantum mechanics is a fundamental structure of physics and that classical mechanics is a special aspect of quantum mechanics, see Erkcan Özcan, *Kuantumdan Kozmosa Fizik: Anlamak Mümkün mü?* (Evrim Ağacı 2022) On the random and unpredictable behavior of determined systems in classical physics, see also The Editors of Encyclopaedia, *Chaos Theory* (Britannica 2022)

The importance of human-centered perspectives is clearly reflected in Socrates' anthropomorphic design of God[54]. By attributing human-like qualities and a moral direction to the divine, Socrates demonstrates how early thinkers moved beyond the mechanistic view of the universe. This anthropocentric projection of purpose onto the natural world laid the foundation for a moral framework based on human will, rather than mechanical determinism. It is in this departure from Parmenides' rigid worldview that the seeds of free will and moral responsibility began to take root in philosophical thought.

In Epicurus' thought, atoms, as fundamental bodies, move vertically in a straight line. However, they deviate slightly from this course due to their collisions with one another. This random deviation, known as the "clinamen" or "swerve," is a critical aspect of his philosophy, as it introduces an element of unpredictability in nature. Epicurus thus provides a philosophical basis for the idea of free will, presenting it as a challenge to the rigid mechanistic order and the concept of fate that had been prevalent in other worldviews[55].

During the Middle Ages, particularly under the influence of the Semitic tradition, there were efforts to reconcile the tension between free will and fate, especially within the framework of religious teachings. In Christian doctrine, Augustine addressed this issue by examining the relationship between divine foreknowledge and human free will. He drew on the etymology of the term *fari*, meaning "far away," "ahead," or "everywhere," to explain that God's omniscience and will could coexist with human agency. Augustine maintained that while God has foreknowledge of all events, this does not negate human free will; individuals still possess the freedom to make moral choices[56].

In the Neo-Platonic tradition, human will and individuality[57] were further emphasized, portraying humans as creators of their own destiny[58]. This idea of individual autonomy and agency flourished in the Renaissance, a period that marked a profound shift in thinking, especially in how history, art, education, and law were interpreted. Figures like Dante Alighieri, Francesco Petrarca, Giovanni Pico della Mirandola, Giovanni Boccaccio, and Coluccio Salutati played a significant role in advancing this new humanistic perspective. Their views departed from the medieval focus on divine order and fate, placing greater emphasis on human experience and the potential for self-realization. Petrarch, for example, in his dialogue with Augustine, articulated a clear distinction between human and divine pursuits. He rejected the aspiration to resemble God, arguing that mortal humans should concern themselves with mortal matters[59]. For Petrarch, the path to understanding and finding God lay not in the beauty of nature or external realities but in introspection and self-reflection[60].

54 Ahmet Arslan, *İlkçağ Felsefe Tarihi-II Sofistlerden Platon'a* (İstanbul Bilgi Üniversitesi Yayınları 2018) 107.

55 Ahmet Arslan, *İlkçağ Felsefe Tarihi-IV Helenistik Dönem Felsefesi* (İstanbul Bilgi Üniversitesi 2010) 82-83.

56 Augustine, *The City of God, Books I-VII* (The Catholic University of America Press 2008); Alev Alatlı, *Batı'ya Yön Veren Metinler* (Melisa 2010) 187-200.

57 Robert Coles, "'The Nature and Destiny of Man" by Reinhold Niebuhr' [The MIT Press] 103 Daedalus 97

58 According to Pico della Mirandola (1463-1499), God has drawn a path for man in this way. See Ibid

59 Francesco Petrarca, *Petrarch's Secret: The Soul's Conflict with Passion* (William H. Draper tr, Mt. San Antonio College 2021); Alatlı (n 56) 425-429.

60 Francesco Petrarca, *Letters on Familiar Matters (Rerum familiarium libri), Volume 3* (Aldo S. Bernardo tr, Italica Press 2008)

This inward focus on human experience marked a shift towards a more personal and individualized understanding of morality and free will, signaling a transition from a theocentric to a more human-centered worldview.

In Islamic theology, the Mu'tazila school, which arose from the idea of an abstract and rational God, emphasized divine justice and believed that God governs the universe with a purpose directed toward the good[61]. In contrast, the Ash'ariyya school developed as a counter to the Mu'tazila, advocating a more orthodox stance that became mainstream in Islamic thought[62]. The Ash'ariyya sought to avoid the extremes of both the Mu'tazila's overemphasis on rationalism and the Hashwiyya school's literalist approach. They accepted God's attributes, such as will and power, but distinguished them from human attributes. The Ash'ari doctrine proposed a form of partial[63] determinism, acknowledging both divine will and human responsibility[64]. God's will, in this view, could override human actions or natural processes at any moment, emphasizing His omnipotence.

In terms of natural philosophy, the Ash'ariyya adopted an atomistic interpretation, as systematized by Abu Bakr al-Baqillani. This perspective rejected the existence of fixed, immutable natural laws akin to Aristotle's concept of *nous* (intellect) as the ordering principle of the cosmos. Instead, the Ash'ari scholars proposed a universe governed by successive accidents[65]. These accidents are individual, momentary occurrences willed by God, happening in sequence, but not bound by any inherent causality in the natural world. Therefore, what we observe as natural laws are merely God's customs (*ada*), and these can be broken at any time if God wills, allowing for the possibility of miracles (*harik al-ada*)[66].

The concept of causality in this Ash'ari framework is not the Aristotelian *rationes necessariae*—necessary causal relations between things. Instead, they viewed the order of the world as a series of events determined by God's will. Curcani, an Ash'ari theologian, accepted this sequence of accidents as necessary but only in the sense that they follow God's will[67]. Thus, while denying formal or natural causality, they affirmed a divine and transcendent agency, meaning that the apparent order in the universe is not intrinsic to nature but is continually sustained by God's creative will[68]. This interpretation is not only a view that saves God's will from the necessity of fate, but also a determination that expresses a synthesis of atomists and skeptics.

61 Louis Gardet and Georges Anawati, *Introduction à la Théologie Musulmane. Essai de Théologie Comparée* (Ahmet Arslan tr, Ayrıntı 2017) 81.

62 Ibid 85.

63 The reflection of human will in Islamic theology has been demonstrated through the concept of partial will. For the examination of the human element in the Islamic world in terms of secularity, ethics, existence and history, see Lenn E. Goodmon, *Islamic Humanism* (Ahmet Arslan tr, İletişim 2006)

64 Gardet and Anawati (n 61) 93.

65 Ibid 99.

66 Ibid 100.

67 Ibid 520.

68 Ibid 522. In our opinion, the fact that God's will is constantly active in the universe indicates that God is subject to linear time.

On the other hand, based on this uncertainty, Ghazali argued that the will of God, whose nature cannot be grasped by reason, can only be understood through intuition. Thus, he discredited theologians who attempted to establish wisdom by reason, accusing them of relying on relative value[69]. Ibn Khaldun, meanwhile, noted that the people he referred to as "the ancients", whom he considered the forerunners of Baqillani, saw reasoning as "the falsity of the evidence being the falsity of what is intended to be proven with this evidence", which he described as retroactive[70]. With this definition, Ibn Khaldun questioned to some extent the placement of dogmas in a state of uncertainty.

In contrast, the concept of the unity of existence, which reflects the immanence of God within the universe in Islamic philosophy, was strongly emphasized by Muslim philosophers. So much so that the idea of creation (*ibda'*) from nothing (*ex nihilo*), the fundamental assertion of God's transcendence over the universe, was unanimously rejected[71]. Ibn Sina (Avicenna), however, developed a determinist, pantheist, and monist doctrine, focusing on the contradiction between fate and divine power[72]. Ibn Rushd (Averroes), known as the best commentator on Aristotle in the West, defined God as an active reason within the universe. Diverging from Plato's idea of eternal forms in the presence of God, Ibn Rushd proposed that particulars can also be known in the presence of God[73].

It should be noted that while theologians used ancient Greek sources—primarily Aristotle and Plato—as tools for establishing or reconciling Islamic thought, they often displayed an eclectic attitude, seemingly ignoring[74] the clear prescriptions of the Quran, the primary source of Islamic law[75]. This indicates that, to some extent, independent thought systems could be developed based on these concepts up until the 12th century. Additionally, the theory of modes (*state*) that Abu Hashim established, regarding the distinction he made in determining concepts in the mind, reflects the philosophy of meaning and a nominalist approach[76]. As previously mentioned, the concept of partial will, rooted in atomism, is significant in Islamic theology. Will, as a concept, is distinct from fate. For instance, even in Greek mythology, the fact that the gods themselves cannot defy fate (*Dike*) reveals that fate presents a challenge to divine will as well.

Humanity's turn to disciplines such as mathematics, geometry, and astronomy in search of certainty is clear: it sought normative security. However, the limitations of this certainty became particularly evident in Christian theology. The emphasis on the concept of mercy[77] in theology and ethics

69 Ibid 109. See also *Enoch (Ethiopic) Parallel Translations* Chapter LXIX.

70 Gardet and Anawati (n 61) 111.

71 Ibid 473.

72 Ibid 473.

73 Ibid 476.

74 For information on how Islamic philosophers not only approached the Qur'an eclectically and did not accept it as a whole, but also manipulated ancient Greek philosophy, see Hasan Aydın, *Ortaçağda Sözde Aristotelesçi Yapıtlar ve Salt İyi Ya Da Nedenler Kitabı* (Bilim ve Gelecek Kitaplığı 2019)

75 Gardet and Anawati (n 61) 475.

76 Ibid 482.

77 Zelyüt (n 6)

essentially made the idea of God forgiving people, despite His own laws, more accessible. This approach, which prioritized God's will over fate, was further explored from a humanistic perspective during the Middle Ages by thinkers like Petrarch and Boccaccio.

The Platonic perspective of the early Renaissance was replaced by the understanding of physics guided by Newtonian mechanics, Descartes' Cartesian philosophy, and the questions and answers in the realm of logic that Kant grappled with. In particular, the universe that Descartes established based on the self has been accepted as the foundation of modern philosophy. Descartes began by doubting everything about the external world. He claimed that the only thing he was certain of was the act of thinking that he himself performed, and therefore, he existed as the one performing this act. This marked a transition from nature, that is, the object, to the human being, that is, the subject, setting aside all a priori knowledge. Although this was seen as a brilliant advancement for its time, it did not definitively prove that the act of thinking was not mechanistic and autonomous, nor did it necessarily establish the subject or will. Later, Descartes proposed the idea of a deist god as the agent or subject governing the functioning of the universe, which ultimately distanced his philosophy from naturalism. Thus, Descartes grounded the reality of nature in God[78]. After introducing a transcendent God into the universe, he put forward the principle of the conservation of momentum, based on the idea that movement is a property given to the universe solely by creation[79]. Although Descartes imagined the Earth as motionless and at the center of the universe, his clear assertion that movement is relative to the observer was a significant step—one bold enough to merit the church's censure of the author[80].

The philosophy of the Enlightenment was built on the idea of man trusting his own mind (*sapere aude*) in the struggle against the difficulties he faced[81]. In this process, German idealism did not leave the naturalistic understanding of nature, as seen in Heraclitus' perspective, without a challenge. Although idealism accepted human free will as a starting point, it subordinated it to the necessities of reason[82]. On the other hand, the attempt to derive "universal" laws from human will emerged as a new equation of natural law[83]. Hegel interpreted the French Revolution (1789) as an assertion of free will against the law[84]. The Germans persisted in emphasizing spiritual activity in nature and a vitalistic perspective[85]. Jacob Böhme (1575–1624) continued an alchemical tradition that emphasized the concepts of will and soul. Leibniz (1646–1716) argued that there were autonomous units in nature (monads) with their own willpower, but that these did not lead to chaos because they

78 Albert Lange, *The History of Materialism* (Ahmet Arslan tr, Sentez 2016) 209.

79 Mason (n 40) 149.

80 Ibid 153. Although the spirit-matter dichotomy is seen as a fundamental argument in analytical philosophy, Lange is of the opinion that Descartes included the concept of spirit in his theory "unnecessarily" in order not to completely oppose the church. See Lange (n 78) 211.

81 Immanuel Kant, *What is Enlightenment?* (Mehmet Barış Albayrak tr, Albaraka Yayınları 2022)

82 Coles (n 57)

83 Martin Loughlin, *Foundations of Public Law* (Dilşad Çiğdem Sever and Kıvılcım Turanlı trs, Dipnot 2015) 80.

84 Georg Wilhelm Friedrich Hegel, 'Vorlesungen über die Philosophie der Geschichte' 7 Tercüme Dergisi; Mete Tunçay, *Batı'da Siyasal Düşünceler Tarihi-III Yakınçağ* (İstanbul Blgi Üniversitesi Yayınları 2015) 32.

85 Mason (n 40) 319.

were the work of God[86]. Oken (1779–1851) also equated man with God and built a universe based on the existence of both wills[87]. As can be seen, German philosophy regarded man's will as an exception to the mechanical universe, and the influence of this perspective continued until the end of the 19th century[88].

The human-environment dialectic emerges as a recurring pattern in each of these stages. Descartes established a pathway to free will through the subject-object distinction. However, in our view, there is no necessity for the transition from the act of thinking to the subject. Action is ultimately a judgment that occurs based on the meaning assigned by the human being. Since free will is a sine qua non assumption[89] for a secular system of responsibility, it becomes a necessity. Otherwise, spiritual explanations built on false foundations, such as the pituitary gland, which presuppose the certainty of the will, fall outside the scientific realm today[90]. This is because consciousness itself, and the mechanism that produces the judgment of its objectivity, are fundamentally the same. There is no distinction between the observer and the observed[91]. Therefore, the issue is not proving the certainty of consciousness but accepting its axiomatic nature. When law and responsibility are grounded in the will, it is important to emphasize its role as a functional assumption rather than asserting the certainty of this axiom. Moreover, viewing the connections made by the human mind as absolute natural law feeds into Pythagorean mysticism and German idealism. The assumption of human will in a secular sense separates man from nature, fostering the human-environment dialectic[92]. Thus, will stands as an antithesis to fate. The probabilistic nature of physical reality, discussed earlier under the heading of "linear time," further supports this thesis.

When human will is accepted as a subject, it has two reflections. The first is the power to change nature; the second is the awareness or consciousness of one's own existence. The first is not exclusive to humans but is a potential inherent in all living and non-living elements. The second allows humans to construct a system with themselves as the reference point. While the system is human-centered,[93] it must consider

86 Ibid 322.

87 Ibid 324.

88 Ibid 330.

89 According to Hegel, the starting point of law is free will. Georg Wilhelm Friedrich Hegel, *The Philosophy of Right* (Sümer Yayıncılık 2015) 48. See also Abdulkadir Nacar, 'İnsanlığa Karşı Suçlarda Sosyal Kimlik Motivasyonu Üzerine Mantıksal Bir Yaklaşım' 41 PPIL 359.

90 In our opinion, the concept of spirit immortality is also a metaphysical manifestation of the idea of subjective certainty that is not subject to linear time and entropy. For examples of advanced metaphysical assumptions based on the certainty of consciousness, see Panpsychism.

91 Gödel argues that an axiomatic system cannot be proven from within itself and that systems that appear consistent are incomplete. See incompleteness theorem.

92 Will is here considered not on the grounds of fact (*quid facti*) but on the grounds of validity (*quid juris*). The material source of this validity is the function of will in social life.

93 What is meant here is not a solipsistic perspective, but rather centering the awareness of 'human beings as objects'. The hypothetical acceptance of human will as a subject is based on the reflexive consciousness's ability to perceive itself as an object. This unique feature in universe serves as the foundational sustainability reference, enabling the development of science and culture. For views that explain the development of personality through this capacity of the individual to observe and assess themselves as an object, see perspectives in psychology and philosophy, such as: George Herbert Mead's "Theory of the Self"; Jean-Paul Sartre's "Being and Nothingness"; Charles Cooley's "Looking Glass Self"; Immanuel Kant's Theory of Autonomy. Hegel also states that individuals, as well as people, cannot gain "personality" unless they reach this pure self-consciousness. See Hegel, *The Philosophy of Right* (n 89) 72. In this study, the term "secular" refers to this advanced level of awareness. Such awareness enables an objective evaluation of Jung's collective

all elements that can influence nature. At this juncture, what comes into conflict with humans is change. Humans strive for the continuity of both themselves and the things they value. Spinoza clearly articulated the authentic basis of this aim as "conatus."

Categorically, "the effort to continue in existence" is not something acquired later but is a priori[94]. The disappearance of this effort—contained in every being to the extent of its possibilities—marks the disappearance of its subject[95]. Since this feature inherent in being also requires action, conatus necessitates a relationship between particulars that influence each other. The affective relationship between affecting and affected reveals an infinite uncertainty[96]. Spinoza approached this uncertainty from a deterministic standpoint, rather than considering infinite relational possibilities: "There is nothing possible in nature; on the contrary, everything is determined to exist and act in a certain way as a result of the necessity of divine nature"[97]. Our study, however, diverges at this point by starting from the probabilistic nature of physical reality. The uncertainty that arises from the conflict between different efforts to exist poses the question of what kind of relationship should be established between particulars and the whole. The modern answer to this question is connectivity[98].

In explaining the concepts of will and consciousness, connectivity, based on neural networks in the brain, has guided neuroscience studies since 2012[99]. Connectivity, which allows for accurate modeling of changes in living or inorganic systems,[100] provides a successful model, especially in simulations of nervous systems and decision-making processes[101]. This approach posits that all cells within a system are integrally connected. The connections between cells construct the whole, meaning that the relationship between cells constitutes the whole itself. In this sense, the whole is not merely the sum of its parts[102]. Hopfield and Hinton, who developed a method for artificial neural networks inspired by connectivity in physical reality, were awarded the 2024 Nobel Prize in Physics[103].

unconscious and its influence on moral systems, as well as the demystification of this influence, thus allowing us to discuss the concept of secular morality. Ultimately, we center humans in the sustainability equation because of their distinctive feature: reflexive consciousness. Reflexive consciousness refers to the ability of the subject (will) to become an object of nature once again, allowing humans to reflect on themselves and their actions.

94 Gilles Deleuze, *Spinoza: Practical Philosophy* (Alber Nohum tr, Norgunk 2013) 228.

95 Roger Scruton, *Spinoza* (Hakan Gür tr, Dost 2007) 89.

96 Gilles Deleuze, *Spinoza Üzerine Onbir Ders* (Ulus Baker tr, Kabalcı 2008) 151

97 Baruch Spinoza, *The Ethics* (R.H.M. Elwes tr, Blackmask 2001)

98 Türker Kılıç, *Yeni Bilim Bağlantısallık Yeni Kültür Yaşamdaşlık* (Ayrıntı 2023)

99 Ibid 17; https://www.humanconnectome.org/ Access: 18 October 2024.

100 Andrea Cavagna and others, 'Scale-Free Correlations in Starling Flocks' 107 Proc Natl Acad Sci U S A 11865 See also https://www.nobelprize.org/prizes/physics/2021/popular-information/ Access: 18 October 2024

101 Philip M. Meneely, Caroline L. Dahlberg and Jacqueline K. Rose, 'Working with Worms: Caenorhabditis Elegans as A Model Organism' 19 Current Protocols Essential Laboratory Techniques e35; Henry Markram and others, 'Reconstruction and Simulation of Neocortical Microcircuitry' 163 Cell 456

102 Philip W. Anderson, 'More is Different' 177 Science 393; Kılıç (n 98) For the interactive relationship between parts and whole in understanding a text, see hermeneutic cycle.

103 https://www.nobelprize.org/prizes/physics/2024/press-release/ Access: 17 October 2024. In logic, the fallacy of composition is known as the claim that the parts must be the same as the whole. The fallacy of this idea is explained in physics by the concept of emergence.

A system that considers all factors capable of altering nature, as explained above, while aiming for the continuity of assigned values, aligns with the idea of connectional integrity[104]. When contemplating such a system, critical questions arise: How can sustainability be the reference for our moral and legal judgments? This question presents both a mathematical and a moral dilemma.

For example, seasonal reproduction and fishing simulations aimed at sustaining fish stocks in a sea require mathematical expertise. On the other hand, a murderer killing others to avoid being caught serves his own survival but threatens societal sustainability. Here, conflicting elements reveal a moral problem. In both cases, the value assigned to the elements within the system affects the optimal solution. Therefore, the refined concept we refer to as morality is, at its core, a problem of axiology and sustainability. In the next chapter, sustainability as a reference of morality will be discussed.

II. REFERENCE OF SECULAR MORALITY: SUSTAINABILITY

Asserting that sustainability is the basis of morality differs from claiming that hedonism, personal interest, or society form its foundation. This is because sustainability can also explain the ontology of morality. The system we refer to as morality, in its simplest form, involves the continuity of certain values by assigning significance to specific elements. Thus, sustainability reflects not only the purpose but also the working model or algorithm of morality.

Other approaches attempt to identify the basis of morality—what virtue should guide human behavior. Metaethics, or the problem of the ontology of morality, however, precedes axiology. A metaethical explanation cannot be made by attributing value to personal interest, pleasure, or society. Such frameworks create a fictional reference unit, elevating one of many possible values as the highest ideal. In contrast, sustainability is morality itself. Sustaining, by nature, is an action that requires energy in the face of time and change. It is an active effort to assign value to gains and to preserve them. Therefore, both the origin (or motivation) and the outcome (or purpose) of morality are fundamentally about sustaining.

When viewed through the lens of decision theory, the assumption of human will mark the starting point of law. Decision theory, which addresses conflicts of interest and optimal decisions by assigning probabilities to various factors in mathematics and statistics, recognizes the will that makes the decision as the dominant element. In a moral system, decisions and behaviors are evaluated according to certain reference points. To answer the question of which values are determined and how they are defined within the framework of time and will, we must first analyze the concept of value with a descriptive approach, rather than making imperative claims.

What serves as the reference for determining whether a behavior is "good" or "bad"? For instance, one could label behaviors that express generosity as good by attributing a positive value to the concept of generosity as a reference point. Whether this reference is of real or nominal quality is a separate issue. By "real," we mean an objective basis for what is considered good in itself, while "nominal" refers to

104 For the relation between connectional mathematics and conatus, see Kılıç (n 98) 78.

an abstract standard, where something is good merely in a conceptual or self-referential sense. This dialectic, which has also been central to debates in scientific methodology, can be evaluated within Popper's system of critical rationalism[105].

According to this view, the reference value in morality is shaped by the behaviors observed within society and shifts as these behaviors evolve. Social structures generate variable assumptions about what constitutes the moral reference value. For example, homosexual relationships, once prohibited in the Semitic tradition, are now often accepted as expressions of individual will in the modern context. Conversely, child marriages, which were historically permitted in the same tradition, are now increasingly viewed through a critical lens, reshaping the moral evaluation of such practices.

Though societal acceptance of behaviors as good or bad changes over time, the criteria for determining good and bad are intrinsic to morality itself. Morality seeks to preserve the continuity of the concepts it values by defining certain behaviors as good or bad and constructing social identity around these values. Sustainability, which is the core aim of morality, becomes a fundamental value in determining good and bad. Both behaviors and the concepts they uphold serve the broader goal of social sustainability. For example, the rise of humanism as a value was a reaction to the Church's inability to adapt to scientific,[106] social[107] and legal[108] developments, leading to the view that the corrupt Church institution had become unsustainable.

The elements within each sample construct certain values in order to preserve their interests. The function of value assignment facilitates economic exchange, as described by both Adam Smith[109] and Karl Marx[110]. This exchange is determined relatively, in relation to different elements and variables. Therefore, the tasks assigned to the will through these values are relative to all elements within the sample. This implies that whether a behavior is ethical or not is determined by its relationship to all the relevant elements. The judgment about the ethical nature of a behavior is thus hypothetical, based on the values within the sample.

The possibility that the same behavior could be evaluated differently in different samples clearly demonstrates that good and bad values cannot be discussed at the level of mathematical objectivity. In this regard, it is more reasonable to ground mathematics on the absolute existence of God, rather than on relative concepts of good and bad[111]. Just like the will, value assignment is functional and hypothetical.

105 Nobel laureates Albert Einstein, Peter Medawar and Jacques Monod adopted Popper's views in the method of science, see Ali Mehmet Celal Şengör, *Bilgiyle Sohbet* (İş Bankası Kültür Yayınları 2014) 613.

106 Alberto A. Martinez, *Burned alive : Bruno, Galileo and the Inquisition* (Reaktion Books 2018)

107 Charlotte Methuen, *Luther and Calvin : Religious Revolutionaries* (Lion Hudson 2011)

108 S.E. Dawson and Royal Society of Canada, *The Lines of Demarcation of Pope Alexander VI and the Treaty of Tordesillas A. D. 1493 And 1494* (Creative Media Partners, LLC 2015)

109 Adam Smith and Dugald Stewart, *The Theory of Moral Sentiments: Or, An Essay Towards an Analysis of the Principles* (Wells and Lilly 1817)

110 Karl Marx and others, *Capital: Volume One* (Dover Publications 2019)

111 David Albertson, *Mathematical Theologies: Nicholas of Cusa and the Legacy of Thierry of Chartres* (Oxford University Press 2014)

Beyond serving as a topic of public discourse,[112] sustainability both represents the algorithm of morality and reveals the standard by which value is measured. The object of sustainability is the preservation of past gains. Individuals or societies aim to carry these gains into the future. In this process, they seek to resolve conflicts in the most sustainable manner for their own future. This does not imply attributing an imperative rationality to decision-makers; rather, it suggests that subjects operate with relative rationality shaped by sustainability concerns, according to their capacities.

Adam Smith's "rational choice theory" has a broad literature in economics, sociology, and political fields[113]. This theory can yield more accurate results when evaluated relatively, depending on time and context, rather than through an imperative lens. For example, in a high-inflation economy, holding savings in demand deposits in the national currency may not be seen as objectively rational. However, in a sample where there is a bias toward foreign currency or interest, the outcomes required by this "objective rationality" may not materialize as expected[114].

The distinction to be made here is between mathematical certainty and imperative certainty regarding behaviors. Moreover, mathematical certainty does not always present itself clearly. For instance, while data on human impact on global climate change is available,[115] no definitive model can pinpoint which state is responsible to what extent[116]. At this point, individuals must increase their awareness of the impact of the elements within the sample, in line with scientific methodology.

Essentially, objections that reveal the inadequacies of systems rejecting utility and advocating purely duty-based ethics—those that dismiss individual needs in favor of societal benefit or vice versa—are fundamentally reservations about sustainability. To what extent is it sustainable to kill millions in the name of law, to eliminate individual rights for the sake of society, or to do the reverse? At this point, it's important to emphasize the practicality of the concept of sustainability, ensuring it isn't relegated to a deus ex machina role. It should be remembered that normative principles regarding sustainability can be derived through practical observations. This implies that a behavior can be evaluated alongside other factors and judged as good or bad based on its outcomes.

The method of evaluation works as follows: if a behavior becomes a norm, it is tested to see whether this norm contributes to a sustainable system. As a result, not every behavior will be subject to the same moral judgment. For instance, a woman walking down the street in a miniskirt poses no threat to the

112 Shoko Yamada and others, 'Sustainability as a Moral Discourse: Its Shifting Meanings, Exclusions, and Anxieties' 14 Sustainability 3095

113 Raymond Boudon, 'Beyond Rational Choice Theory' 29 Annual Review of Sociology 1

114 See also Sanjit Dhami and Cass R. Sunstein, *Bounded Rationality: Heuristics, Judgment, and Public Policy* (MIT Press 2022)

115 Rafaela Hillerbrand, 'Climate Change as Risk?' in Sabine Roeser and others (eds), *Handbook of Risk Theory: Epistemology, Decision Theory, Ethics, and Social Implications of Risk* (Springer 2012) 322-323; Ulrich Ranke, *Natural Disaster Risk Management: Geosciences and Social Responsibility* (Springer 2016) 23.

116 Nataša Nedeski and André Nollkaemper, 'A Guide to Tackling the Collective Causation Problem in International Climate Change Litigation' EJIL Talk <https://www.ejiltalk.org/a-guide-to-tackling-the-collective-causation-problem-in-international-climate-change-litigation/>

social sustainability gains in Germany. However, in Afghanistan, the same action might be considered socially unsustainable, regardless of whether it stems from mass hysteria or other cultural factors.

The answer to whether morality is objective or relative lies in understanding morality as "objectively relative," much like the probabilistic nature of physical reality. Objectivity in this context doesn't refer to a transcendent, deterministic moral command but rather to the good/bad judgment derived from an objective evaluation of the value priorities assigned to all the factors within a given sample.

Until a global, homogeneous value judgment for a specific behavior is established, morality should be treated as it is: contextual and fluid. To continue with the example of the miniskirt, when we ask why it isn't prohibited for a woman to wear a miniskirt at home in Afghanistan, we face the reality of how communication capacity and societal norms influence behavior. The capacity for communication is a determining factor in whether a behavior can become a norm. For example, the moral evaluation of the difficulties encountered by a person struggling to survive on a deserted island, assessed by the individual themselves, and the discussion of the same difficulties in a philosophy class or scientific article, appeal to different communication volumes. Therefore, although the example may seem the same, the target audience, norm-forming capacity, and consequently, the moral judgment, are different situations. Therefore, the good and bad values attributed to actions must be evaluated within the framework of time, place, and dominant discourse[117].

If the ontology, purpose, and functioning of morality are reduced to sustainability, we encounter a broad literature that spans fields like engineering, resource management, politics, and law. A key source of this literature is the United Nations Sustainable Development Goals (SDGs)[118]. When morality is defined as the act of assigning value to certain elements and maintaining those values, we are making a *de lege lata* definition—an expression of the law as it currently stands. In contrast, the UN SDGs aim to instill a heightened awareness of sustainability among all stakeholders, grounded in advanced scientific research. This effort represents a forward-looking attempt to establish a responsible and "moral" governance model (*de lege ferenda*) for the future.

However, the designation of "development" as the core element worth sustaining within the UN framework has drawn various critiques[119]. Marx, in particular, emphasized exploitation stemming from class conflict, and Wallerstein from the center-periphery relationship, and accepted that a system that constantly strives for growth is inevitably unsustainable. Sustaining implies preserving what has been gained, while development connotes striving for more, presenting an ideological distinction between two different aims. Yet, when considering the future holistically, both conservatism and progressivism are necessary[120]. Therefore, within this concept, there is a need for an understanding

117 For the necessity of determining morality according to the situation, see Aristotle, Ross and Urmson (n 2) 1113a32-3

118 THE 17 GOALS | Sustainable Development (un.org) Access: 29 September 2024

119 Marc Pallemaerts, 'International Environmental Law from Stockholm to Rio: Back to the Future?' 1 Review of European Community & International Environmental Law 254; Duncan French, 'Sustainable Development' in Malgosia Fitzmaurice, David M. Ong and Panos Merkouris (eds), *Research handbooks in international law* (Edward Elgar 2010) 54; Vaughan Lowe, *Sustainable Development and Unsustainable Arguments, International Law and Sustainable Development: Past Achievements and Future Challenges* (Oxford University Press 1999)

120 For example, on the importance of technical advances for climate resilience, see Stephane Hallegatte, Jun Erik Maruyama

that not only signifies quantitative development[121] but, more importantly, emphasizes the development and preservation of existing gains.

Quantitative methods play an indispensable role in evaluation,[122] even if we don't always notice them in daily life—from weighing the pros and cons of marriage to grading an exam on a scale of one hundred. Of course, quantity, as we understand it, does not naturally exist in the world. Quantification requires uniformity, meaning that the units of measurement must be absolutely equal, but in nature, no two entities are perfectly identical. Thus, rather than viewing quantity simply as a convenient assumption, it's essential to measure factors relative to each other using complex, multifaceted simulation models.

One problematic use of quantification is "money" which facilitates the determination of the relative value of objects, actions, and qualities[123]. However, a completely monetized value system anonymizes relationships between people, turning them into mere numbers for each other[124]. Additionally, in a world economy dominated by the dollar, where its supply serves the interests of limited groups, the unsustainability of this unit of measurement becomes evident[125]. In this regard, it would be more appropriate to focus on measurement techniques that better align with environmental sustainability, such as the carbon footprint[126] or water footprint[127].

The OECD's report on Sustainability Impact Assessment (SIA) highlights the necessity of a long-term evaluation that integrates economic, environmental, and social components[128]. One of the key points raised in this report is the importance of incorporating a qualitative approach, in addition to traditional quantitative methods like cost-benefit analysis and monetization[129]. In our own study,

Rentschler and Julie Rozenberg, *The Adaptation Principles : A Guide for Designing Strategies for Climate Change Adaptation and Resilience* (2020) 48; Sotirios A. Argyroudis and others, 'Digital Technologies Can Enhance Climate Resilience of Critical Infrastructure' 35 Climate Risk Management 100387; Stelvia Matos and others, 'Innovation and Climate Change: A Review and Introduction to the Special Issue' 117 Technovation 102612

121 As opposed to numerical calculations, see Stephen Houlgate, *Quantity and Measure in Hegel's 'Science of Logic': Hegel on Being* (Bloomsbury Publishing 2021); Stuart Elden, *Speaking Against Number: Heidegger, Language and the Politics of Calculation* (Edinburgh University Press 2006)

122 Nicholas Z. Muller, 'Measuring Firm Environmental Performance to Inform ESG Investing' NBER Working Paper No w29454; Impact valuation: How it helps measure social and environmental efforts | World Economic Forum Access: 18 November 2024

123 Aristotle discusses the idea of money as a means of establishing equality in Nicomachean Ethics (Book V, Chapter 5). Here, he argues that money (or "*numisma*" in Greek) acts as a common measure that can equalize value, facilitating fair exchange. As for the linguistic roots, "numismatics" and "nomos" (meaning "law") do not share the same root. "Numismatics" derives from the Greek word "*nomisma*" (*νόμισμα*), which means "coin" or "currency" and comes from "*nomizein*" (*νομίζειν*), meaning "to use by custom" or "to hold as customary." Meanwhile, "nomos" (*νόμος*) means "law" or "custom" and derives from a different root associated with managing or allotting, rather than with currency specifically. However, both terms reflect aspects of customary practice in society—nomos as the law or social order, and *nomisma* as a customary measure of value.

124 Georg Simmel, *The Philosophy of Money* (Routledge 2004)

125 Maurice Obstfeld and Kenneth Rogoff, *The Unsustainable Us Current Account Position Revisited* (SSRN 2010)

126 Matthew J Franchetti and Defne Apul, *Carbon Footprint Analysis : Concepts, Methods, Implementation, and Case Studies* (Taylor & Francis 2013)

127 Meng Xu and Chunhui Li, *Application of the Water Footprint: Water Stress Analysis and Allocation* (Springer 2020)

128 OECD, *Guidance on Sustainability Impact Assessment* (2010) 4-5.

129 Ibid 5, 9.

we've emphasized the relative measurements of various elements to assess sustainability. While quantification simplifies the complexity of qualities, it faces certain limitations. For instance, long-term uncertainties challenge cost-benefit analysis, and monetization often creates imbalances in supply, as well as misunderstanding the sustainability of specific habitats[130]. According to the OECD, SIA is structured in 8 key stages:

1. **Assess the need for sustainability impact assessment:** Determine whether the assessment is essential for the proposal at hand.
2. **Define the scope of the assessment:** Clearly outline the boundaries and focus areas of the evaluation, identifying the economic, social, and environmental aspects to be included.
3. **Selection of tools and methods:** Choose tools and methods that align with the determined scope, ensuring compatibility with the specific components of sustainability being assessed.
4. **Engage stakeholders:** Involve relevant stakeholders to provide input, gather diverse perspectives, and ensure the inclusivity of the assessment.
5. **Analyze economic, social, and environmental impacts:** Conduct a thorough examination of the impacts on all three pillars of sustainability—economic, social, and environmental.
6. **Identify synergies, conflicts, and trade-offs:** Evaluate how these impacts interact, highlighting synergies, potential conflicts, and trade-offs that arise.
7. **Make recommendations for optimization:** Propose solutions or modifications to maximize positive outcomes while minimizing adverse impacts.
8. **Present findings to policy makers:** Communicate the results, providing clear options and recommendations for decision-makers to consider in their policy frameworks.

The Swiss Federal Council's sustainability framework applies 15 basic criteria and 8 additional criteria for assessing the economic, social, and ecological impacts of various policies and actions[131]. These criteria include aspects such as irreversible damage, human health, pollution prevention, and promotion of competition. However, when determining the scope of an assessment, it's important to recognize that not every action or policy will relate to all of these criteria[132]. Thus, the question of the scope—which impacts to evaluate—requires careful consideration of procedural, fundamental, and methodological factors[133].

The assessment scope clarifies the purpose, data sources, and intended targets of the evaluation, as well as the tools and methods to be used. The OECD report divides these tools and methods

130 For a discussion of the ecosystem services approach and ecosystem service replacement cost developed to fill this gap, see *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)* International Court of Justice paras. 45-53.

131 OECD (n 128) 10-11.

132 Ibid 10.

133 Ibid 12.

into phases[134]. and suggests various approaches, such as participatory tools, scenario planning, and modeling, depending on their relevance to the scope. It's essential to differentiate between criteria and indicators in sustainability assessment: criteria represent general, pre-assessment factors, while indicators are more specific and reflect post-assessment findings[135]. Though distinct, these two elements should maintain an interactive relationship, as they don't always align perfectly[136].

While this study adopts the OECD's 2010 SIA criteria as the primary framework for scoring sustainability outcomes, widely institutionalized standards such as those of the Global Reporting Initiative (GRI) provide additional perspective on how ethical sustainability principles are operationalized in global governance. GRI is the most widely used framework for sustainability reporting worldwide. Unlike the OECD's ex ante policy assessment model, GRI provides detailed, indicator-based reporting standards across economic, environmental, and social dimensions. Key standards include GRI 305 (Emissions), GRI 306 (Waste), GRI 401 (Employment), and GRI 403 (Occupational Health and Safety), among others. These standards emphasize stakeholder engagement, materiality, and transparency, and are structured to produce machine-readable, comparable disclosures.

The qualitative nature of sustainability assessment is highlighted through specific questions categorized under economic, social, and ecological dimensions[137]. These questions aim to understand the broader impacts of actions, which can also apply to moral evaluations. For example, the reason theft is considered "bad" stems from its unsustainable nature, particularly in economic and social contexts. Similarly, it's not just United Nations bodies and states that prioritize sustainability; companies also do so, even when focused on profit. But what drives this focus on sustainability? To answer this, we need to reconsider the meaning of economic sustainability.

The economist Karl Polanyi provides a historical perspective, noting that before the Great Transformation, economics was intertwined with morality, including the "sacred" dimension of moral values. It was only after this transformation that a distinction was made between economic "rights" and moral considerations[138]. After the heightened significance placed on the distinction between economic rationality and morality, economic sustainability today has evolved into a moral-political approach. It involves balancing economic growth with ecological and social responsibilities, reflecting a fusion of ethical considerations and economic rationality. Economic ethics is also about how to manage non-replaceable resources and irreversible damages based on linear time. In this respect, economic sustainability, which has become popular today, is a "moral" economic-political approach. As can be seen, sustainability offers a consistent methodology both in terms of explaining "what is" through the algorithm of morality and as a road map for showing "what should be."

The results of the assessments applied so far also provide insight into the types of damage that may occur in various areas. Determining what precautions should be taken against these damages is also

134 Ibid 14.

135 Ibid 19.

136 Ibid 19.

137 Ibid 21.

138 Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Beacon Press 2001)

a sustainability issue since it involves action. For example, when the precaution for the destruction of a habitat is limited to compensating the landowner, the scope and purpose of the assessment should be re-evaluated. How much focus should be placed on pre-damage precautionary measures versus ex-post sanctions is also a separate sustainability assessment concern. Similarly, in criminal law, the purpose of sanctions is a "sustainable sanction" issue. The necessity of presenting certain choices to policymakers, based on the sustainability assessment, calls for the assessment to be simplified and quantified. The OECD's SIA methodology involves first posing a series of questions across social, economic, and environmental domains for a proposed solution to a given problem. These responses are then scored on a scale ranging from – 2 to 2. The resulting data is transferred to a spider diagram and presented to policymakers, enabling the visualization and comparative analysis of solution proposals for a single problem[139]. This study argues that sustainability serves as the foundation of moral and legal judgments, as illustrated by the network of relationships shown in Table 1. Furthermore, it posits that the OECD's methodology can be expanded to address a broader range of any behavior or solutions. In this context, three solution proposals for three distinct problems within the moral and legal domains will be evaluated using the OECD's methodology. (Table 2)

Issue	Solution
Current international law lacks a formal framework for recognizing and protecting climate refugees, despite growing numbers due to rising sea levels and extreme weather events.	Mandate resource-sharing mechanisms for countries contributing the most to climate change to support host nations. (A)
Multinational corporations often evade responsibility for pollution in developing countries, leading to health and ecological crises.	Mandatory environmental audits for corporations operating across borders, with hefty fines for non-compliance. (B)
The ethical dilemma of mass meat production, which contributes to environmental degradation and raises concerns about animal suffering.	Subsidizing plant-based and lab-grown meat alternatives to make them economically competitive. (C)

Sample questions from social, economic and environmental areas for the solutions coded as A, B and C below are scored hypothetically between – 2 and 2. (Table 3)

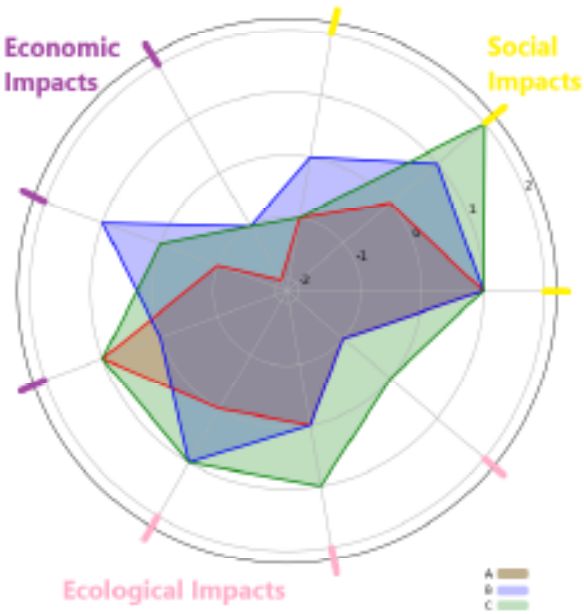
Social, Economic and Environmental Impacts	A	B	C
The quality of life for climate refugees	1		
International cooperation and social stability in host nations	0		
Considering the cultural integration of refugees	-1		
Sustainable funding mechanism for resource-sharing	-2		
Fairly distributing the financial burden among contributing nations	-1		
Reducing the economic burden on developing host countries	1		
Mitigating ecological stress in overburdened host areas	0		
Promoting sustainable urban planning for resettlement	0		
Accounting for the ecological impact of increased resource use	-1		
Protecting communities affected by corporate pollution		1	
Holding corporations accountable for their environmental impact		1	
Ensuring transparency for local stakeholders		0	

139 OECD (n 128) 29.

Imposing a reasonable cost on corporations		-1	
Encouraging innovation in sustainable practices		1	
Creating economic opportunities		0	
Reducing long-term environmental degradation		1	
Incentivizing cleaner production methods		0	
Helping developing countries protect their natural resources		-1	
Making ethical food choices accessible to more people			1
Addressing public concerns about animal welfare			2
Align with cultural food practices globally			-1
Reducing the cost of plant-based and lab-grown alternatives			-1
Supporting farmers transitioning to sustainable practices			0
Stimulating innovation in food technology			1
Significantly reducing greenhouse gas emissions from livestock			1
Limiting deforestation and land degradation			1
Lowering water and energy use in food production			0

The spider diagram below (Table 4) illustrates the social, economic, and ecological impacts of solutions A, B, and C. This method can also be used to generate moral and legal value judgments.

SIA plays a crucial role in determining the stage at which decision-makers or stakeholders are responsible by conducting a multidimensional serve as a reference for secular morality, provides a method for judging behaviors as "good" or "bad"[140]. In the next chapter, the legal consequences of "bad" behaviors will be examined, with an emphasis on how behaviors become norms.



140 Ibid 5-6.

III. AKRASIA: SUSTAINABILITY AND LEGAL RESPONSIBILITY

When the fault line between will and fate is interpreted in a modern sense, it becomes evident that the will is a useful assumption enabling responsibility. Frankfurt defined the will as the capacity to act differently,[141] meaning that, as long as the will operates within a scale of probability, legal and moral responsibility can exist. Without this probabilistic basis, viewing human behavior as purely deterministic in the secular realm of responsibility would necessitate questioning the entire mechanism of accountability.

Akrasia is a concept that challenges the idea that bad actions arise solely from ignorance. Instead, it posits that bad actions are deliberate choices stemming from the will, which is understood as the ability to act differently[142]. This suggests that evil should be attributed to the will rather than ignorance or lack of knowledge. Therefore, accountability for actions is based on the choices made through will, not on the technical understanding of laws. This explains why modern criminal laws differentiate responsibility not by the level of knowledge but by the degree of will involve (e.g., distinctions in cases of mental illness, childhood, intent, negligence, etc.).

The infamous act of Tyrant Dionysius, who hung laws so high that no one could read them, illustrates the idea that laws are ineffective when inaccessible. Although individuals may not need to know the laws in technical detail for them to be applicable, the legitimacy of laws relies on the legal security they provide[143]. Laws allow individuals to predict the consequences of their actions, enabling social organization, development, and increasing complexity. Kropotkin's *Mutual Aid* emphasized the role of environmental pressures in pushing humans and other living beings toward cooperation and organization. Laws, as tools of this organization, are essential for sustaining social order. Throughout history, sovereign power and the predictability it offers have been more clearly visible. Today, legal security makes a modus vivendi more sustainable, leading morality toward a formalized system within modern law.

In legal liability, principles such as *neminem laedere* (do not harm anyone), *Sic utere tuo ut alienum non laedas* (use your property in such a way as not to injure that of others) from Roman law, and obligations against harm in environmental law reflect the foundational axiom of non-harm. This axiom is also found in the traditional Hippocratic Oath. Its function is to make coexistence sustainable. However, moving from this to a duty ethics based on imperative ideals results in subjective interpretations of morality rather than reflecting what morality actually is.

The normative structure of morality is derived from practical experiences, which aligns with the principle of parsimony. While the historical role of morality in generating necessary norms is clear, invoking divine explanations or mathematical certainty often leads to speculative assumptions.

141 Harry G. Frankfurt, 'Alternate Possibilities and Moral Responsibility' 66 Journal of Philosophy 829; Ibo van de Poel and Jessica Nihlén Fahlquist, 'Risk and Responsibility' in Sabine Roeser and others (eds), *Handbook of Risk Theory: Epistemology, Decision Theory, Ethics, and Social Implications of Risk* (Springer Netherlands 2012) 884.

142 Aristotle, Ross and Urmson (n 2) 1113 b15 – 1114 b25.

143 Nacar (n 89) 360.

Nevertheless, such theories serve a psychological need for belief in an omnipotent being, providing comfort in a world governed by mechanical laws. People tend to prefer not absolute laws of mathematical certainty but a persona who understands and occasionally forgives—someone more human. Therefore, instead of focusing on the certainty of moral rules or their divine origins, it is more constructive to analyze the relationship between rules and experiences. In this interplay, theory and practice co-construct a system anchored in sustainability. Whether behaviors resulting from new experiences can be accepted as exceptions or rules indeed depends on their sustainability. Sustainability serves as a key measure for evaluating whether a behavior can be consistently integrated into a broader normative framework.

Kant labeled the flow from practice to norm construction as unprincipledness (*Prinzipienlosigkeit*), arguing that norms derived from actions risk being adjusted post hoc, undermining universality. He insisted moral evaluation should measure actions against pre-established norms grounded in reason[144]. However, Kant failed to provide a consistent mechanism for deriving universal norms from a priori principles. His transcendental ideals assume immutable rules but lack historical and theoretical coherence. In reality, norms emerge dynamically from experience or authoritative predictions, reflecting a constructivist process that Kant's rigid framework overlooks.

Constructivism, in fact, supports an interactive relationship between rules and actors, from morality's origins to international relations[145]. Both individuals and states are subjects of rules, but they also shape and evolve those rules. As such, the moral reference point for both states and the international system is sustainability. When morality is seen as a sacred ideal, it may appear inevitable to conclude that states lack morality[146]. Examining morality in terms of individual and state interests can offer a coherent theory for explaining behaviors but overlooks morality's regulatory role. This study, by contrast, provides a sound reference point for individuals, society, the state, and international order, suggesting that morality is fundamentally grounded in sustainability.

In developmental psychology, Kohlberg's final stage of moral development suggests that individuals construct their own rules[147]. Although Kohlberg presents this as part of a psychological progression, Habermas builds on his ideas by connecting moral development to historical and social evolution[148]. Nevertheless, nothing prevents societies, regardless of complexity, from developing and maintaining

144 Thomas E. Hill, 'Kant's Tugendlehre as Normative Ethics' in Lara Denis (ed), *Kant's Metaphysics of Morals: A Critical Guide* (Cambridge University Press 2010)

145 Venduka Kubalkova, Nicholas Onuf and Paul Kowert, 'International Relations in A Constructed World'

146 Machiavelli argues that rulers should prioritize political expediency over morality. See Niccolo Machiavelli, *The Prince* (Cambridge University Press 1988) According to Hobbes, the primary role of the state is to maintain order rather than uphold moral values. See Thomas Hobbes, *Leviathan* (Dover Publications 2012) Weber contends that political actions often conflict with personal moral codes, suggesting a divide between statecraft and morality. See Max Weber, *Politics As a Vocation* (Creative Media Partners, LLC 2021) Morgenthau claims that international relations are governed by the pursuit of power, not by moral principles. See Hans Joachim Morgenthau, *Politics Among Nations: The Struggle for Power and Peace* (Knopf 1948)

147 Lawrence Kohlberg, *From is to Ought: How to Commit the Naturalistic Fallacy and Get Away with it in the Study of Moral Development* (1978)

148 Jürgen Habermas, *Moral Consciousness and Communicative Action* (MIT Press 1990)

their own values and rules. Moreover, the universality of the norms produced is a separate issue,[149] requiring confirmation, both in theory and practice, of the norm's foundational context and its impact on sustainability. Thus, the relationship between behavior and norms based on sustainability is not a developmental stage but rather a concept intrinsic to morality.

The question of how a behavior becomes a norm falls into a distinct area of law. This transition from practical ethics to normative ethics can be expressed legally as passive consent transforming into a binding rule[150]. In this context, the legal binding of custom is derived from the understanding that individuals or states consent, either explicitly or implicitly, to the practice's emergence and continuation[151]. Customary law, which often has a broader scope than written law, provides a framework for understanding how behaviors become codified norms[152]. It plays a role in both private and public law.

For instance, Article 1 of the Swiss Civil Code outlines the secondary sources a judge may refer to after written law[153]. In contrast, criminal law prioritizes the principle of legality, requiring a stable normative structure for defining crimes and punishments, which limits the role of customary law in this area. Similarly, the written procedure in administrative law restricts the use of administrative custom as a legal tool. However, in international public law, customary law holds a primary position, often on par with written law, due to the absence of a rigid hierarchy between the two. This prominence is reflected in the sources of law recognized by the Statute of International Court of Justice (ICJ)[154]. Besides, after the Lausanne Peace Treaty of 1923 specified a 3-mile[155] territorial water boundary between Turkey and Greece, both parties eventually extended this to 6 miles, with this practice continuing for years. Over time, this established custom could supersede the original treaty. The significance of customary law in international law[156] stems from its ability to fill normative gaps through the practical application models developed by states[157]. In fact, the interactions and practices between states are often codified, both by the states themselves and by bodies like the International Law Commission, which serves to transform customary practices into formalized written norms[158].

149 On the formation of local customary law, see *Case Concerning Right of Passage over Indian Territory (Portugal v. India)* International Court of Justice

150 For the relationship between ethics and customary law, see Brian D. Lepard, *Customary International Law: A New Theory with Practical Applications* (Cambridge University Press 2010) 25-26; 140-150.

151 Ibid 16-20.

152 For a comparative study on the relationship between sustainable development and custom and the transformation of custom into law, see Peter Orebech and others, *The Role of Customary Law in Sustainable Development* (Cambridge University Press 2006)

153 https://www.admin.ch/opc/de/classified-compilation/19070042/201.604.010000/210.pdf Access: 29 September 2024

154 *Statute of the International Court of Justice* (1945) Article 38.

155 *Treaty of Lausanne* (1923) Article 6.

156 The question "Do states have morality, and what is it?" relates to the body of international law, addressing both domestic aspects, such as human rights, and international principles, such as non-harm, non-interference, and freedom of the seas. Thus, international law can be viewed as a doctrine developed to define and regulate state morality.

157 For the place of custom in international law, see *The Nature of Customary Law: Legal, Historical and Philosophical Perspectives* (Cambridge University Press 2007)

158 For the work of the International Law Commission on the determination of the formation of customary norms, see International Law Commission, *Draft Conclusions on Identification of Customary International Law with Commentaries*

In customary law, two fundamental elements are widely accepted: the objective and subjective elements. The objective element refers to state practices that are sufficiently widespread and consistent, while the subjective element (or *opinio juris*) indicates that states follow these practices with the belief that they are legally obligated to do so[159]. These two conditions are essential in answering the question of how behaviors become norms in international law.

Different perspectives in legal doctrine assign varying degrees of importance to these elements. Some argue that the subjective element is the legitimate source of binding customary law and that actual practice merely serves as evidence of this belief[160]. However, relying solely on the subjective element complicates the process of identifying binding customary norms. On the other hand, an action that is objectively carried out without a clear awareness of legal obligation is not accepted as a customary norm.

For instance, in the Lotus case, the Permanent Court of International Justice did not recognize the practice of flag states refraining from making arrests in high seas collision incidents as a customary rule, as there was no established awareness of a legal obligation to do so[161]. This case highlights that both elements—objective practice and subjective belief—are necessary and should be seen as complementary to one another in the formation of customary law. Without either element, a consistent practice may fail to achieve the status of a binding legal norm[162].

In both morality and law, the purpose of punishing "bad" or "illegal" actions,[163] or subjecting them to moral or material sanctions, is to prevent these actions from becoming norms. The logic behind sanctions is to maintain the normative structure by reacting to deviations from acceptable behavior[164]. Thus, sanction norms are inherently reactive and relational,[165] developed in response to behaviors that threaten to normalize undesirable actions. When a behavior does not encounter a

(Yearbook of the International Law Commission 2018)

159 Michael C Wood, *Second Report on Identification of Customary International Law / by Michael Wood, Special Rapporteur* (2014)

160 Lepard (n 150) 122.

161 *The Case of the SS Lotus, (France v Turkey) (Collection of Judgement)* PCIJ

162 Martti Koskenniemi, *From Apology to Utopia: The Structure of International Legal Argument* (Cambridge University Press 2006) 410-411.

163 Del Vecchio saw the distinction between good and bad as an essential, rational feature of both moral philosophy and legal theory. See Giorgio Del Vecchio, *The Formal Bases of Law* (Boston Book Company 1914) Legal and moral responsibility are primarily based on the distinction between good and bad. Stoicism, in contrast, argues that external events are beyond our control and should not be perceived as inherently good or bad. See Epictetus, *Discourses* (Clarendon Press 2007) This separation from external events challenges the traditional concept of moral responsibility based on accountability for external consequences, a common foundation in both moral philosophy and legal systems. It neglects the regulative function of morality and law.

164 On the need for deviance in societies to define and maintain their boundaries and norms, see Kai Erikson, *Wayward Puritans: A Study in the Sociology of Deviance* (Wiley 1966)

165 In the 2001 ARSIWA, liability norms were interpreted in a secondary manner. See Emmanuel Decaux, *Droit International Public* (Dalloz 1999) 58; Hakkı Hakan Erkiner, *Devletin Haksız Fiilden Kaynaklanan Uluslararası Sorumluluğu* (On İki Levha 2010) 62. For criticism of this distinction, see Katja Creutz, *State Responsibility in the International Legal Order: A Critical Appraisal* (Cambridge University Press 2020) 116-120.

sanction reaction, it can elicit a legitimacy reaction, which, over time, can pave the way for formal legality through customary law[166].

It is important to acknowledge that custom is not the sole source of laws. While customary law is rooted in past practices, laws imposed by sovereign powers often refer to future expectations[167]. However, the sustainability of such laws depends on their alignment with reality. For example, in the United Nations system, granting equal voting rights to all states on matters of international peace and security is misaligned with reality, given that states differ in their operational capacities to safeguard peace and security.

Historically, the Peace of Westphalia forced sovereigns who were unable to destroy each other to accept the concept of sovereign equality. Today, however, this idea should not be viewed as an ideal beyond question, but as a practical notion that needs revision. In reality, states are unequal in terms of both their responsibilities and capacities. A sustainable system should assign authority proportionate to these responsibilities. Systems disconnected from reality and built on overly idealized notions are ultimately unsustainable, as shown by the events leading to the First and Second World Wars.

From this perspective, ongoing reform efforts within the United Nations system should be viewed as attempts to create a structure more in line with current realities. Systems that fail to adapt risk being reconstructed in a destructive manner, repeating the lessons of history.

CONCLUSION

The ability to discuss moral and legal responsibility hinges on the assumption of will. Recognizing the existence of will necessitates rejecting a purely deterministic worldview. The strongest reason for this rejection lies in the probabilistic nature of physical reality. If we define will as the possibility of behaving differently, it aligns with the probabilistic model of the universe. However, will is not a concept that can be proven with certainty. Although each individual may believe in their own capacity for free will, they cannot prove it to others with mathematical precision. This makes will a useful assumption, not because it is scientifically certain, but because it serves a pragmatic purpose: sustainability.

We must acknowledge the existence of will to sustain our economic, environmental, and social life. Every thought or system developed beyond this step is propelled by the momentum of sustainability. The answers to ethical questions—such as why we care for our children, why we ban

166 Durkheim discusses how social norms transform as society evolves. See Emile Durkheim, *The Division of Labor in Society* (Free Press 1997) Hart argues that behaviors become codified into law when there's enough consensus or practice to justify their formalization. This implies that legitimacy first arises from widespread acceptance, and the absence of sanctions may reinforce a behavior's validity, ultimately guiding it toward legal status. See Herbert Lionel Adolphus Hart, *The Concept of Law* (OUP Oxford 2012)

167 For example, Weber considered the source of the norm as authority. See Max Weber, *Economy and Society* (University of California Press 1978)

theft, or why we oppose racism—can be traced back to this concept. When we consider sustainability in its simplest form, it can be understood as the will to assign value to something and to maintain that value over time.

This function of sustainability aligns with Aristotle's concept of *phronesis* (practical wisdom). Phronesis, which involves making sound judgments and decisions in the realm of ethics, helps guide individuals in navigating the dichotomy of "good" and "bad" behaviors, assuming the presence of free will in a world shaped by changes that occur over linear time. At its core, this is an axiological problem—one that deals with the nature of value and behavior.

The simplest answer to why this moral system was established and how it operates lies in the sustainability of the values that have been assigned. The effort to sustain certain values over time is what allows us to establish moral systems that guide behavior, ensuring that what is considered "good" endures, while "bad" actions are discouraged through moral or legal frameworks. This emphasis on sustainability as a guiding principle provides a framework for maintaining societal balance and continuity, much like Aristotle's notion of applying practical wisdom in decision-making for the common good.

Since value is determined relatively, depending on other elements, the effort to sustain something depends on the context in which the value is assigned and the measurements used. For example, a behavior that is acceptable in one society may be morally condemned or legally punished in another. The principle behind this is sustainability: societies create norms based on the values they develop and seek to preserve those gains over time. Therefore, morality is not absolute, but rather "objectively relative."

The tools and methods discussed in our study for SIA give insight into how moral evaluations are made. This framework suggests that morality can be based on a measurable scientific basis. The relationship between legal responsibility and sustainability is parallel to that of morality because both are systems developed with sustainability concerns in mind. Law formalizes morality by converting behaviors into norms, and the process through which behaviors become norms is often encapsulated in customary law. Whether written or unwritten, customary law involves the normative binding of behaviors through objective and subjective elements.

The purpose of sanctions against "bad" or "illegal" actions is to prevent these behaviors from becoming norms. Thus, sustainability must be seen as the foundation of both morality and legal responsibility.

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