Soft Normativity as a Matter of Degree and as a Binary*

La normatividad blanda como cuestión de grado y como binario

Triantafyllos Gkouvas

Universidad de Murcia, España

t.gkouvas@um.es

Abstract: In the context of jurisprudential debates, the term "soft law" has been utilized in a variety of ways that often defy comparison. Consequently, the stances within the hard versus soft law controversy exhibit significant diversity and nuance. To narrow down the range of conceptual options for the jurisprudential use of the term "soft", the analysis focuses on the semantic and metaphysical intricacies of pairs of antonymous adjectives like "soft" and "hard" in partial departure from available interpretations of the word "soft" in legal and jurisprudential discourse. By provisionally suppressing these legal connotations the analysis will avail itself of the taxonomic insights provided by Rudolph Carnap's tripartite distinction between classificatory, comparative, and quantitative (scientific) concepts. In applying this taxonomic framework, occasional digressions will be made to explore how the attribution of "softness" to legal norms or legal instruments can vary in its literalness depending on whether "softness" is understood as a qualitative property of legal artifacts (i.e., as a way for a legal artifact to be), as a dispositional property of legal processes of lawmaking, enforcement, or adjudication, or, alternatively, as a dimension along which particular legal artifacts or processes exhibit varying characteristics other than softness proper.

Keywords: similarity, gradable adjectives, comparison, classification, legalization, entrenchment, relevance.

Resumen: En el contexto de los debates jurisprudenciales, el término "derecho blando (soft law)" se ha utilizado de diversas maneras que a menudo no permiten establecer comparaciones. En consecuencia, las posturas dentro de la controversia entre derecho vinculante y derecho blando son muy diversas y presentan muchos matices. Para reducir el abanico de opciones conceptuales para el uso jurisprudencial del término «blando», el análisis se centra en las complejidades semánticas y metafísicas de pares de adjetivos antónimos como "blando" y

* This work is part of the "New Forms of Law Creation and Application" (Nuevas formas de creación y aplicación del Derecho) project, which is funded by the Region of Murcia Autonomous Community through its call for grants for scientific and technical research projects by competitive groups. The call is included in the Seneca Foundation's Regional Program for the Promotion of Scientific and Technical Research Excellence (Action Plan 2022). I am deeply grateful to my colleagues for their insightful comments on earlier versions of this paper.

"duro", apartándose en parte de las interpretaciones disponibles de la palabra "blando" en el discurso jurídico y jurisprudencial. Al suprimir provisionalmente estas connotaciones jurídicas, el análisis se valdrá de las ideas taxonómicas proporcionadas por la distinción tripartita de Rudolph Carnap entre conceptos (científicos) de clasificación, comparación y cuantificación. Al aplicar este marco taxonómico, se harán algunas digresiones ocasionales para explorar cómo la atribución de "flexibilidad" a las normas jurídicas o a los instrumentos jurídicos puede variar en su literalidad dependiendo de si la "flexibilidad" se entiende como una propiedad cualitativa de los artefactos jurídicos (es decir, como una forma de ser de un artefacto jurídico), como una propiedad disposicional de los procesos jurídicos de elaboración, aplicación o ejecución del derecho o, alternativamente, como una dimensión a lo largo de la cual determinados artefactos o procesos jurídicos presentan características variables distintas de la blandura propiamente dicha.

Palabras clave: similitud, adjetivos graduables, comparación, clasificación, legalización, atrincheramiento, relevancia.

I. Introduction

In the context of jurisprudential debates, the term "soft law" has been utilized in a variety of ways that often defy comparison. Consequently, the stances within the hard versus soft law controversy exhibit significant diversity and nuance. Proponents of soft law advocate for a flexible and open-ended approach to the relevance of rule-like considerations in settling legal questions (Kirton & Trebilcock, 2004). Although soft law is a system of rules, they are not the kind of rules whose pedigree makes them directly authoritative for resolving legal issues. Advocates of soft law perceive it as being endowed with both input legitimacy and output legitimacy (Scharpf 2003). According to proponents of soft law, the instruments of soft law promote a dynamic interaction among multiple levels of government and the involvement of various social actors. Conversely, those who are skeptical of or critical of soft law regard it as a less rigid, and therefore more unpredictable, approach to legal regulation. For instance, soft law critics contend that soft law is ineffective when confronted with the actions of invasive and rent-seeking market actors who relegate the costs of market deregulation to society under the guise of soft legality (Di Robilant, 2006, p. 508). A complementary critique from the opposite angle can be found in Mattei's (2002) reflection on the "hard code" tendencies of legal globalization. This reflection highlights the ideological undercurrents of the opposition between "hardness" and "softness" in law.

The rich semantic background of the attribute "soft" provides a foundational point of departure for comprehending the existing conceptualizations and applications of soft law. Some definitions accentuate the word "soft" as the element that imbues the term

with its distinctive connotation. According to these definitions, soft law is a type of law not solely characterized by its "softness" but also determined in terms or with respect to its "softness" (d'Aspremont 2008). This theoretical framework is further classified into two distinct schools of thought. The first group (Weil 1983; Blutman 2010) adopts a dichotomous approach, distinguishing between law and non-law. Adherents of this more positivist approach contend that "soft law" refers to rules of positive law that are recognized as such yet can nevertheless be regarded as weak in their commanding character. This softness may be attributed to various factors, such as the use of vague language, non-justiciable formulations, or exclusive reliance on self-interpretation by the subject of the obligation.

In contrast, the second group (Terpan 2015; Knodt & Schoenefeld 2020) perceives law as a continuous spectrum rather than a dichotomy. This group argues that soft law does not have to be established according to the traditional doctrine of sources of positive and customary law. Consequently, proponents of this perspective place soft law norms on a spectrum of normative pressure and behavioral influence. Notably, proponents of a non-binary approach do not uniformly perceive soft law as a desirable development in terms of legitimacy, transparency, legal certainty, or respect for the rule of law. In this regard, they may concur with legal positivists that the emergence of a normative category of soft law poses a certain threat to the rule of law (Klabbers 1998; Eliantonio and Ştefan 2021; Petropoulou Ionescu and Eliantonio 2021). Nevertheless, they acknowledge the existence of soft law and seek to better understand its nature and functionality.

However, an alternative approach avoids categorizing soft law as a distinct legal category (Klabbers, 1996; Cerone, 2016). Adopting a positivist, binary perspective, this approach is the antithesis of the previously delineated positivist perspective in that it excludes positive law entirely from the purview of soft law. This approach encompasses exclusively rules that lack the status of extant international law according to recognized sources. According to this perspective, in the context of soft law, the term "law" does not denote the legal status of the rule itself but rather alludes to its form or provenance. It may also indicate its relevance within the international legal system. In this sense, "soft law" refers to rules that influence law and achieve some of its effects, even though they are not law.

A fourth usage variation can be identified if we take on board the distinction between the content of a norm or proposition and its vehicle of representation (D'Aspremont, 2011). Although "soft law" is primarily conceptualized as a category

of norms, the term is also used to refer to a category of instruments predominantly adopted in an intergovernmental context. These instruments establish rules of conduct or other normative standards, though they are not legally binding. In these cases, soft law refers to regulatory instruments and governance mechanisms that imply normative commitment without relying on binding rules or formal sanctions. Furthermore, some definitions broaden the scope of "soft law" to include vague or non-justiciable obligations present in hard law sources, such as treaties, constitutions, and statutes.

It is also worth noting that the task of delineating competing conceptions of "softness" in law is not an isolated one. The notion of "softness" has been employed in analogous ways in various philosophical and scientific disciplines. This pattern of parallel usage warrants consideration when theorizing about the legal variants of "softness". For instance, the notion of "soft logic" has come to play an important role in scientific and mathematical reasoning. The concept of soft numbers, for instance, is based on the idea of creating a language that can tell the difference between different multiples of zero. This language helps to build a model of a world where everything is extremely small (Klein & Maimon 2024).

Conversely, proponents of logical fatalism have been known to appeal to "soft facts" in an attempt to dispel the notion of a set of necessarily true statements about what will happen that are true regardless of *when* they are made. In contradistinction to "hard facts", soft facts are reported by statements such as 'It was predicted in 1900 that there would be a nuclear accident on April 26, 1986'. Advocates of "soft facts" (Hoffman & Rosenkrantz 1984) contend that such statements, anchored in a past time, are truly statements about the future.

Finally, among philosophers of science, ceteris paribus or inexact laws—that is, laws that hold under some circumstances but not under others—are frequently interpreted in "elastic" or "soft" terms (see, for instance, Strevens 2014). This approach entails the notion that the relationship between the antecedent and the consequent of a generalization is malleable in multiple dimensions. From a statistical perspective, the assertion "ravens are black" is equivalent to the proposition "most ravens are black" within the relevant scientific contexts. From a stochastic standpoint, the aforementioned statement implies a high physical probability that any given raven is black. From a dispositional perspective, the statement "ravens are black" signifies a causal tendency among ravens to exhibit black coloration.

This brief essay does not seek to reiterate or evaluate the jurisprudential arguments that have been debated between skeptics and staunch supporters of soft law. Nor does

it seek to explore different views on the nature of law. More significantly, this study represents a significant departure from existing approaches to the soft versus hard law debate in legal doctrine. It examines the concept of "softness" in partial isolation from doctrinal elaborations on soft law. By "partial isolation", I mean that "softness" will still be treated as a juridical metaphor of normative force rather than a physical or psychophysical (see, relatedly, Michell, 2006) magnitude. However, it will not be examined through the lens of doctrinal specifications of softness as an attribute of a *body* of law (i.e., soft law). Instead, the study will be based on extra-doctrinal discussions about how the attribution of polar opposites, such as soft and hard, is governed by set-theoretic and order-theoretic criteria.

This shift in perspective has one drawback, which I hope to mitigate. The study's focus on extralegal categories leaves little room for the meaningful juxtaposition of purely doctrinal arguments against my premises and/or conclusions. In the absence of a readily identifiable "legal interlocutor", I will allow enough space for objections from the contemporary debate on the metaphysics of dichotomous and gradable attributes. To demonstrate how a "metaphysical interlocutor" can appreciate the relevance of legal categories, I will draw targeted parallels between positions in the debate on the metaphysics of quantifiable properties and legal distinctions such as qualitative (e.g., hard versus soft, valid versus invalid) and sortal (e.g., positive, customary, precedential, divine, and natural) divisions of law, as well as socio-legal concepts such as governance, legalization, and entrenchment.

To narrow down the range of conceptual options for the jurisprudential use of the term "soft", the following analysis will focus on the semantic and metaphysical intricacies of antonymous adjective pairs, such as soft/hard, hot/cold, tall/short, static/mobile, light/dark, long/short, frequent/seldom, healthy/sick, and happy/sad. These adjectives and their analogues can be graded over one or more dimensions.[1] One example of a one-dimensional pair is tall versus short. These attributes can be quantified using a unidimensional scale, such as the metric scale used to measure height, which essentially measures the length or distance between points on a line or curve. Conversely, pairs involving multiple dimensions, such as healthy versus sick, offer a more nuanced assessment of health-related concepts. Health is a multidimensional concept encompassing various aspects, such as musculoskeletal health, freedom from disease, and cardiovascular health (D'Ambrosio & Hedden, 2023, p. 253). An individual's overall health status is determined by their health in these areas.

Polar opposites provide a useful framework for examining properties whose

gradable (e.g., hot to cold, heavy to light, fast to slow) or complementary (e.g., odd and even, male and female, true and false) nature is debated. While the gradable nature of softness and hardness as physical qualities is not deeply contested, the semantics of their figurative attribution to legal artifacts (i.e., norms and instruments) are. In other words, it remains an open question whether the terms "soft law" and "hard law" fully and appropriately cover the domain of legal artifacts or if it is meaningful to speak of degrees of softness or hardness in legal regulation. As with the metaphysics of sortal and qualitative properties, the law places great importance on methods for finite collections of elements (e.g., the states in a federation or the members of an electoral constituency) and infinite collections of elements (e.g., the possible copies of a patent or the possible bearers of a right), as well as finite divisions of conceptual spaces (e.g., legal genera like theft and legal species like *furtum usus* and *furtum possessionis*, or rationes decidendi and the distinctions—i.e, the judicial practice of distinguishing—made thereunder) and infinite divisions of conceptual spaces (e.g., degrees of degrading treatment and degrees of privacy).[2]

In applying this taxonomic framework, occasional digressions will be made to explore how the attribution of "softness" to legal norms or legal instruments can vary in its literalness depending on whether "softness" is understood as a qualitative property of legal artifacts (i.e., as a way for a legal artifact to be), as a dispositional property of legal processes of lawmaking, enforcement, or adjudication, or, alternatively, as a dimension along which particular legal artifacts or processes exhibit varying characteristics other than softness proper. As will be demonstrated, each of these alternative approaches articulates a distinct set of ontological commitments, not only with respect to the understanding of "softness" in soft law, but also with respect to the understanding of law as such. In summary, the conventional hard versus soft law polarity does not appear to be as straightforward as one might initially suppose. Instead, it appears to be more accurately described as a refinement of more traditional polarities that focus directly on the nature of law itself. These traditional polarities encompass the following: the nature of law as factual (empirical) or moral (normative); the role of law as a means to non-legal ends (political, economic, social, cultural), or as an end in itself (normative or intended); and the law as a list of distinctly legal ends.

The essay is divided into five sections. Each section presents and applies a taxonomic framework deemed suitable for examining the semantics and metaphysics of "softness", broadly construed. The proposed framework is not entirely novel. It is also not without controversy. However, this should not be seen as a reason to avoid it, given that the

controversy has existed for over 70 years. Specifically, Rudolph Carnap's tripartite distinction between classificatory, comparative, and quantitative (scientific) concepts will serve as this study's foundational framework. Carnap regarded this classification of concepts as essential to making his "explicative" project in the philosophy of science more amenable to peer review. This study modifies Carnap's original classification by subdividing his taxon of classificatory concepts into two subtypes, each corresponding to a distinct class-constituting relation: equivalence and categorical, or noncomparative, similarity.

II. Three and "A Half" Types of Concept

In the annals of analytic philosophy, Rudolf Carnap's contributions and influence are considered seminal. He played a pivotal role in the work of the Vienna Circle from 1925 to 1935. In the contemporary context, Carnap's philosophical approach can be viewed as a precursor to contemporary theories of "conceptual engineering" (for this correlation see Isaac et al., 2022, pp. 1-4) rather than as a rigid pursuit of knowledge or inquiry. Instead of seeking to understand the nature of reality as such, he aimed to determine the desired state of affairs in the context of endeavoring to understand reality. He recognized the limitations imposed by our available instruments and the knowledge derived from the sciences. This voluntarism (for this characterization see Jeffrey, 1994) underlies Carnap's philosophy from beginning to end, animating his search for rational reconstructions—or explications, as he later termed them—of certain terms or concepts in our more primitive, ordinary languages (or vestiges of them in scientific languages).

When feasible, Carnap conceptualized these explanations or rational reconstructions as situated within broader linguistic or conceptual frameworks. These frameworks encompassed constructed object languages accompanied by a hierarchy of metalanguages. The metalanguages served two purposes. First, they defined and explored the truth, analyticity, synonymity, designation, and other semantic resources of the object language. Second, they examined the object language in relation to its extra-linguistic environment. Notably, Carnap used the adjective "warm" to model the diversification of the explication of quasi-scientific terms. For illustrative purposes, I will substitute "soft" for "warm" in the following discussion, which explains the rationale behind Carnap's proposed taxonomic classification of qualitative terms.

In *The Logical Foundations of Probability* (1950), Carnap introduced three categories of scientific concepts: the classificatory, the comparative, and the quantitative.

The progression from categorization (classification) to ordering (comparison) to measurement (quantification) is not coincidental. This progression signifies the cognitive journey of the mind in refining its representation of the logical relations between entities that it perceives as numerically distinct yet susceptible to shared inquiry. The initial stage of this progression is preceded by a single relation in which the objects involved are not regarded as numerically distinct. This relation is that of identity, whereby each object is related to itself.

The subsequent step, which is both the sole necessary step to depart from the domain of unities (i.e., the domain of the one as one) and the first step into the domain of totalities (i.e., the domain of the many as one), is the relation of *equivalence*. This relation is foundational to Carnap's notion of classificatory concepts, as will be subsequently demonstrated. The most common examples of an equivalence relation are the geometric relation of equipollence (roughly, the relation between two line-segments of equal length and direction) and the arithmetic relation of equality (namely, the relation between two variables that have the same value). In a broader sense, two numerically distinct objects are said to be in a relation of equivalence if they belong to exactly the same class. To illustrate, consider the set of stamps dispersed on a table. These stamps can be arranged into disjoint classes (bundles), such that no stamp is contained in two bundles, no bundle is empty, and every stamp is in one of the bundles lying on the table. Consequently, any two stamps that are stacked in the same bundle are said to be in an equivalence relation. That is to say, they are equivalent in the sense that they belong exclusively to one and the same class of objects.

It is imperative to acknowledge that equivalence classes, defined as collections of objects that share the same, unique membership in a given class, are not the sole outcome of a classification exercise. Aside from equivalence classes, *similarity* classes, though less rigid, share a similar classificatory character.[3] In scientifically "orthodox" circles, similarity relations, akin to equivalence relations, are often regarded as symmetrical. This implies that if A is similar to B, then B is similar to A, just as if A is equivalent to B, then B is equivalent to A. However, similarity differs from equivalence in one significant aspect: similarity relations can be *comparative*, whereas equivalence relations cannot. The employment of triadic or tetradic comparative expressions, such as "x is more similar to y than to z" or "x is as similar to y as z is to q", conveys this notion of comparative similarity. While non-comparative or categorical similarity is also a possibility—that is, the relation of x and y being similar to each other—comparative similarity is the most familiar example of similarity. In contrast to relations of equivalence, which exhibit an

exclusionary or dichotomous effect, relations of similarity, both comparative and non-comparative, *lack* this characteristic. While equivalence relations impose *partitions* on a given domain of objects, similarity (and difference) relations impose *divisions* on a domain of objects (for the partition/division distinction see Yablo, 2014, pp. 36-7). That is to say, the "cells" (as they are called) resulting from a division of a domain of pairwise similar objects may *overlap* in such a way that the same element-object may belong to more than one cell simultaneously. In summary, cell or class membership is not an exclusive either/or affair.

III. Classification into Equivalence Classes

Carnap's notion of classificatory concepts is related to these two class-forming relations, equivalence and similarity. Classificatory concepts are the first variant of what Carnap calls "explicata", that is, the products of the transformation of 'an inexact, prescientific concept, the explicandum, into an exact concept, the explicatum' (Carnap, 1950, 1). Classificatory concepts are used to group objects into equivalence, i.e. mutually exclusive or disjoint, or similarity, i.e. overlapping, classes, hence the term "classificatory". Carnap distinguishes two subtypes of classificatory concepts: sortal and qualitative. While the former (sortal) concept applies to objects that in principle form equivalence classes, the latter (qualitative) concept is better thought of as applying to objects that form similarity classes.

Sortal concepts, such as "dog", "tiger", and "tree", refer to kinds—that is, collections of individuals of the same species—whose membership is mutually exclusive. For instance, an animal cannot be both an African elephant and a zebra or a lion. Traditionally, kind membership has been considered an all-or-nothing proposition: an animal is either an African elephant or it is not. However, sortal concepts produce two types of relations: horizontal relations of equivalence between entities that share the same sortal property (e.g., tigers or dogs) and vertical relations of hierarchical specification between members of vertically related kinds or species. These concepts introduce vertical relations of hierarchical specification between members of vertically related kinds or species. For instance, when classifying an animal as an African elephant, it is also classified as belonging to the Elephantidae family, the Proboscidea order, and the Mammalia class. Thus, classification into kinds establishes a hierarchy within the classified domain wherein members of lower species *ipso facto* belong to higher species (see, relatedly, Wolff, 2020, pp. 23-4).

Qualitative concepts such as soft or warm, on the other hand, are better thought

of as generating similarity classes rather than equivalence classes, and this evaluation is crucial to understanding. Classificatory (as opposed to comparative) uses of qualitative concepts are prone to be seen as poorly informative or even counterintuitive. To see why qualitative (as opposed to sortal) classification is better thought of as giving rise to similarity rather than equivalence classes, and to stay within the contours of our legal topic, consider the use of the qualitative concept of softness as a classificatory concept for explicating "à la Carnap" the explicandum "law". Suppose that the antonymous nature of adjectives like "soft" (i.e., "soft" versus "hard") implies that at least two equivalence (mutually exclusive) classes of legal artifacts (norms and/or instruments) emerge: the class of soft legal artifacts and the class of hard legal artifacts. This is more or less what soft law scholars call the binary or dichotomous approach to soft law. The binary approach to soft law is an approach according to which soft and hard legal artifacts form classes of equivalence (rather than similarity). In other words, something of a legal nature (a norm or an instrument) is either (legally) soft or (legally) hard: *tertium non datur*.

This understanding, predicated on the notion of qualitative equivalence (rather than similarity), is problematic for two reasons. First, it is not ontologically neutral or indifferent. Second, it is ontologically unintuitive. Rather than treating law itself as a sortal "explicandum" and, accordingly, looking for its sortal "explicata",[4] it treats law as an instance of a peculiar binary quality (i.e., "soft legality and "hard legality"). The qualitative equivalence classes of "law" (i.e., the disjoint classes of soft legal artifacts and hard legal artifacts) lack the hierarchical embedding exhibited by sortal rather than qualitative equivalence classes (e.g., positive law, custom, and precedent). As a result, "legal qualities" used as a criterion for generating equivalence classes of legal artifacts are much less informative for jurisprudential purposes than "legal kinds." The designation of a legal norm or instrument as "soft law" does not result in its placement within a richer hierarchical structure of legal kinds. There are no higher legal kinds to which a soft law norm or instrument belongs by virtue of its classification as soft law. This classification does not permit the drawing of many additional inferences, in contrast to a classification into types (positive law, custom, and precedent).

Furthermore, the endeavor to utilize equivalence-based classifications of soft and hard law to elucidate the profoundly contextual nature of attributing qualities to objects has proven to be arduous. Unlike the veracity of attributions of sortal properties, such as positive, natural, divine, or customary law, the veracity of attributions of qualitative properties, such as soft or hard law, is not constant across all possible contexts or

situations in which such an attributive statement is made. To illustrate, the temperature of tea, while hot in comparison to its immediate surroundings, is lower when juxtaposed with that of a steel furnace or the surface of the sun (example borrowed from Wolff, 2020, p. 25). In a similar vein, a legal artifact (e.g., a code of conduct) is regarded as soft in comparison to other regulative practices occurring in its immediate context of application and enforcement (e.g., a framework agreement). However, it might be regarded as not being soft in comparison to other practices occurring in distinctly political or humanitarian contexts (e.g., documents or advisory opinions of an NGO). Within the ambit of these "under-juridified" environments, a code of conduct can be regarded as hard law rather than soft law.

IV. Classification into Similarity Classes

Abandoning an equivalence approach to categorizing soft and hard legal artifacts leaves us with an option that still falls within the purely classificatory project of sorting law on the basis of its qualitative nature (i.e., soft and hard exemplars of legal norms and instruments). According to this approach, the soft/hard qualitative pair must somehow be involved in dividing the domain of legal artifacts into similarity rather than equivalence classes. It is imperative to emphasize that the similarity relation that is employed in a purely classificatory context must be of the non-comparative or categorical type, as is frequently articulated (namely, "A and B resemble each other"), as opposed to the comparative type (namely, "A resembles B more than C").

The soft-hard polarity, when functioning as a criterion of division rather than a criterion of partition of the legal domain, must operate as a respect of similarity rather than equivalence. That is to say, the soft-hard polarity must act as a respect in which two elements of a similarity class are similar or resemble each other. One potential interpretation of this principle is that "softness" itself can serve as a criterion, understood as a respect in which otherwise different legal artifacts are similar. However, this interpretation falls short of capturing the nuances of a *categorical* (namely, non-comparative) similarity class comprising soft law norms and instruments (for the notion of categorical similarity see Belastegui, 2021, pp. 140-150 and Guigon, 2009, pp. 63-69). The inherent gradability of "softness" (where "softness" can be ranked on a scale from minimal to maximal) poses challenges in its utilization as a sole criterion for non-comparative or categorical similarity, i.e., A is either similar to B or not in a certain respect. Given the gradable nature of "softness", the attribution of degrees of softness does not result in classifications, but rather in *orderings* (A is *more* similar to B in terms

of its degree of "softness"). Orderings are relations that serve to form *sequences* rather than mere classes (i.e., orderless aggregations) of objects.

Consequently, it is more precise to posit that, from a strictly categorical perspective, "softness" does not function *per se* as a criterion for dividing the legal domain into similarity classes. Instead, it is a *dimension*[5] (e.g., compare the dimensions of lightness and saturation in the determination of color tones like red, yellow and blue) along which another determinable legal or legally relevant property (e.g., the property "color") can vary. It is this latter determinable property (namely, color) that is intended to serve as a respect of categorical, non-comparative similarity between determinate color hues. However, the nature of this determinable respect of categorical similarity between legal artifacts is much more elusive than the case of colors and remains to be elucidated.

One might posit that this determinable respect of categorical similarity between legal artifacts could be the notion of "governance" (as opposed to the more traditional and much narrower notion of "government"). In this discussion, "governance" is conceptualized as a property (rather than a process) of the behavior of policy-formulating and policy-implementing actors operating *within* the state, or *on behalf of* the state, or *without* the state, or *beyond* the state. Just as color is defined by its more distinct hues, such as red, blue, or yellow, so governance can be defined by gradually differentiated modes of policy-formulation and policy-implementation that lie on a spectrum delineated by the two opposing ideal types of governance, namely, "market" and "hierarchy". Between these two types, other modes of governance can be identified, such as "community", "associations", and "networks" (see, relatedly, Schneider and Kenis 1996).

It is crucial to note that variation across this spectrum can, in principle, be represented by variation in the *degree of toleration* of non-compliance with the respective norms and practices (i.e., the norms and practices of a market, of an institutional hierarchy, of an association, or of a network). Nevertheless, the extent of this variation remains unquantifiable through statements of categorical similarity, such as 'associations resemble communities in terms of the toleration of non-compliance with their edicts'. It is imperative to acknowledge that such statements *lack* a comparative nature in the conventional sense. At best, the precise degree of similarity between associations and communities is implicitly rather than explicitly determined by the context of the utterance.

In order to make an informative and explicit comparison between associations and communities with regard to the extent of their tolerance for deviations from established

norms, it is necessary to relinquish the conventional classificatory approach and instead propose an ordinal or interval scale that facilitates the assessment of truth values, such as 'Association A exhibits a greater degree of similarity to Community B in terms of its tolerance for noncompliance'. This would entail the utilization of an ordinal scale, which would serve to rank prototypical modes of governance based on their propensity to tolerate deviations from established norms and practices. Alternatively, an interval scale could be employed, representing equal distances between two distinct modes of governance.

In this instance, the resulting classification of different modes of governance is not dichotomous, meaning that the result of this classification is not the creation of disjoint equivalence classes. One governance type can be associated with multiple similarity classes, thereby demonstrating resemblance to other governance types across different yet partially overlapping similarity classes. To illustrate, a majoritarian institution such as the U.S. House of Representatives or the European Parliament can be regarded as similar to a non-majoritarian institution like the U.S. Federal Reserve System or the European Banking Authority (EBA) due to the capacity of both types of governance to establish regulatory norms that necessitate strict compliance. Conversely, the European Banking Authority may be classified into a similarity class that does not encompass the European Parliament. For instance, it may be regarded as similar to intergovernmental organizations such as the International Monetary Fund (IMF), given its capacity to overrule the decisions of national regulators and its ability to issue guidelines that are not accompanied by enforceable sanctions.

V. Comparative Similarity

The preceding remarks on the limited informativeness of classifying soft and hard modes of governance into classes of categorical (rather than comparative) similarity have made it clear that a much "richer" notion of similarity is necessary to explain how particular modes of governance under the determinable kind of "governance" admit of orders of similarity, just as red is more similar in color to orange than either is to blue. In the context of soft and hard governance, the respective orders may be lexical rather than numerical, as conveyed by qualifications such as "soft, softer, very soft, less soft, and hardly soft" and "hard, harder, very hard, less hard, and hardly hard", respectively.

Comparative[6] (as opposed to categorical) judgments of similarity take the form of either a triadic logical structure, such as 'x is (equal to or) more similar to y than z is', or a tetradic logical structure, such as 'x is (equal to or) more similar to y than z is to w' (see,

among others, Blumson, 2018; Goodman, 1972 and Williamson, 1988). These triadic or tetradic statements implicitly or explicitly reference a particular aspect or aspects of similarity, akin to their categorical counterpart. Consequently, legal artifact A may be equally or more similar to legal artifact B than to legal artifact C in terms of softness, or, alternatively, in all respects. The latter case of similarity in all possible respects is a special case of overall similarity (for the notion of overall similarity see Guigon 2014), which transcends the contour of comparisons with respect to the soft-hard divide and includes all remaining legally relevant properties, whatever these may be from the point of view of a particular legal theory.

The employment of comparative terms such as "softer" or "better" and "harder" or "worse" serves to impose an additional order in the relationship between objects grouped under a particular criterion. This order does not inherently constitute a metric distance that could be used to assign cardinal[7] numerical values to the objects arranged in this particular order. Relations of pure comparative similarity, that is, qualitative or non-quantitative, are ordinal in nature and thus correspond only to relations of equality or inequality of rank over a domain of objects. To illustrate, in the context of an ordinal scale employing a 1-5 star-rating system for evaluating hotels, it is not possible to conclude that a 2-star hotel is half as good as a 4-star hotel in the ranking. At most, it can be concluded that the 4-star hotel is superior to the 2-star hotel and that the 4-star hotel is more analogous to the 5-star hotel than the 1-star hotel.

To maintain our focus on the jurisprudential question, a method for expressing ordinal comparative similarity between legal artifacts without resorting to non-literal, jurisprudential interpretations of the figurative phrase "softer than" will be proposed. The following suggestion is hereby put forward: the assertion that legal artifact A (e.g., a code of conduct) exhibits a greater degree of "legalization" in comparison to legal artifact B (e.g., a framework agreement) than to legal artifact C (e.g., an NGO advisory opinion) signifies that legal artifact A demonstrates a higher degree of similarity in respect of its "legalization" to legal artifact B than to legal artifact C. A similar proposition can be made in the case of legal artifact D (e.g., a written constitution) that exhibits a greater degree of "legalization" in comparison to legal artifact E (e.g., a ratified multilateral treaty) than to legal artifact F (e.g., a constitutional custom). This finding suggests that D exhibits a stronger alignment with E in terms of its degree of legalization compared to F.

Within the framework of socio-legal discourse, the term "legalization" has evolved to become a prevailing concept (for a seminal account see Abbott et al., 2000). It

is employed to denote the increasing tendency of states to utilize legal modes of association to structure their interactions. This concept's scope extends beyond the evolution of international political institutions into legal entities, encompassing the gradual transformation of domestic social institutions or practices into legal or legalistic ones. According to Abbott et al. (2000), the phenomenon of legalization can be categorized into three distinct clusters of characteristics that a system of norms may exhibit: obligation (i.e., the behavior of actors operating within the system is subject to scrutiny under the general rules, procedures, and discourse of a body of law, whether international or domestic), precision (i.e., the clarity in defining the conduct that a system requires, permits, or prohibits) and delegation, which refers to the leeway available for authorizing third parties to implement, interpret, and apply the rules, to resolve disputes, and (possibly) to make further rules.

Despite the wide acceptance of this taxonomic scheme, I do not intend to adhere to the conventional interpretation of the concept as it was originally introduced in the extant literature. The impetus for this deviation stems from an alleged misinterpretation of the dimensions along which the legalization of a system can vary (for a similar critique see Bélanger and Fontaine-Skronski, 2012, p. 241). Abbott et al. (2000) contend that all three notions of obligation, precision, and delegation are dimensional, thereby permitting gradations, resulting in 'a multidimensional continuum ranging from the "ideal" type of legalization, where all three properties are maximized; to "hard" legalization, where all three (or at least obligation and delegation) are high; through multiple forms of partial or "soft" legalization involving different combinations of attributes; and finally to the complete absence of legalization, another ideal type' (Abbott et al., pp. 401-2). Nevertheless, the notion of obligation as a degree rather than a binary state remains opaque. That is to say, the concept of being *more or less* obligated to act in a certain way or not to act in a certain way is not readily comprehensible. A parallel observation can be made about the concept of delegation as a form of authorization, which also appears to be a clear binary state rather than a matter of degree.

Due to the constraints imposed by the limitations of textual space, it is not feasible to provide a more detailed critique of this original interpretation. However, the available space does permit the proposal of a reconstruction of the original concept in more metaphysically unobjectionable terms. The proposal is that legalization is not a multidimensional property of systems of norms and practices, but rather a *unidimensional* property. The unidimensional character of legalization is attributed

to its contribution, in varying degrees, to the process of constraining the powers of government. These powers may be local, regional, national, supranational, peripheral, or international. Consequently, the concept of legalization can be regarded as a measure of the *constraining influence* on the powers of state and non-state actors to regulate the affairs of members of a political community over which they claim either partial or total jurisdiction.

The articulation of these constraints can be expressed on an ordinal scale, with each degree of constraint corresponding to a distinct rank or position. The fineness of these ranks is contingent upon the legal modeling of the institutions and the sensitivity of the applied theory to empirical updates. To illustrate this point, consider a hypothetical scale of legalization construed in terms of degrees of constraining influence with a high degree of fine-grainedness:

> *the highest* ≤ *extremely high* ≤ *very high* ≤ *high* ≤ *moderately high* ≥ *moderately low* ≥ *low* ≥ *very low* ≥ *extremely low* ≥ *the lowest*

According to the aforementioned scale, if an institutional artifact exerts a very high degree of constraining influence on the powers of government (international or domestic or other), then it also exerts a high degree of constraining influence and perhaps a moderately high degree of influence, but it definitely does not exert a moderately low degree of constraining influence. This ordering is sufficient to induce a comparative scale that, although non-quantitative, better conveys some qualitative information about the (local, regional, national, supranational, peripheral, and international) ranking of hard and soft law artifacts.

While legalization, conceptualized as a constraining influence on governing powers, is arguably the quality that best captures gradations in the regulative "softness" or "hardness" of a norm or instrument, the extension of this quality cannot be directly (i.e., by mere sensory perception) assigned to discrete ranking positions. A critical element absent from this discourse is a set of *indices* that would provide indirect guidance (i.e., evidence) as to when the scope of governing powers within a system is actually affected by the presence of a soft institutional artifact. In the absence of a more compelling concept, it is proposed that the extent to which a particular constraint on governing power is *entrenched* within a given system or practice serves as a viable index. Entrenchment can be defined as the degree to which a norm or instrument resists modification or removal by those whose powers are constrained (Waluchow and Kyritsis, 2023). This suggests that the institutions of government, as delineated by the constitution, are not at liberty to alter or remove these constraints according to their

discretion.

Consequently, the most significant constraint on government power is indicated by an unamendable constitutional norm. Subsequent to this, we observe constitutional amendment mechanisms that can be initiated by and require the involvement of the governmental bodies whose powers are constrained. However, these mechanisms invariably necessitate more than a simple decision by the incumbent government, such as a presidential decree or a simple majority vote in the legislature, to initiate change. In certain instances, the formation of a constitutional assembly becomes requisite, or the attainment of super-majorities, the execution of referendums, or the endorsement of the central government in a federal system, accompanied by the approval of a specific percentage of the governments or regional units within the federal system. At the lowest level of entrenchment, norms or instruments are in place that are virtually impossible to make even minimally resistant to modification or repeal by those whose powers they limit. A notable illustration of this phenomenon is the responsibility of humanitarian actors such as the Red Cross and Oxfam to protect civilians during a peacekeeping mission (see Breakey, 2012: 73).

VI. Metric Distance

A comparative analysis of hard and soft legal artifacts (norms and instruments) reveals a more nuanced relationship compared to purely classificatory correlations between them. This discrepancy can be attributed to the capacity to establish similarity classes among these artifacts and to arrange them according to their constraining power, which ranges from minimal to substantial. However, it is imperative to acknowledge that such an ordering, in and of itself, is incapable of accurately representing the difference or, even more exigently, the precise distance between disparate legal artifacts placed on a "legalization" scale, as proposed in the preceding section. In order to attribute specific "amounts" of the attribute "legalized" to a legal artifact, it is necessary to introduce a metric on the scale of "legalization". The concept of "amount" attains its full significance in quantitative contexts, wherein specific amounts of an attribute can be attributed to an object, such as measuring four meters in length or possessing a mass of 4 kilograms. Quantitative comparisons can be made between different objects, such as determining that one object is twice as massive as another.

The numerical character of these quantitative concepts serves as a hallmark of their nature. Carnap, for instance, dedicates significant attention to differentiating between the measurement (i.e., the allocation of a numerical value) of intensive (e.g., temperature

measured in Celsius or Fahrenheit rather than Kelvin, scale, utility, or intelligence quotient) and extensive (e.g., length, area, volume, or infant mortality) magnitudes. Intensive magnitudes are, as it were, "sensory" magnitudes, and this is what makes their attribution to particular objects a psychophysical rather than a purely physical matter (Michell, 2006). Increases or decreases in the degree to which we perceive heat, noise, brightness, or spiciness are understood as increases or decreases in the intensity of our corresponding sensations (ergo their occasional characterization as "psychophysical" magnitudes).

In contrast, extensive magnitudes are fundamentally magnitudes of distance, which makes meaningful locutions such as 'the Great Wall of China is almost 18 times longer than the current border wall between Mexico and the United States'. This is a condensed way of saying that the ratio of the length of the Great Wall of China to the length of the current border wall between Mexico and the United States is approximately 18 to 1 or 18:1. In the context of ratio scale measurement, such as measurement of length and mass, the value of a whole (the number 18 in the fraction's nominator) is represented as the sum of the values of its parts (the number 1 in the fraction's denominator). This premise is predicated on the notion of concatenation, which bears a structural resemblance to the arithmetic operation of addition.[8]

Quite tellingly, intensive magnitudes are notable for their lack of an obvious, empirically confirmable concatenation operation that can yield relations of "how much more" magnitude A is in comparison to magnitude B. This feature places intensive attributes in a liminal area between paradigmatic (extensive) magnitudes such as length and mass, and mere orders such as hardness (as measured on the ordinal Mohs scale) or university rankings. This liminal placement does not compromise their quantitative character, as it still allows them to receive numerical values that represent differences between degrees on an interval scale (rather than ratios on a metric ratio scale).

In contradistinction to an extensive quantity of a given magnitude, such as 1 meter, an intensive quantity of the same magnitude, for example 1 degree Celsius, cannot be regarded as the unit of measurement for other quantities of the same kind. The quantity 5 degrees Celsius does not signify an amount of heat five times greater than the amount of heat represented by 1 degree Celsius. Instead, it is permissible to conceptualize the difference or interval between two intensive quantities as a unit of measurement, thereby licensing a statement like 'the difference between 10 and 20 degrees Celsius is twice the difference between 10 and 15 degrees Celsius'.

It is also crucial to underscore the distinction in semantic interpretation of the

number zero between measures of extensive and intensive quantities. In the context of extensive quantities, the numerical value of zero denotes the absence of the quantity within the spatiotemporal framework of the measurement. The absence of distance between points A and B indicates that these points are identical. Conversely, a temperature of 0 degrees Celsius does not signify the absence of temperature, but rather the instantiation of a particular quantity on a scale arbitrarily divided into negative and positive halves.

The preceding remarks are intended to stimulate the investigation into the potential for quantitative measurement of "legal softness" and "legal hardness", as opposed to comparative or classificatory approaches, which may yield less informative results. Two possibilities emerge from this inquiry, of which only one might warrant further consideration. The first option, albeit tenuous, involves formulating a model in which soft and hard law norms and instruments can be assigned positions on an interval scale analogous to the Celsius scale. The second option, though less plausible, involves the allocation of the same items to positions on a ratio scale, analogous to the distance scale employed to represent metric relationships between points on a line or curve.

To ascertain the informative value of these extra-juridical scenarios, it is recommended to discard one possibility and embrace another. What I suggest we forgo is any attempt at measuring "legal softness" by assigning numerical values to "pragmatic" aspects of "legal softness". These aspects include the effectiveness, behavioral impact, or compliance rates of soft law instruments, as well as the material and symbolic costs associated with noncompliance. It is important to acknowledge that these aspects do not inherently define "legal softness" itself but rather serve as assessments of the *desirability* of soft law regimes within specific locations and temporal periods. This desirability is precisely what makes these aspects pragmatic rather than definitory.

With regard to the possibility that merits further inspection, the reader is invited to consider the explanatory value of another, non-physical property that *might* serve as an analogical intermediary between our "metrically hopeless" case of "legal softness" and pure quantities like mass or length. The quantitative representation of this property has been a subject of interest for economists since the advent of marginalist theories in economics (see Hedden and Nebel, 2024). This is the property of *individual welfare*, which is tentatively defined as that which is non-instrumentally or ultimately beneficial to an individual (Crisp, 2021).

Those willing to entertain the notion that welfare is, in essence, a quantitative concept may initiate their inquiry by exploring the representation of individual welfare

on an interval scale (see, among others, Sen, 1970 and Roberts, 1980). On such a scale, one state of affairs (e.g., attending private school) can be represented as being better for an individual than a second state of affairs (e.g., attending public school) *by more or less* than a third state of affairs (e.g., attending boarding school) is better than a fourth state of affairs (e.g., being homeschooled). The fundamental premise asserts the capacity to articulate the magnitude of the discrepancy in personal value (i.e., the ratio of the difference) between one pair of states of affairs as compared to the difference in personal value between another pair of states of affairs.

This assertion functions as the upper limit of interval scale representations of individual welfare, as it is not feasible to express ratios (rather than ratios *of differences*) on the same scale. To illustrate, the assertion that enrolling in a private school is twice as beneficial for an individual as attending a public school appears to lack rationality. Such a comparison would require the establishment of a meaningful zero point on the welfare scale, a point that would denote the *absence* of personal value. Conversely, an intrapersonal scale of individual welfare would entail the assertion that we can make numerically communicable claims such as 'going to private school is twice as beneficial for John as going to public school'. This representation endeavors to uphold meaningful relationships between the levels of welfare associated with two distinct states in which an individual's life can unfold.

While welfare is predominantly evaluative in nature, it bears notable parallels with a notion that, albeit not itself an interpretation of either "legal softness" or "legal hardness", is nonetheless a property that, as I dare to suggest, is at least indirectly implicated in certain contexts of attributing "softness" or "hardness" to legal norms and instruments. To elaborate, the property that I would like to liken to the measurable property of being beneficial for an individual (individual well-being) is the property of *being relevant to a legal question*. My confessedly bold suggestion is that judgments concerning the categorization of a norm or instrument as soft or hard law can, *in principle*, be translated into judgments regarding the relative relevance of a specific norm or instrument in *resolving* or *settling* (rather than, for example, simply formulating or revising) a *general* legal question.[9]

The idea then is that, in principle, a norm A is "legally harder" than norm B if and because its "ratio" or rationale is *more relevant* than the other's in resolving (i.e., settling in a definitive manner) a general legal issue. Conversely, a norm A is regarded as "legally softer" than a norm B when and because its "ratio" or rationale is less apt for definitively

settling a general legal question than the rationale of norm B. This appears to be an undeniable shift towards "sacrificing" the doctrinal specificity of the distinction between soft and hard norms in favor of prioritizing pragmatic considerations when deciding what the law says or requires in a given case.

Appearances aside, the only genuinely pragmatic element introduced by this shift in focus from "legal hardness" to legal relevance is the element of action, not utility or function. In this context, "action" refers to the mental activities of official actors, such as policymakers, judges, and administrators, as well as "para-official" actors, such as lawyers and jurists, who aim to resolve for others (i.e., the addressees of legal norms) questions about what they (the addressees) should or may do in accordance with what the law requires. The considerations relevant to deciding what others should do are not necessarily utility-based. Depending on the decider's jurisprudential allegiances, these considerations may be based on arguments of policy as well as arguments of political, institutional or moral principle. For instance, considerations of democratic legitimacy and separation of powers are animated by political concerns about *who* (what type of official or role) gets to decide what others should do. Rule of law considerations (e.g., linguistic clarity in the formulation of legal norms) are animated by institutional concerns about *how* (e.g., by textual or purposive criteria for applying a norm) one gets to decide what others should do. Crucially, these considerations remain relevant both in the traditional discussions about the pertinence of soft law instruments as well as in the present "extra-doctrinal" digression.

Accordingly, introducing the notion of relevance is meant only to bring the hard-soft polarity closer to its "original" semantic environment. In this environment, hardness and softness, like heaviness and lightness, are semantic specifications of the intensity of operative forces in a field. In non-physical contexts, such as legal practice, this intensity can be construed as a type of normative weight. More specifically, it refers to the influence that certain norms or broader considerations (moral, doctrinal, political, or prudential) have on a general legal-normative question.

What is a *general* legal issue or question itself is a question that only a comprehensive legal theory can address. In principle, however, it should be possible to claim that a legal *doctrine* (such as the doctrine of negligence in tort law or the doctrine of objective civil liability) is a theoretical elaboration of a determinable number of generic legal questions and this assumption is all that is needed in order to take the further step in assuming that, whether hard or soft, law is primarily a body of persistently recurring, doctrinally elaborated questions that look for consistently recurring answers.

If this paraphrase of soft and hard legality into degrees of legal relevance can be sustained under further scrutiny—a process to which it is undoubtedly entitled—it becomes evident that the distinction between hard and soft law may itself be an unnecessary paraphrase of the more "archaic" question of how non-legal (social, moral etc.) facts contribute to the determination of the content of the law. For example, a growing perspective in analytic jurisprudence is that legal practices, including lawmaking, law application, and law enforcement, cannot determine their own relevance when it comes to establishing the meaning of legal instruments or the intent of the legislature. According to this alternative perspective, facts about moral (e.g., justice) and prudential (e.g., security) value could be considered "hard facts" in the revised and perhaps idiosyncratic sense that they invariably exceed a certain threshold of relevance to settling questions about what the law says. Conversely, behavioral, mental, and linguistic facts could be considered "soft facts" because their relevance invariably "pales" in comparison to that of value facts. In other words, facts about the behavior, thoughts, or utterances of legal officials can never outweigh value facts when deciding what the law says (see, relatedly, Greenberg, 2004, p. 160-1).

This shift in perspective has the (undeniably *paradoxical* to the soft law orthodox thinkers) result of classifying as *hard* law norms or instruments that exhibit a *higher degree* of relevance in settling a specific family or class of legal questions. This outcome may present certain challenges for legal positivists and, to a lesser extent, legal realists, as it could potentially diminish the significance of the concept of sources of law in determining the resolution of legal questions. It is imperative to underscore that the objective of this discourse is not to proffer a favorable or accommodating interpretation of the hard/soft law controversy. Instead, the objective is to demonstrate a *scenario* in which the controversy *could* be resolved by relinquishing its position and allowing for a more substantial discourse regarding the means of assessing the legal significance of the facts that inform the resolution of textbook-level as well as more peripheral or unanticipated legal inquiries. If this prospect appeals to lawyers and scholars working in domains heavily influenced by supranational and international best practices and standards, then it will be primarily to them that this final section will be addressed, exploring how this alternative vision of quantifiable law would manifest.

The discourse surrounding degrees of legal relevance in this particular context represents a progression toward the conceptualization of a property that can, in principle, be quantified on an interval scale rather than merely on an ordinal (although not a ratio) scale. In other words, it is not unintelligible to assume that

consideration A can be more relevant to a question than consideration B *by more or less* than consideration C is more relevant to the same question than consideration D. Differences in degree between different pairs of considerations *can* be meaningfully applied in legal adjudication, especially in the context of precedential reasoning. In the context of precedential reasoning, the primary cognitive exercise for the judge is to ascertain the relevance of an earlier decision to a later case. The relevance of an earlier decision to a later case pertains to the totality of respects (considerations) in which two cases appear to pose *the same general legal question*. In instances where two cases are observed to present an identical legal question in all legally relevant respects, the response to this question by the earlier legal decision should be adopted as the response to the (supposedly identical) general question posed by the subsequent legal decision.

In the context of our earlier association of individual welfare with legal relevance, the intriguing relationship between these two concepts can now become more evident. The concept of being non-instrumentally beneficial to an individual corresponds to the notion of non-instrumental importance for that individual in settling the general prudential question of how to live well. The question of how to live well invites a practical-evaluative inquiry, and any state of affairs designated as non-instrumentally good for an individual is presumed relevant in resolving the question of how to live well. In essence, the relationship between personal value and the notion of relevance is more intricate than it initially appears. If goodness for an individual is analogous to or closely associated with relevance to living well, and if individual well-being is in principle quantifiable, then there should be no principled reason to resist exploring the hypothesis that *anything* of relevance (including, of course, legal relevance) is subject to measurement on an interval or even ratio scale.

The establishment of novel scales to measure the relevance of different considerations in legal contexts necessitates the preservation of existing analogies between the family of considerations relevant to evaluative questions, such as how to live well, and the family of considerations relevant to general legal questions, such as the state's responsibility for the consequences of irresponsible individual choices. Assuming the validity of the proposition that law serves as a means to ensure more optimal outcomes in the distribution of the burdens and benefits of co-existing within a political society (a substantial assumption, it must be acknowledged), the distance between what is relevant to how one lives well or better and what is relevant to how we live well or better *together* (as members of a political community) is itself measurable.

References

Abbott, Kenneth W., Robert O. Keohane, Andrew Moravcsik, Anne-Marie Slaughter and Duncan Snidal, 2000: "The Concept of Legalization". *International Organization*, vol. 54 n. 3, pp. 401-419.

Bélanger, Louis and Kim Fontaine-Skronski, 2012: "'Legalization' in international relations: A conceptual analysis". *Social Science Information*, vol. 51 n. 2, pp. 238-262.

Belastegui, Javier, 2021: *The Resemblance Structure of Natural Kinds: A Formal Model for Resemblance Nominalism*. PhD Dissertation, Addi Open Repository, University of the Basque Country. http://hdl.handle.net/10810/50709 (29/05/2025).

Blumson, Ben, 2018: "Two Conceptions of Similarity". *Philosophical Quarterly*, vol. 68, n. 270, pp. 21-37.

Blutman, László, 2010: "In the trap of a legal metaphor: international soft law." *International & Comparative Law Quarterly*, vol. 59 n. 3, pp. 605–624.

Breakey, Hugh, 2012: "The protection of civilians in armed conflict: Four concepts", in Angus Francis, Vesselin Popovski and Charles Sampford (eds.), *Norms of protection: Responsibility to protect, protection of civilians and their interaction*. New York, United Nations University Press, pp. 40-61.

Carnap, Rudolph, 1950: *Logical foundations of probability*. Chicago, University of Chicago Press.

Cerone, John, 2016: "A Taxonomy of Soft Law: Stipulating a Definition", in Stéphanie Lagoutte, Thomas Gammeltoft-Hansen and John Cerone (eds.), *Tracing the Roles of Soft Law in Human Rights*. Oxford: Oxford University Press, pp. 15-24.

Crisp, Roger, 2021: "Well-Being", in Edward N. Zalta and Uri Nodelman (eds.), *The Stanford Encyclopedia of Philosophy* (Winter 2021 Edition), https://plato.stanford.edu/archives/win2021/entries/well-being/ (29/05/2025).

D'Ambrosio, Justin and Brian Hedden, 2023: "Multidimensional Adjectives". *Australasian Journal of Philosophy*, vol. 102, n. 2, pp. 253-277.

d'Aspremont, Jean, 2008: "Softness in International law: A Self-serving Quest for New Legal Materials". *European Journal of International Law*, vol. 19, n. 5, pp. 1075–1093.

_____, 2011: "The Politics of Deformalization in International Law". *Göttingen Journal of International* Law, vol. 3, pp. 503–550.

Di Robilant, Anna, 2006: "Genealogies of soft law". *American Journal of Comparative Law*, vol. 54, n. 3, pp. 499–554.

Eliantonio, Mariolina and Oana Ştefan, 2021: "The Elusive Legitimacy of EU Soft Law: An Analysis of Consultation and Participation in the Process of Adopting COVID-19 Soft Law in the EU. *European Journal of Risk Regulation*, vol. 12, n.1, pp. 159–175.

Gärdenfors, P. (2000). *Conceptual Spaces: The Geometry of Thought*. Cambridge, MIT Press.

Goodman, Nelson, 1972: "Seven Strictures on Similarity" in Nelson Goodman, *Problems and Projects*. Indianapolis, Bobbs-Merrill, pp. 437-446.

Greenberg, Mark, 2004: "How Facts Make Law". *Legal Theory*, vol. 10, n.3, pp.157-198.

Guigon, Ghislain, 2009: *The Metaphysics of Resemblance*. PhD Dissertation, University of Geneva. https://philarchive.org/rec/GUITMO-4 (29/05/2025).

_____, 2014: "Overall similarity, natural properties, and paraphrases". *Philosophical Studies*, vol. 167, n. 2, pp. 387-399.

Hedden, Brian and Jacob M. Nebel, 2024: "Multidimensional Concepts and Disparate Scale Types". *Philosophical Review*, vol. 133, n. 3, pp. 265-308.

Hempel, Carl G. and Paul Oppenheim, 1936: *Der Typusbegriff im Licht der neuen Logik*. Leiden, A.W. Sijthoff's Uitgeversmij.

Hempel, Carl G., 1952: *Fundamentals of Concept Formation in Empirical Science*. Chicago, University of Chicago Press.

Hoffman, Joshua and Gary Rosenkrantz, 1984: "Hard and Soft Facts". *Philosophical Review*, vol. 93, n. 3, pp. 419-434.

Isaac, Manuel Gustavo, Steffen Koch and Ryan Nefdt, 2022: "Conceptual engineering: A road map to practice". *Philosophy Compass*, vol. 17, n. 10, pp. 1-15.

Jeffrey, Richard C., 1994: "Carnap's Voluntarism", in D. Prawitz, B. Skyrms and D. Westerståhl (eds.), *Logic, Methodology, and Philosophy of Science IX*. Amsterdam, Elsevier, pp. 847-866.

Kaufmann, Arthur (ed.), 1990: *Rechtsphilosophie III. Gustav Radbruch*, *Gesamtausgabe*, vol. 3. Heidelberg, C.F. Müller Verlag, pp. 60–70.

Kirton, John J. and Michael J. Trebilcock, 2004: *Hard Choices, Soft Law: Voluntary Standards in Global Trade, Environment and Social Governance* (first edition). London, Routledge.

Klein, Moshe and Oded Maimon, 2024: *Foundations of Soft Logic*. Cham, Springer.

Klabbers, Jan, 1996: "The Redundancy of Soft Law". *Nordic Journal of International* Law, vol. 65, n. 2, pp. 167–182.

_____, 1998: "The Undesirability of Soft Law". *Nordic Journal of International Law*, vol. 67, n. 4, pp. 381–391.

Knodt, Michèle and Jonas J. Schoenefeld, 2020: "Harder soft governance in European climate and energy policy: exploring a new trend in public policy". *Journal of Environmental Policy and Planning*, vol. 22, n. 6, pp. 761–773.

Marmodoro, Anna, 2017: *Everything in Everything: Anaxagoras's Metaphysics*. Oxford, Oxford University Press.

Mattei, Ugo, 2002: "Hard Code Now!". *Global Jurist Frontiers*, vol. 2, n.1.

Michell, Joel, 2006: "Psychophysics, intensive magnitudes, and the psychometricians' fallacy". *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, vol. 37, n. 3, pp. 414-432.

Petropoulou Ionescu, Danai and Mariolina Eliantonio, 2021: "Democratic Legitimacy and Soft Law in the EU Legal Order: A Theoretical Perspective". *Journal of Contemporary European Research*, vol. 17, n. 1, pp. 43–65.

Roberts, Kevin W.S., 1980: "Interpersonal Comparability and Social Choice Theory". *The Review of Economic Studies*, vol. 47, n. 2, pp. 421–39.

Scharpf, Fritz W., 2003: "Problem-solving effectiveness and democratic accountability in the EU". MPIfG Working Paper 03/1, Max Planck Institute for the Study of Societies. http://www.mpifg.de/pu/workpap/wp03-1/wp03-1.html (29/05/2025).

Schneider, Volker and Patrick Kenis, 1996: "Verteilte Kontrolle: Institutionelle Steuerung in modernen Gesellschaften" in Patrick Kenis & Vokler Schneider (eds.), *Organisation*

und Netzwerk: Institutionelle Steuerung in Wirtschaft und Politik. Frankfurt am Main: Campus Verl., pp. 9–43.

Sen, Amartya, 1970: *Collective Choice and Social Welfare*. San Francisco: Holden Day.

Strevens, Michael, 2014: "High-Level Exceptions Explained". *Erkenntnis*, vol. 79, Supplement 10: CETERIS PARIBUS LAWS REVISITED, pp. 1819-1832.

Terpan, Fabien, 2015: "Soft Law in the European Union—The Changing Nature of EU Law". *European Law Journal*, vol. 21, n. 1, pp. 68–96.

Waluchow, Wil and Dimitrios Kyritsis, 2023: "Constitutionalism", in Edward N. Zalta and Uri Nodelman (eds.), *The Stanford Encyclopedia of Philosophy* (Winter 2023 Edition). https://plato.stanford.edu/archives/sum2023/entries/constitutionalism/ (29/05/2025).

Wolff, J.E., 2020: *The Metaphysics of Quantities*. Oxford, Oxford University Press.

Weil, Prosper, 1983, "Towards Relative Normativity in International Law". *American Journal of International Law*, vol. 77, n. 3, pp. 413–42.

Williamson, Timothy, 1988: "First-Order Logics for Comparative Similarity". *Notre Dame Journal of Formal Logic*, vol. 29, n. 4, pp. 457-481.

Yablo, Stephen, 2014: *Aboutness*. Princeton, Princeton University Press.

Notes

1 This theoretical framework is inspired, albeit not driven, by metaphysical considerations that are reminiscent of the Pre-Socratic era of naturalistic and cosmological philosophy. A seminal figure in this context is Anaxagoras of Clazomenae (c. 500–480 BCE), who proposed the "everything in everything" physical theory that defies contemporary explanation (for a contemporary reappraisal see Marmodoro, 2017). This ancient theory posits that the fundamental constituents of the universe are pairs of polar antonyms, such as warm and cold or soft and hard. Anaxagoras's approach diverges from the conventional concept of "elemental substances", such as fire, air, earth, and water, by emphasizing the qualitative nature of things rather than their literal materiality or ethereal nature. He proposed that instances of qualitative opposites, such as softness and hardness or heat and cold, do not have a material basis. Nevertheless, these qualitative opposites can amalgamate into tangible entities, such as earth and flesh.

2 If I may dare to suggest it, law is, in a not-so-figurative sense, a "science of collectibles and

divisibles". Collectibility implies the ability to treat many, numerically distinct elements as *one* in a relevant respect. This is precisely what legal norms do with their *generality*. They address classes of individuals grouped under different legal criteria (e.g., the citizens of France, humans, fetuses, adults, and children). Divisibility, on the other hand, implies the possibility of *definition* (e.g., piety as divine desirability) or *ordering* (e.g., degrees of piety). Divisibility as definability is evident in the *abstraction* of legal norms. Legal norms regulate cases, which are explicitly (e.g., the division of property into movable and immovable) or interpretively (e.g., the legal meaning of moral injury) defined by the division of abstract cases (e.g., crime) into less abstract cases (e.g., homicide) and even less abstract cases (e.g., manslaughter and murder). Divisibility as possible ordering (e.g., "how X is something" or "is something above or below the threshold of X-ness") is also evident in law through the application of what is commonly known as *indeterminate legal concepts*, such as "reasonable", "cruel", or "good faith". In his seminal "Klassenbegriffe und Ordnungsbegriffe im Rechtsdenken" (Class Concepts and Order Concepts in Legal Thought), Gustav Radbruch compared his approach to the latter type of legal concepts to the notion of order concepts put forth by Carl Hempel and Paul Oppenheim (see Kaufmann, 1990, pp. 60-70; see also below note 6).

3 Recent advances in cognitive psychology and philosophy of mind have suggested that natural concepts like color hues or types of sound can be represented geometrically as regions in an optimally divided similarity space (for a seminal analysis see Gärdenfors, 2000).

4 In a sortal classificatory approach, law would be regarded as a species among other species of a common genus. To illustrate, the concept of "positive law" could be conceptualized as an equivalence class (species) alongside the species "custom" and, perhaps, also "precedent." This conceptualization positions "positive law," "custom," and "precedent" as species (or sources in legal terminology) of the genus "law." A salient point for our present purposes is that the distinction between positive law and custom, on the one hand, and the distinction between hard law and soft law, on the other, do not exactly overlap. In other words, these are different ways of explaining law as such. To illustrate this point, instances of soft positive law, such as UN resolutions and declarations, can readily be envisioned, as can cases of hard customary law, understood as uncodified, exemplified by the British Constitution. A qualitative approach to legal classification differs from the sortal approach in some formal respects.

5 The distinction between criteria of equivalence or resemblance and dimensions is crucial. The former refer to the standard by which we divide a conceptual or physical space, either dichotomously (into two parts) or polytomously (into more parts), or gradually, by degrees. The latter refer to the nature of the divided space, or the "dividend" as an infinitely extended continuum. A dimension, as a type of space, can serve two distinct purposes. It can either identify the position or class of an object or serve as a measure of magnitude (size or intensity). For example, saying that time is the measure of duration or that length is the measure of distance means that how long or how far something

lasts or extends corresponds to a specific number *ratione temporis* or *ratione longitudinis* respectively. The "ratio" in "ratione" refers to the notion of dimension in the technical sense discussed here. Similarly, the jurisdictional qualifications encountered in legal rules, such as *ratione personae*, *ratione loci*, *ratione materiae*, etc., could refer to types of juridical conceptual spaces. These juridical spaces are usually divided dichotomously or polytomously. For example, jurisdiction *ratione personae* is divided into natural persons, legal persons, and states, followed by further divisions of natural persons, such as nationals and non-nationals, and of states, such as contracting and non-contracting states. The European Court of Human Rights' three-tiered standard for determining whether an act constitutes torture, inhuman treatment, or degrading treatment or punishment under Article 3 of the European Convention on Human Rights exemplifies a gradual division of juridical conceptual space. The severity of the inflicted suffering establishes the threshold. Torture designates the most severe range of suffering, followed by inhuman treatment, which designates a less severe range, and finally, degrading treatment, which designates the least severe range.

6 Carnap's discussion of comparative concepts is similar to Carl Hempel's and Paul Oppenheim's discussion of order concepts (*Ordnungsbegriffe*). Order concepts denote gradable properties that can be attributed to individual phenomena to varying degrees (see Hempel & Oppenheim, 1936). Later, Hempel explicitly adopted Carnap's terminology (see Hempel, 1952, pp. 54-62 and note 60 p. 85). I would like to thank an anonymous reviewer for encouraging me to elaborate on this connection.

7 Cardinal in the sense of numbers expressing multitude (how many) or magnitude (how much). Ordinal numerals (first, second, third etc.) can and are often used in purely ordinal comparisons to denote the position (not the multitude or magnitude) of an item in a sequence.

8 Concatenation is defined as the process of appending one string to the end of another string. Analogous to the summation of numbers, the concatenation of lengths can be conceptualized as follows: when two rods are placed in parallel, their combined length is the sum of the individual lengths of each rod. The determination of various lengths can be achieved by selecting one rod as the unit of measurement (in our example, the current length of the border wall between Mexico and the United States) and subsequently comparing the frequency with which this unit fits into the length to be measured (in our case, again, the Great Wall of China).

9 To settle a legal question is to form the intention to consider oneself bound by the practical consequences of the chosen answer.

Submission: May 29, 2025
Revision: June 24, 2025
Acceptance: June 24, 2025