Legal Concepts as Mental Representations

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Abstract

Although much ink has been spilled on different aspects of legal concepts, the approach based on the developments of cognitive science is a still neglected area of study. The "mental" and cognitive aspect of these concepts, i.e., their features as mental constructs and cognitive tools, especially in the light of the developments of the cognitive sciences, is discussed quite rarely. The argument made by this paper is that legal concepts are best understood as mental representations. The piece explains what mental representations are and why this view matters. The explanation of legal concepts, understood as mental representations is one of (at least) three levels of explanation within legal philosophy, but—as will be argued—it is the most fundamental level. This paper analyzes the consequences of such understanding of concepts used in the field of legal philosophy. Special emphasis is put on the current debate on the analogical or amodal nature of concepts.

Keywords Legal concepts · Mental representation · Embodied cognition · Naturalism

1 Introduction

Legal concepts are a crucial point of interest in legal theory and legal philosophy [22, 37, 41, 43]. Nevertheless, the emphasis is put mainly on the analysis of their functions. The "mental" and cognitive aspect of these concepts, i.e., their features as mental constructs and cognitive tools, especially in the light of the developments of the cognitive sciences, is discussed quite rarely. It is troublesome since the adopted approach to these concepts directly influences many areas of legal scholarship, especially theories of legal cognition within legal epistemology, as conceptual processing is a basic cognitive process [2, 3]. Thus, research on the nature of legal concepts is relevant not merely for areas traditionally considered to be related (legal semiotics, philosophy of language, conceptual analysis etc.),

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but also for many branches of legal theory which may prima facie seem immune to the results of research on concepts (legal reasoning and decision-making research, legal ontology [41], legal epistemology [7] etc.). This is still relatively rarely noticed in legal philosophy [for exceptions see 7, 41].

The argument made by this paper is that legal concepts are best understood as mental representations. The piece explains what mental representations are and why this view matters for legal philosophy. Then, it is explained how concepts can be interpreted as meanings, and what is the relation between concepts, words, and objects. Therefore the paper falls within the cognitive semiotics, which is devoted to the interdisciplinary analysis of meaning [see 50].

Crucially, the view of concepts as mental representations is currently a "default position in cognitive science" [29]. Even if cognitive science cannot offer a full explanation of legal phenomena, it can shed new light on how the legal mind works and what are the basic mechanisms of legal cognition. The explanation of legal concepts, understood as mental representations is one of (at least) three levels of explanation within legal philosophy, but—as will be argued—it is the deepest and most fundamental level. This does not assume any form of reductionism–the aim is not to argue that other levels of explanation are less relevant. Other levels, which embrace legal history, analytical philosophy, *Begriffsjurisprudenz*, legal hermeneutics, contemporary theories of legal concepts etc. are crucial in elucidating what law *really* is, whereas the developments of cognitive science allows us to understand how legal mind works at the basic level.

If one agrees that cognitive science offers the best knowledge of human cognition, one should also agree that this knowledge can be harnessed in updating theories of legal concepts. Moreover, the rapid development of cognitive theories of concepts shows the new aspects of cognition that should be taken into consideration within reflection about law. Such "naturalized legal philosophy" can significantly supplement the traditional ways of thinking about legal concepts [about naturalism in law see 19, 26, 45].

As will be argued, the vivid psychological discussion concerning the character of concepts (especially abstract ones) can be a starting point for detailed analyses of legal concepts. Concepts, understood as "mental glue," allow us to act in the world [33]. Legal concepts, then, allow us to create and apply law, as well as—probably—feel its normative power [17].

The purpose of the paper is threefold:

1. to provide a clear distinction between legal concepts understood *"non-naturalistically"* (i.e., concepts as strictly related to words or identical with words, concepts as Fregean senses, concepts as inferential links etc.) and as understood *"naturalistically"* (i.e., concepts as mental representations), with the argumentation that the *"naturalistic"* approach is more coherent with the current state of knowledge and will influence the debate within legal philosophy,
2. to outline a novel theory of legal concepts based on the classical approach to concepts and on knowledge stemming from contemporary cognitive science and philosophy,

3. to point out the main consequences of such understanding of concepts in the field of legal philosophy, with emphasis on the naturalistic component of explanation of legal concepts.

All these goals are, obviously, interrelated. However, in the field of legal philosophy the very nature of legal concepts as mental representations has not been stated so far. It may be an effect of the insufficient level of interdisciplinarity, which results in a lack of interest in contemporary cognitive science. Another problem is the lack of conclusiveness of cognitive science, which may result in tension and multiple sources of naturalization (different scientific theories lead to different results and it is not clear which one should be accepted). Moreover, the nature of law—which is an abstract artefact [8]—does not facilitate the characterization of legal concepts (mostly abstract) in terms of mental representations. It is clearer to define the concept of a "cat" as a mental representation (because we do see cats, which are physical objects) than to similarly define the concept of "justice" or "law," as neither of these exist in a physical sense. Finally, the notion of mental representation is far from being clear [44]. Still, as will be argued, an approach based on the "representational" paradigm demonstrates the need for revision of the received views of legal concepts, especially in the context of legal semiotics.

The paper is divided into five parts. First, I shall focus briefly on defining legal concepts. Second, I will present the mediatory character of concepts (in general, and legal concepts in particular). Third, I will describe the differences between abstract and concrete concepts. The fourth part will discuss different models of legal concepts as mental representations, with reference to the debate within cognitive science concerning the nature of concepts. Finally, the fifth part will address the consequences of representational account for legal philosophy in the context of updating the received view.

2 What are Legal Concepts?

It is not an easy task to define legal concepts. "Legal concept" seems to.

(a) be a concept

or

(b) be a word referring to a concept.

This distinction—between the (1) very concept and (2) linguistic expression of a concept will be the focal point of the subsequent parts of this paper.

Despite proposing a complex definition of legal concepts, one can enumerate some basic features of these concepts in the framework of what I call received views, for instance the following two:

(1) Concepts relevant in the legal, normative context; one can distinguish legal concepts between concepts that are *present* in legal acts and concepts harnessed by lawyers; this theoretical distinction is based on a division between two kinds of legal language [18]. The mentioned phrase "*present in*" is particularly controversial;

(2) Concepts which *refer* to abstract entities; law is one such abstract entity, like justice, legal personhood or causality. The crucial legal concepts are abstract, as they do not concern physical objects, but abstract artifacts [see 16]. One of the subgroups of these concepts are institutional concepts, which *refer* to social and legal abstract institutions [42]. The mentioned verb "*refer*" is particularly controversial.

Obviously, this list can be extended further, but these two features are relevant in the discussion concerning the nature of legal concepts in the light of cognitive science. A legal concept is therefore an abstract concept that is relevant in legal context.[1] This basic and simple definition seems to be rather non-controversial and is essential for further analysis. The two keywords: "present" (in texts) and "refer" (to abstract entities) are two sources of the puzzle regarding the nature of legal concepts. Below, I will focus mainly on abstract legal concepts, as these are the source of theoretical problems concerning mental representations.

3 Concepts Between Language and Objects

Do abstract legal concepts, like "law," "justice," power," "causality" or "crime" refer to abstract objects? Do they occur in legal norms and legal language? My answer to both of these questions is "no." It may seem prima facie surprising, due to the fact of implicit acceptance of the view on legal concepts as present (or encoded) in norms [and also in legal text expressing norms; see 20, 40, 43] and referring to certain objects, institutions etc. One cannot dispute that the general idea is fair, but it should be formulated in a more precise way. This equally applies to concepts like "vehicle," "autonomous machine," "consumer" or "producer"—which are also legal concepts, but concrete ones—as they are about concrete, spatial–temporal entities.

The question we should ask first is "what is a concept?" This is, probably, one of the hottest topics in philosophy and cognitive science. In spite of many definitions presented before now [for review see 30, 33], it is still not clear how concepts are made and what their function in cognition is. Still, substantial empirical-based progress was made in recent decades within cognitive science.

Both philosophers and psychologists still discuss different attempts to elucidate the nature of concepts, which are an enigmatic "glue" in our mind [33]. In general, two akin approaches may be differentiated: philosophical and psychological [after 29].

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[1] There are also many legal concepts which refer to concrete, spatial–temporal entities; a more extensive discussion of the dichotomy *abstract-concrete* can be found in Sect. 4.

In the philosophical analyses (especially in the analytical current), concepts are often treated as meanings [9, pp. 311–312]. This means the concept "law" is the meaning of the word 46*law*, which denotes an abstract artefact—law itself. It might be clearer if we think about a concrete concept, like "cat," which is the meaning of the word *cat,* that denotes every cat that exists.

According to the psychological approach, there is no direct link between language and objects. Thus, an intermediary factor is needed, immersed in our minds. One of the most promising candidates are mental representations that connect objects (percepts) and language. Mental representations can be understood in many ways, but one of the prominent hypotheses is that concepts are basic mental representations [see 46].

More detailed discussion about the character of concepts as mental representations will be presented below in Sect. 4.

The representational approach to concepts is, of course, not the only position that can be accepted. For instance, according to Pfordten, at least three approaches parallel to representational view of concepts (and legal concepts) are worth mentioning, namely: nominalism, idealism, and realism [37, pp. 19–20]. Painting with a broad bush, nominalism reduces concepts to words (ibid.). Idealism assumes that concepts are not representations and refer to entities existing independently from the mind and the natural world [37, pp. 19–20]. Finally, according to realism, concepts may be treated as properties of entities or entities itself.

None of these approaches seems appropriate in the legal context.

It is hardly reliable to reduce concepts to words, as different concepts can be expressed by different words. The concept of "law" is expressed by the words "law," "Gesetz," "diritto," "droit," and "prawo." It does not therefore reduce to any of these words (cf. ibidem). Idealism is a "queer" theory (in the sense of "argument from queerness," see [28]), as it presupposes the existence of strange objects. It is not clear how ideas exist and how we can access them. Realism reduces concepts to words and is an unreliable stance if we assume that concepts allow us to categorize objects and to thrive in the world. As Pfortden notes,

> "there seems to be no reason to reduce concepts to properties, or, at the least, blur the distinction between properties as parts of facts and concepts of properties as mental representations of these properties as parts of facts. For example, we carefully distinguish between 'law' and the 'concept of law.' If somebody knows the concept of law—like it is presented in H. L. A. Hart's famous book—he does not know law" ([37], p. 20).

Another approach is based on understanding concepts as inferential links [43]. This is a view strongly linked to the "formal" theories of legal concepts, developed within law and computer science. The focus here is rather on the functions of concepts than on the concepts per se.

Obviously, also other theories of legal concepts developed both in nineteenth and twentieth century are still relevant. For instance, the school of *Begriffsjurisprudenz* (jurisprudence of concepts) is of a particular importance. Ihering (who coined the term), Puchta, and Wintscheid (to name merely the most important representatives of this current) stressed the importance of concepts as a basis for

law. Painting with a broad bush, their theory supposed the existence of the "pyramid of concepts", i.e. that the law can be reduced to a formed set of concepts (and can be inferred from legal concepts) [51]. According to the cognitive approach presented here, concepts are significant, as they form a basis for the cognition of law. If concepts are mental constructs, law should be merely an individual or collective mental entity. This will be more elaborated in further parts, but it is worth mentioning here that "law in mind" is rather one of (at least) three layers of law.

Another approach which should be mentioned here is Dworkin's idea of the "deep structure" of political concepts (which include legal concepts) [52]. Dworkin portrays the similarities and differences between natural kinds and political values. Natural kinds' deep structure lies in biology, political values deep structure is of a normative character. What is crucial, the meaning of legal concepts is determined by this deep structure [see 53]. The nature of an abstract legal entity–e.g. justice–and the meaning of concept "justice" can be discovered by "exposing its normative core" [52, p. 13]. The concepts are then not the very meaning. In this regard the position is different from the idea defended in this paper.

Obviously, neither theories of legal concepts developed within *Begriffsjurisprudenz* nor by Dworkin (and many other legal scholars) are immersed in the contemporary research within the cognitive science. However, one can identify both similarities and differences between the naturalistic approach and "purely philosophical" approaches.

As will be argued below, concepts can be simultaneously described as both meanings and representations. Language, which allows us to express concepts, gains meaning thanks to concepts. The relation between objects, concepts and language is based on a feedback loop.

To put it briefly, there are no legal concepts without language; there is no meaning of words (and language) without concepts; there is no cognition without concepts understood as mental representations. Legal concepts are then both the meaning of words and representations, but in both cases are language dependent. Abstract language enables us to construct abstract concepts—it is highly probable we would not be able to create abstract law without language [see 14, 47]. No matter how important language is, it does not mean concepts are in any aspect reducible to linguistic utterances.

Thus, the relation between conceptual and linguistic layers of legal cognition can be stated as follows:

(1) objects (physical objects and mental artifacts)
       represented by concepts; designated by words (names);
(2) concepts (representations)
       representing objects; giving meaning to words; dependent on language;
(3) words (language)
       dependent on concepts (the relation of meaning); designating objects; developing concepts.

The proposed scheme bears some similarity to the interpretation of the relation between sign, object, and interpretant given by Peirce [36; cf. 1], but with an important difference with respect to the representational approach to mind.[2]

Crucially, legal concepts are both mental representations and meanings of words. Whereas treating concepts as meanings is embedded in traditional thinking about concepts, the combination of both of these features seems novel in the legal context. This is particularly relevant for the research within legal semiotics, but–as will be argued–also for the debates within legal philosophy concerning also the fields which do not seem to be prima facie dependent on the view concerning the concepts.

What needs a closer examination here is the character of concepts as mental representations. As the representational perspective is dominant in psychologistic approaches, it is necessary to make reference to contemporary theories of mental representations, especially ones developed within the embodied cognition and classical amodal approaches. These two research programs are still influential (however, embodied cognition replaced or at least weakened the classical program). Below, I will focus firstly on the distinction between abstract and concrete concepts, as the understanding of abstractness is a pivotal point in the analysis of legal concepts as representations.

4 Differences Between Abstract and Concrete Concepts

When the nature of legal concepts is discussed, an important distinction should be made between concrete and abstract legal concepts. As mentioned, many relevant legal concepts are abstract, i.e., these concepts do not represent physical entities. It is not possible to indicate the elements of the world that these concepts represent, as they represent abstract objects [see 5, 11]. A contrario, concrete concepts are the concepts which represent concrete, spatiotemporal, physical entities (for the discussion see [5]). It's worth delving into the topic and explaining exactly what abstractness means. One should note, however, this definition of abstractness is accepted within the cognitive science, but it is not uncontroversial (for another see e.g. [48], where abstraction is defined in three ways, as "mere omission," "generalization" and "decontextualization." However, this concerns abstraction rather than abstractness).

Of course, concrete concepts are more or less general. The concept "car" is more general than "sports car" and is less general than "thing." The difference between abstraction and abstractness in this context lies in the character of object: any thing is a material object, so even general concrete concepts represent physical objects. Abstract concepts represent entities belonging to a different metaphysical category, i.e., objects which do not exist in a similar way.

If a concept is concrete, it is relatively easy for us to clarify its meaning (intension) and determine its reference (extension), and thus to grasp the role it plays in our minds. The concept "car," whose extension are existing car, is a mental

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[2] The theory of Peirce is mentioned as an inspiration, because the described relation between words, concepts, and objects bears some resemblance to Peirce's works, but it is different in details.

representation of cars, "tree"—trees, and "cat"—cats (if the "extension" is interpreted broadly and embraces also the discussion on relation of representing). In these cases, we have little trouble explaining on a day-to-day basis how the concept functions and what it represents. Judging whether a word that symbolizes a particular concept has been used correctly does not raise serious difficulties either. Without cognitive access to objects, we are able to simulate them, and this simulation involves reactivation of brain areas that play a key role in perception and interaction with the environment [2].

The situation changes significantly when we handle concepts that represent abstract objects. The abstract sphere exists differently when compared to concrete elements of the world (if it exists at all; this is a metaphysical dispute which will not be analyzed here, see [10]). We are unable to identify existing objects represented by concepts such as "justice," "claim," or "truth," as opposed to spatial–temporal entities such as cars or trees. This makes the way we process these concepts more problematic and has been the subject of intensive research, posing a particular challenge to proponents of the embodied cognition research program [4]. What is the problematic character of abstract concepts understood as representations?

The act of representing something presupposes the existence of a relation [44]. In the case of mental representations, this is to be the relation between the mind and what is represented by the concept. But what if the concept refers to something that does not exist in a physical realm (i.e., something that cannot be experienced by senses)? This question is related to many issues analyzed by philosophers of mind, such as intentionality or the status of beliefs (and the related question of propositional attitudes). The question of how the mind operates with concepts that do not represent sensorily knowable objects is important because different answers entail different positions on the status of legal concepts. According to the thesis presented in this paper, the search for an answer to this question requires taking into account some results obtained in the field of research on the psychology of concepts.

It is clear, however, that not all legal concepts refer to the realm of abstractness. Many of them represent concrete, space–time entities, but in an undefined way. The concept "thing" refers to many material objects, but is a concept with a higher degree of abstraction than "car," for example. "Car," in turn, is a concept with a higher degree of abstraction than "a BMW 116i car." In this sense, concrete concepts, i.e., concepts referring to material objects, can also be more or less abstract. Still, this is abstraction, not abstractness in a strict sense [5].

The proposed meaning of "abstractness" is rather uncontroversial, but much controversy surrounds the differences between concrete and abstract representations when cognitive mechanisms are concerned.

The contemporary embodied cognition research identifies several positions on the relationship between concrete and abstract concepts. Some see the concrete-abstract dichotomy as inappropriate (implying that abstract concepts are processed in the same way as concrete ones; others see the two groups of concepts as distinctly different. The first group is made up of researchers who embrace what is known as *strong embodiment*. The second group includes those who believe that the way abstract concepts are processed is not dependent on concrete concepts and the sensorimotor system, and thus consider these concepts to be amodal representations (by

the way, with regard to all concepts, this was the classic cognitive science position advocated by, among others, Jerry Fodor [15], and today it is partly shared by, for example, Guy Dove [12] and Edouard Machery [27]). The adherents of the position, which can be described as intermediate, assume that the intuitive, strong dichotomy "abstract—concrete" is inadequate because abstract concepts, although different from concrete ones, are related to them through grounding, even though the manner of this grounding is disputable [see 5].

The next section of this paper asks the question of the nature of legal mental representations.

5 Two Approaches to Legal Mental Representations

The main problems concerning representations that are debated within cognitive science are mirrored in the search for a theory of legal concepts. Two options will be discussed below, and I will argue for the embodied view.

Obviously, the research on mental representations is multifaceted and more than two approaches are debated. The very concept "mental representation" is understood in different ways [3]. The choice made here can be justified in the following way: embodied cognition seems to be a promising research program in the legal context and has attracted the attention of legal philosophers; it provides a way of presenting how mental representations can be conceived. The amodal view will also be considered, as it can be treated as the opposite stance with regard to the character of concepts. Moreover, a tendency arose in the contemporary approaches to abstract concepts to consider the amodality of certain representations [4, 12].

The main component of the set of features that is crucial in analyzing legal concepts is their similarity to the represented objects. Below, two main possibilities are discussed. First, one can understand mental representations as quasi-linguistic, amodal symbols our brain processes when we think. This is consistent with the so-called traditional or classical approach to cognition [see 2, 3]. According to the opposite view, supported by representatives of embodied cognition, representations are analogical in nature, i.e., they are similar in some way to what they represent [see 27]. The dispute over the nature of representations is thus related to the dispute over cognition itself.

As will be argued, both of these approaches can prima facie look attractively in the context of legal concepts. However, there is a fundamental problem when considering the classical view, referred to as the grounding problem. On the other hand, the embodied cognition approach is also fraught with problems—how can modal mental representations be somehow similar to legal objects?

5.1 Amodal Representations

According to the classical view, cognition (more precisely, higher cognitive processes, including abstract thinking) is based on the processing of representations that are amodal, i.e., not related to human senses [2]. They are also arbitrary,

in the sense that they bear no resemblance to what they represent (arbitrariness can be illustrated by the word "car," which bears no resemblance to a car). Areas of the brain other than those central to perception, action or introspection are responsible for processing representations. Although in the acquisition of data from the external world the mind absorbs various pieces of sensory information, the stage of actual information processing that is relevant to our thinking (especially legal thinking) takes place on the representations that make up the amodal system of meaning [49; 34].

The exact nature of these amodal representations has been conceived in a variety of ways. Some have held (this was one of the most important positions for several decades; see [3]) that they are similar to language, and that thinking, being the processing of representations, is a process analogous to language use (hence the concept of the language of thought, *Mentalese* [15]). If we add to this the assumption that cognition involves operating on mental symbols, we conclude that thinking is based on manipulating symbols (mental representations) that are arbitrary, amodal, and internal (because they are "in the mind") [15]. Links to the external world are therefore not relevant from a cognitive perspective. Consequently, explaining how the body's sensory and motor systems function was not considered an important part of explaining the mechanisms of cognitive processes.

This view seems promising for legal philosophy, at least prima facie. Legal mental representations, like the concepts of duty or justice, seem to be just certain symbols in our heads, and no resemblance between them and the legal objects is conceivable. On the other hand, if there are no such objects, the similarity perhaps occurs—if duty exists merely in language (the concept is fully conditioned by the language), one can notice a certain kind to similarity. However, this is not the only option. According to adherents of embodiment, abstract concepts also can be indirectly analogical.

What is the main problem with amodal representations? The answer is strongly linked to the symbol grounding problem [21]. Painting with a broad bush, the question about the source of meaning of such representations arises.

In its most frequently discussed form, the symbol grounding problem was formulated by Stevan Harnad [21]. The grounding problem concerns the reference of symbols in light of their arbitrary and intrinsic nature. The fundamental difficulty can be formulated as follows: How can symbols acquire meaning? How do they bind themselves to that to which they refer? The symbols themselves cannot be the source of meaning and cannot make such external connections. So, it turns out that there are no meaningful symbols that are not related to the environment. They cannot be amodal, but they must be somehow grounded in our sensory perception of the world [21]. Other arbitrary symbols cannot form the basis of such grounding. It would be a kind of vicious circle.

Harnad explains the significance of this difficulty with two examples. In the first, a person who knows her mother tongue (e.g., an Italian woman), but who does not know Chinese, wants to learn Chinese. She does not have an Italian-Chinese dictionary, but only a Chinese-to-Chinese dictionary, in which the meaning of each word is explained by its description in Chinese. The meaningless (for the Italian woman) symbols (the Chinese words used to define the words that represent each entry)

cannot be used to give meaning to other Chinese words. To put it simply, she will not be able to understand anything in Chinese [21].

The second example (a more abstract thought experiment) is similar, except that the Chinese-Chinese dictionary is given to a person who knows absolutely no language. The sequences of symbols will also be incomprehensible to him, but at an even deeper level than in the first case. If a person knows another language, it is possible (though difficult) to reconstruct the meaning of individual words of a foreign language. It is hard to disagree with Harnad when he states that ancient language scholars and cryptologists were able to decode unknown words because their thinking was grounded in the language they knew and in their (linguistic) knowledge of the world and past experience [21]. This grounding is not present in the cognition of a person without knowledge of any language, which makes it impossible for individual words to have meaning for such a recipient. This is the proper symbol grounding problem.

This difficulty is considered from the perspective of various disciplines. It is important in cognitive science because attempts to overcome it involve theories that are opposed to classical. In these theories it is presupposed that representations are somehow based in action and perception. This is one of basic tenets of embodied cognition. Still, embodiment might seem inadequate when legal concepts are considered. This leads to the question of how can legal mental representations be grounded in our embodied experience? Law as an abstract artifact cannot be experienced in such a way. We face the same problem in the case of legal abstract entities, like duty, property or obligation.

5.2 Analogical Representations

Within the embodied cognition research program, which—to a certain extent—supplanted classical theories of cognition, representations are supposed to be analogical. Mental simulation, which occurs when we think about objects or when read sentences, is based on conceptual processing. In what sense can representations be similar to the represented objects? Let us take an example.

We all know what apples look like and taste. If we think of a representation of an apple (the concept "apple") it is similar (analogical) to an apple in the following sense: the processing of the concept "apple" is directly linked to the experiences we normally have with apples. We see them, eat them and know many other things about apples. The concept "apple" is analogical, because it is founded on these experiences. It is not an amodal, language-like symbol, but rather a sensory-based part of our long-term memory [2]. From the neurobiological perspective, this is observed as brain reactivation; for instance when we think about a tree, the visual cortex is reactivated; when we think about a telephone, auditory cortex activation can be observed [2; 13].

If representations are analogical, how can we have legal concepts? This question poses a more general problem of embodied cognition, perhaps the biggest one, namely the "challenge of abstract concepts" [4].

It is not clear how we can simulate abstract concepts and have analogical representations of law. The main idea nowadays is that these concepts are not strictly analogical, but—as I will call it—quasi-analogical. In a nutshell, legal concepts are embodied, but we do process them with reference to more concrete concepts with the aid of language which is a kind of scaffold [14]. Among the contemporary theories the most promising results are based on the dual-coding approach [35, 14; see 4 for review], as well as on metaphor theory and its developments [24; 25]. The analysis of these theories falls outside the scope of this paper. It is worth noting, however, that the conceptual metaphor theory is still one of the most influential theories of abstract embodied concepts [4, 23]. According to this theory, developed mainly by Lakoff and Johnson, we can process abstract concepts due to their metaphorical character. Metaphor is interpreted as a cognitive tool, which is a mapping from the source (more concrete) domain onto the target (more abstract) domain. Let us take an example: we all know what the sentence "He broke the law" means. However, we implicitly know that he could not break the law, as law is an abstract entity. He could do it metaphorically. Such sentences are an emanation of the cognitive process of mapping—we think about law as if it were a concrete, fragile entity. The basic metaphor is then "law is a material object (e.g. a branch)." We do have a representation of an abstract entity which is analogical not to the represented object (law) but to the source domain of the metaphorical representation of law.

Metaphor theory is not without controversies [32], but it is still a relevant theory of embodied abstract concepts [see 24; 4]. It allows us to overcome the symbol grounding problem and explain how representations can be indirectly analogical.

It must be noted that in the "wide cognition" [31] approach, encompassing different variations of embodied cognition, anti-representationist stances are also being expressed. A particularly relevant example is radical enactivism which does not assume mental representations. An enactivist approach in the legal context would be difficult to accept, as the existence of legal concepts is a generally shared assumption. Still, it could be consistent with some currents in legal philosophy, for instance with some variations of legal realism (especially the Scandinavian ones). This is, however, beyond the scope of this paper.

6 A (quite) New Way of Understanding Legal Concepts

6.1 *Received View*

Although legal concepts are understood in many ways [see 20; 43], there seems to be a strong assumption in legal theory and philosophy about their linguistic nature. This means that when looking for concepts one can turn to the legal acts in which they are contained, or to an analysis of the language used by lawyers.

It is common to discuss concepts in terms of their linguistic symbols. This is understandable (it is not easy to imagine an alternative way of talking about concepts), but it causes the representational character of concepts to escape the attention of legal theorists. Meanwhile, the concept "law" is significantly different from the

word "law," and this is true both when we consider the paradigm assuming amodality and modality (analogicality) of concepts.

Let us take an example. One of the most frequently analyzed texts on legal concepts is "Tû-Tû" [40]. In this paper, Ross states that concepts are devoid of reference, and hence devoid of meaning. However, they are present in the content of legal norms because they facilitate the presentation of normative information. They are not necessary—the creation of norms is possible without the use of abstract concepts. The result, however, is that norms must be expressed in a more complicated way than when they contain concepts such as "property," "obligation," or even concepts that refer to concrete elements, but in a very broad (undefined) way, such as "movable thing."

The argument given by Ross was based on the assumption that the status of the legal concepts we can find in contemporary legal texts and doctrinal analyses is not different from that of "tû-tû." This concept, invented by him [40], was to be used by the equally imaginary Noit-cif tribe in its specific language. Although it was supposed to be meaningless on its own, it turned out to be meaningful in various contexts, and the norms containing it were fully understood by members of the community. The concept's lack of meaning stems from the fact that the status of tû-tû, which was associated with ritual impurity, among other things, involved no real change. As Ross wrote, "tû-tû simply does not correspond to anything." The concept "tû-tû" itself, then, means nothing, but it is used to refer to a number of situations that give rise to consequences defined by customary law [40]. It merely provides a link between the description of the facts and the description of the consequences prescribed by the norms of the customary law of the tribe. However, it is possible to reformulate the norms in such a way that "tû-tû" does not appear in them and that no information is lost. This is as much an argument for the lack of meaning of "tû-tû" as for the lack of reference. One example provided by Ross [40] is as follows:

(1) "If someone has eaten the chief's meal, he is tû-tû.
(2) If one is tû-tû, he should be subjected to the rite of purification.
    Regardless of what tû-tû means (and whether it means anything at all), (1) and (2) can also be expressed by (3):
(3) If one has eaten a meal intended for a chief, he should be subjected to the rite of purification."

The case is similar with legal concepts. Many of them can be removed from legal texts and express the content of norms without using them. Ross gives an example [40] of the concept "claim":

(1) "If a loan has been made, a claim arises.
(2) If there is a claim, payment should be made on the day it becomes due.

This leads to the conclusion that:

(3) If a loan has been made, the payment should be made on the date it becomes due."

In this conclusion, the concept "claim" is no longer present, and the normative content is the same as sentences (1) and (2).

Leaving aside the evaluation of Ross's conception and the criticisms of his theory of legal concepts [6, 43], the key point is that concepts are discussed as words are. Concepts have reference (as do names) rather than represent anything. Of course, the developed theories of representations came after Ross analyzed legal concepts, but the assumption he seemed to implicitly make is also present in contemporary discussions.

In my view, this is a theoretical problem and its importance can be judged differently. Although the status of legal concepts is not central to law in action, new approaches to concepts can be incorporated into theoretical and philosophical discussions, thus avoiding their confusion with words that we find in legal acts or norms (assuming that we consider a norm to be a linguistic expression).

6.2 Legal Concepts Merely in Mind

If we accept the view that legal concepts are (specific) mental representations, it becomes clear that they exist only in people's heads. Not in books, not in speech, and not in written reasons for judgment. Differences in their understanding may arise from the different ways in which these concepts are processed. As mentioned earlier, according to one influential theory of abstract concepts, we process them through metaphorical simulation. This processing, however, may take place in different ways from one person to another. One of the weaknesses of metaphor theory lies in the lack of explaining how concepts are processed. It rather presents many different metaphorical mappings that underlie conceptual processing. If we add to this the fact that not all abstract legal concepts are metaphors, it becomes difficult to explain what influences the differences in metaphorical mappings. In turn, according to theories that assume the amodality of concepts, it is unclear how concepts can derive meaning and, therefore, exactly how they can represent abstract objects.

Since legal concepts are in fact basic mental representations, they are creations of the mind. One might be tempted to say that law does not exist outside the mind of man. Of course, there are written laws that courts cite when justifying their decisions. Thanks to language, which symbolizes concepts, law becomes communicable. But it is far from being unambiguous.

The role of language, moreover, is one of the greatest puzzles. The question of whether it merely reproduces thought processes, being their emanation, or rather participates in their creation, is an open one. This question is related to the fundamental discussion of concepts. Recent research allows us to argue [see 14;47] that explaining how we process abstract concepts requires consideration of both modal and amodal representations. The recent theories inspired by the dual-coding approach [35], e.g., the WAT theory (words as social tools [5] or theories assuming the role of language as a "medium of thought" [12] seem nowadays to be steps in the

right direction. If so, in explaining legal mental representations one should consider metaphor theory as merely one of many instruments. Such methodological pluralism, understood as harnessing different theories, allows us to overcome the difficulties of a particular theory.

Finally, law functions in society and regulates the functioning of society. Thus, it is impossible to separate it from language, as language is the primary tool for human communication (and thus all social interaction). Although legal concepts are not linguistic in nature, they function thanks to language, which symbolizes and also co-creates them.

6.3 Levels of Explanation

Cognitive science can exert an important influence on legal philosophy in general, and theory of legal concepts in particular. However, it should not be read as a revolutionary statement. As concepts are mental representations, it seems to be necessary to change the way of thinking about concepts and not confuse them with words. Still, if the nature and functions of legal concepts are to be explained, different levels of explanation should be considered. There are at least three such levels which need be taken into consideration when attempting to explain legal concepts.

The first level is cognitive—we should explain how concepts are processed by our brains. At this level concepts should be treated as representations and cognitive science should be harnessed in explanations. This is a naturalistic part of legal philosophy. Obviously one can separate law from scientific knowledge and practice legal philosophy in an anti-naturalistic manner. This is, however, a risky endeavor: when purely philosophical theories of concepts are compared with empirical-based, scientific results it would be irrational to deny the data and maintain a different position. My stance is that when the same phenomena are investigated empirically and non-empirically, preference is given to those theories that are based on experimental findings.

Let us then accept that legal concepts (especially abstract ones) are embodied mental representations. Does it tell us anything about their role in legal inferences, their evolution or meaning in the legal context? Obviously is does not.

To explain these aspects of legal concepts—the, so to speak, "strictly legal" aspects of legal concepts—we need at least two other levels of explanation. The second is based on research within legal history, with special emphasis on Roman law. Romans created a legal system based on abstract, institutional concepts, and many contemporary concepts trace back to the times of the Roman state. To describe the evolution of certain concepts, and to explain how legal mental representations may change, a cognitive explanation is not sufficient.

Finally, to get the actual meaning of a certain concept one cannot analyze this concept in isolation from the whole legal system. Legal concepts do differ from ordinary ones in numerous aspects, and this concerns both concrete and abstract legal concepts. It is not sufficient to know how a certain concept is processed by the brain and how it evolved. To avoid speculation, one needs also to understand what

role it plays in practice. It is not necessary to know what the meaning of the concept is in "law in books," one must also deconstruct its meaning in "law in action."

I understand the "most fundamental level" (or the deepest level) of explanation as a fundamental in the sense of the fundamentality of human cognitive processes. There exists no law, no ethics, no science etc. without human brain activity. This does not assume any form of reductionism–it must be stressed that other levels of explanation are not less relevant. We should not ignore the developments of science when debating nature and functions of legal concepts. At the same time we should also not forget about the heritage of legal theory. The point is that explanation offered by legal history and legal theory does not concern the fundamental cognitive processes and the debate on legal concepts should be supplemented by the results of a relatively new branch which is called "cognitive legal studies" or, simply, "law and cognitive science."

Expanding on the dichotomy of law in books and law in action, introduced by Pound [39] another element can also be identified: "law in mind." These three levels of explanation can be then considered in a following way: the first level is about "law in mind," the second is about "law in books," and the third one is about "law in action." The first is aimed at explaining the legal mind and cognitive processes, the second is devoted to the evolution of concepts and doctrinal theories concerning the concepts, and the third is about how these concepts are harnessed by lawyers every day. All legal concepts are merely in mind, but they manifest themselves on different levels and thus different levels of explanation are needed.

7 Conclusion

The purpose of this text has been to outline a new theory of legal concepts that takes into account the widely accepted position in cognitive science that concepts are mental representations. This allows us to look at legal concepts from a new perspective. They are not present in legal acts or refer to certain states of affairs, but rather represent abstract objects (in this case, legal entities). It is not clear whether these concepts are amodal and arbitrary or analogical. Discussions in cognitive science provide arguments for both the first and second positions. However, it seems more appropriate to regard representations as analogical and embodied. Not only does this avoid the problem of grounding, but it also fits into a research agenda whose basic assumptions have been corroborated by many studies [see 2, 13]. It seems, however, that in light of the abstract nature of legal concepts, it is necessary to seek a middle path between the two extremes. Recent research is moving precisely in the direction of moderate embodiment and allows for the occurrence of amodal representations [13].

The relation between concepts (understood as mental representations) and words (by which concepts are expressed) is theoretically relevant especially in the context of meaning and functions of legal concepts. First, the popular phrase "meaning of concepts" is unclear and can be misleading, because concepts are meanings (of words). This is particularly relevant to theories of legal interpretation. Lawyer who

interprets a legal rule reads the words which are strictly related to mental representations. The content of mental representations is determined not merely by the "legal knowledge" of lawyer, but also–and possibly mainly–embodied knowledge about world, in case of abstract legal concepts filtered by the conceptual metaphors.

One can identify the analysis significant also for legal pragmatics. The problem of legal context, which is relevant for theories of interpretation, can be analyzed from the "cognitive view", as treating legal concepts as mental representations challenges the received view: if legal concepts are representations and words are symbols of concepts, the theory of embodied mental simulation should be taken into account and become a point of departure for legal philosophy. In other words, the relevant context of legally relevant utterances embraces not merely strictly linguistic layer, but also the basic one, i.e. cognitive. Processing of language depends on more fundamental cognitive mechanisms, with a pivotal role of mental simulations. One can argue it is not crucial from the traditional view on pragmatics, but attempts at creating a naturalized theory of legal interpretation should not separate from the developments of cognitive science.

Regardless of the assessment one adopts about the nature of concepts, recognizing them as mental representations seems essential, and discussions of a naturalized cognitive theory of legal concepts are just beginning.

Declarations

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