

Deontic Logic and Legal Systems, by Pablo E. Navarro and Jorge L. Rodriguez (Cambridge: Cambridge University Press, 2014, paperback, ISBN 978-0-521-13990-8, 261 pages).

### **Topic and objective of the book**

As the title *Deontic Logic and Legal Systems* indicates, Pablo E. Navarro and Jorge L. Rodriguez's new book intends to offer an introduction to the logic of norms and some fundamental legal concepts. It aims to be an analytical exercise on deontic logic and in particular legal systems. That is to say, the monograph is a theoretically orientated discussion of how and why deontic logic may be used in order to have a better grasp of broadly normative systems and, more specifically, the legal system. Nevertheless, as Navarro and Rodriguez make clear in the *Preface*, the book is limited by its aim since it presents the reader an introductory view only and therefore it offers a simplified version in order to tackle philosophically relevant issues in law. As a direct consequence, a more careful analysis of many problems has been put aside for now.

Navarro and Rodriguez, two Argentinean scholars that are part of a generation of Continental style legal philosophers bring us what promises to be a new analysis of the legal discourse by means of applying deontic logic. Both these authors have published monographs before, and a considerable number of papers in several journals that have to do with legal theory or legal philosophy. Often written and published in Spanish, Navarro and Rodriguez's latest publication *Deontic Logic and Legal Systems* is a new account of an issue arguably central to jurisprudence in an attempt to cross the imaginary bridge between two at times irreconcilable styles. The authors march through a very high level of abstraction in legal philosophy Continental tradition to bring deontic logic and its application to the legal discourse this time, more provocatively, with an Anglo-American twist.

Applied for the first time by Von Wright<sup>1</sup>, the term deontic logic refers to normative orders in three different ways, that is—in short—a prohibition, a permission, or an obligation. Traditionally, logic refers to true or false statements. Therein, and simply put, a conclusion will be true or false depending on whether the premises are true or false. Indeed, this has to do with propositions that are evidently descriptive. But there are other propositions that are non-descriptive and, amongst the latter, those that are prescriptive—i.e. they may state an obligation, a permission, or a prohibition. These non-descriptive propositions that are prescriptions are not capable of having “true” values in logic. Arguably, we may be able to establish logic inferences departing from descriptive prescriptions or, what in legal theory we may call norm-propositions. The legal discourse as part of one of these normative systems uses prescriptive language. Therein, deontic logic may be applied as an interpretative tool in order to better understand issues related to the semantic and syntactic use of legal norms or rules.

Navarro and Rodriguez aim to offer the novel reader in legal theory or legal philosophy an elemental insight into deontic logic by presenting basic conceptual elements and formulas first, and from there to demonstrate how they apply in particular to a specific normative system, that is law.

### **Book outline**

The book is divided in two parts, and each part has three chapters, all divided in five sections. The first part—i.e. Part I—offers a brief introduction to basic concepts and ideas on classical logic. Chapter 1 starts by characterising logic and some of its elemental terms—i.e. validity, truth, and logical form. Thereafter, the language of logic is presented including propositional calculus, atomic and molecular formulas. Section 1.3 reminds us of the modal and deontic logic and the fundamental deontic concepts, that is obligation, prohibition, and permission; whilst Section 1.4 compares different systems of deontic logic—e.g. minimal, classical, and standard systems. The Chapter finishes discussing the possibility of deontic logic and whether norms are

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<sup>1</sup> Georg Henrik Von Wright, ‘Deontic Logic’ 60 (1951) *Mind* 1.

capable of having truth-values. Chapter 2 deals with “Paradoxes and Shortcomings of Deontic Logic.” The authors cover briefly the Ross’ paradox, the paradox of derived obligation, the McLaughlin’s paradox, the free choice permission paradox to start with. Thereafter, what the authors call “more serious challenges” are introduced—i.e. the good Samaritan paradox, and the contrary-to-duty paradoxes—followed by the Jørgensen’s dilemma, Kelsen’s logical argument in the legal domain, Ross and the logic of satisfaction, validity as binding force and as membership in a normative system, and yet the possibility of the indirect application of logic to norms. The last two sections have to do with whether norms bear truth-values. Therein, both sides of the story are presented—i.e. deontic logic with truth and deontic logic without truth—, norms and norm-formulation are distinguished, and two conceptions of norms are characterised, that is the pragmatic conception and the semantic conception. Chapter 3 “Norm-propositions, Conditional Norms, and Defeasibility” starts by distinguishing norms from statements about norms, or norms strictly speaking and norm-propositions. To clarify the distinction, two notions of negation for norm-proposition are defined: a) external negation; and b) internal negation. Rodriguez and Navarro show why the distinction between norms and norm-propositions cannot be maintained within the semantic conception of norms. In contrast, by reference to Alchourrón and Bulygin<sup>2</sup>, the authors show how within the pragmatic conception, norms would be conceived as acts of prescriptions and therefore, there would not be capable of having truth-values. Conditional norms follow in the next section, and they are seen through the insular conception and the bridge conception, neither of which is free from difficulties. The Chapter continues with the distinct forms deontic *modus ponens* may assume, that is factual detachment and deontic detachment; and finishes with the so-called defeasible deontic logics owed either to failure of factual detachment or to failure of deontic detachment.

The second part—i.e. Part II—refers specifically to logic in relation to legal systems. Chapter 4 introduces de concept of “legal validity.” The authors point

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<sup>2</sup> Carlos Alchourrón and Eugenio Bulygin, *Normative Systems* (Wein, New York: Springer Verlag, 1971).

out the more often than not confusion between this and other concepts such as existence and legality in the creation of the norms. Kelsen<sup>3</sup> is introduced as a start point and some remarks on his *Pure Theory of Law* intend to show the misunderstanding. Section 4.2 presents us the scope and force of legal norms through the lenses of internal applicability and external applicability of such norms. Thereafter, Rodriguez and Navarro discuss the relationship between applicability and validity, and whether there is a necessary one between the two. In this section, they remind us of the views of many heavy weights in legal theory—e.g. Kelsen, Hart, Bulygin, Schauer. Unsurprisingly, the next section includes the notion of hierarchy within legal orders and basic issues related to legal interpretation are mentioned—i.e. *lex superior*, *lex posterior*, conflicting norms, inconsistency. Section 4.5 is entitled “Two Concepts of Legal Systems.” In reality, it offers the views of different legal philosophers in order to characterise what a legal order is. Starting with Kelsen, Hart follows with his criticism, Raz is mentioned, and Dworkin’s more recent distinction of different concepts of law seems to act as a conclusion for the whole Chapter.

As any system, legal orders bring about some problems that need solving. Chapter 5 reminds us of normative gaps and conflicts of norms. Following Alchourrón and Bulygin, we are introduced to the formal properties of applicable systems in Section 5.1. Incompleteness, inconsistency, and redundancy are defined and dealt with using the Argentinean legal system to exemplify. Section 5.2 discusses whether a legal system may have gaps starting with Kelen’s notion by which non-prohibited actions are considered as implicitly regulated and therefore permitted. Raz and Dworkin’s views follow. But Rodriguez and Navarro remind us that normative gaps are not merely situations not regulated by the law. Indeed, the normative gaps should be distinguished from the axiological gaps. Another legal conflict is listed in Section 5.4, that of normative contradiction or coherence. The Chapter finishes with a recount of the legal conflicts previously introduced and the thesis of defeasibility of legal norms. Different arguments are presented and explored as a way to conclude.

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<sup>3</sup> Hans Kelsen, *Pure Theory of Law* (Gloucester, MA: Peter Smith, 1960).

The last Chapter—i.e. Chapter 6—introduces the idea of legal dynamics starting with Raz and his distinction between momentary and non-momentary legal systems. Section 6.2 focuses the attention on two key moments in any legal order, that of the incorporation and that of the elimination of norms. In other words, “promulgation” and “derogation.” Once again the authors decide to follow Alchourrón and Bulygin when presenting the two approaches for legal dynamics in Section 6.3. Within the legal dynamics, Rodriguez and Navarro explore logical consequences using the Argentinean legal order to exemplify. The last Section of the book evaluates whether legal orders contain all the logical consequences of enacted norms and the role of social sources.

Finally, the *Epilogue* acts both as a summary of the key conceptual elements and issues presented throughout the book, and an overall conclusion.

### **Evaluation of the book: its content and method**

Jurisprudence, legal theory, or legal philosophy have stimulated discussion from very early in the history of mankind. It is true, as Eugenio Bulygin refers in the *Prologue of Deontic Logic and Legal Systems*, that we have proof of these reflections—in a very broad sense—as early as in Ancient Greece. Indeed, these early discussions were mainly philosophical in nature and somehow covered what it is nowadays understood as legal issues too—at least if we have an ample view of what legal issues mean. That is because legal philosophy or legal theory offer a different kind of discourse for analysis, even for a logician and philosopher: the normative character of the law.

The need to comprehend the way in which law is created and applied is paramount in every culture. We may go even beyond—i.e. law is one of the very few sciences in which we still ask how to define its object and the nature of that object we call in general “law.” One of the ways to study this multi-faceted object is through the analysis of its normative concepts—e.g. norm, rule, permission, prohibition, and obligation. Moreover, one of the ways to study these normative concepts is by using techniques and methods developed by logicians. And that is exactly the aim of Rodriguez and Navarro’s latest book. *Deontic Logic and Legal Systems* offers an insight on

how formal analysis may be applied to the normative discourse. As we know, law is one of many normative systems. Therein, Rodriguez and Navarro intend to show us how deontic logic may be essential in understanding both the semantic dimension of law and also its dynamic one.

Some points should be made clear before we refer to *Deontic Logic and Legal Systems* in detail. Firstly, the study of the law and its nature has to do with several elements and may be done from several angles—i.e. logic, politics, economics, morals, only to name a few. Indeed, law is a multi-faceted concept with application in different realms and at different levels. These elements may be reviewed separately from a theoretical point of view. But we must remind ourselves that in practice they will always be somehow related. Any legal norm may bring about complex realities that have to do with, for example, law but also power, morals, and many other implications. So Rodriguez and Navarro's book will be limited by default in the sense they will tackle one of the many realms law may offer—i.e. legal systems and how deontic logic may help in better understanding them. Secondly, a fact that Eugenio Buligyn in his *Prologue* mentions and Rodriguez and Navarro refer to in their *Preface*: to study a normative system such as law through the lenses of deontic logic has traditionally been rather limited to Continental Europe and Latin America. Although we may find elaborated works such as *The Concept of a Legal System*<sup>4</sup>, it is a fact that the Anglo-American tradition in legal theory and legal philosophy is not as rich when referred to the analysis of normative discourse using technics and methods borrowed from logicians. In that sense, Rodriguez and Navarro's book is already a valuable addition to the legal philosophy literature in the English language. With *Deontic Logic and Legal Systems* they attempt to bridge that imaginary gap between two different styles, that is the so-called Continental and Anglo-American ones. To an extent, as I will show in the following paragraphs, they have been successful. Last but not least, Rodriguez and Navarro's book introduces us to the world of logical thinking within law from the level of the beginner. It is a fact that for someone more experienced these pages may sound familiar—at times, even

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<sup>4</sup> Joseph Raz, *The Concept of a Legal System. An Introduction to the Theory of Legal System* (Oxford: Oxford University Press, 1980).

too familiar. But the authors are clear in their *Preface* that this is an introductory work and therein, simplification of complex problems is to be expected. Navarro and Rodriguez go further and concede that a more careful analysis of many problems has been put aside for an advanced book.

Part I “Introduction to Deontic Logic” is essential to any new scholar that wants to have a grasp of how the language of logic may be applied into law. With Chapter 1 “The Language of Logic and the Possibility of Deontic Logic” the authors are able to combine complex vocabulary and logical formulas in an accessible and very comprehensible way for the beginner in legal philosophy. Navarro and Rodriguez apply the same methodology throughout their monograph—i.e. they start from very basic individual elements in logic and deontic logic and build up by adding basic formulas. Once these basic formulas are introduced examples with regards law are always presented. Thereafter, more complex conceptual elements and formulas will follow. For instance, Chapter 1, Section 1 gives us a very broad introduction into the world of logic and argumentation. Very basic elements in logical argumentation are introduced, that is premises and conclusion. Therein, simple and colourful yet very effective examples are offered in order to make clear the aforementioned conceptual elements. Only after several examples of the kind, the authors move onto reviewing these statements through the lenses of formal logic. As a result, by the end of the first section in the book, the reader should already have a basic understanding of elemental components in any logical argumentation and be aware of the way in which a logician applies symbolic schemas.

The following section—i.e. Chapter 1, Section 2—goes beyond elemental components and introduces the reader to propositional calculus. Indeed, a complex way in which sentences describing states of affairs can be reviewed through the lenses of propositional letters. Once again, Navarro and Rodriguez start by presenting the basic elements—e.g. propositional letters  $p$ ,  $q$ ,  $r$ , propositional connectors, and more. Only after making clear these elements the authors demonstrate how they may be combined—i.e. truth table. As before, examples follow.

By the end of Chapter 1 the reader should be able to understand how basic elements in logic and deontic logic may be applied into legal discourse and how to review legal arguments using basic logic formulas. Moreover, within the last part of Chapter 1—and in all other chapters—Navarro and Rodriguez bring about the work of classical and more modern legal philosophers such as Von Wright, Kripke, Åqvist, and many others in order to broaden the reader's understanding on the matter and, if I may say, could act as a catalyser to encourage further independent research.

Although it is mainly a descriptive monograph in the sense most of its pages are dedicated to the explanation of deontic logics, its basic elements and formulas applied to legal discourse, Navarro and Rodriguez are able to include at times critical evaluation too, for example, by questioning the mere "Possibility of Deontic Logic." Indeed, for anyone with previous knowledge in legal philosophy the content of that analysis may not be enough. However, we must remind ourselves that this is an introductory book and in consequence, Navarro and Rodriguez are already going the extra mile even with only introducing open-ended questions.

Part II "Logic and Legal Systems" is probably the most ambitious in this book both in terms of content and extension. Indeed, Rodriguez and Navarro try to include key conceptual elements that have to do with law—e.g. validity, existence, gaps—while referring to authors that go from Kelsen and Hart to Schauer. Thus, Rodriguez and Navarro proceed in that way by introducing a reference to the logical and axiological side of these elements, their mutual implications, and the well-known difference in jurisprudence between static and dynamic view. Indeed, a herculean task for a monograph let alone one of its parts. For the novel jurisprudence reader, it may result in a basic way to approach law through logic. However, this same reader should be made aware that the theories referred to—in particular the views of Hans Kelsen and H.L.A. Hart—are presented in an oversimplified manner and disjointed from the respective bodies of literature they are original parts of.

As an example, Chapter 4, Section 1 "Normative Systems and the Existence of Norms" includes some remarks on Hans Kelsen's *Pure Theory of Law* with

regards the connection between validity and existence of the norms. But the authors are unclear about the meaning of the latter. Indeed, they include a broad Kelsenian characterisation of validity in order to immediately attempt to demonstrate Kelsen's confusion between that concept and existence. However, unless the reader is someone used to the Kelsenian way of understanding and evaluating legal concepts, the introduction of a self-evident conflict is not that obvious.

Another example of oversimplification is the almost dogmatic assumption that for Hans Kelsen all norms must have an element of coercion in order to be considered part of the normative system we call law. It is true, as Navarro and Rodriguez state that Kelsen's theory is not free from complex difficulties and shortcomings but, if that was the case, their contribution to the legal philosophy is far from being guilty of charge.

Chapter 5 makes evident an arguably constant element in Rodriguez and Navarro's monograph—i.e. the almost intrinsic link with Alchourrón and Bulygin's *Normative Systems*. These pages include a very brief account of this seminal work in legal philosophy. For instance, the references to incompleteness, inconsistency, or redundancy are both brief and effective. In only a couple of paragraphs the authors are able to give a clear picture of these notions and implications. However, they are not successful this time with the examples. Knowing that both authors are originally from Argentina, it is understandable that they may refer to localisms or regionalisms when providing particular insights in the form of exemplifications. Nevertheless, for a monograph that is intended for the global audience, a certain level of abstraction is to be expected. In particular, since Freitas/Vélez Sársfield's examples assume the reader will have a basic degree of knowledge with regards civil law legislation that may be crucial at a given time and in a given place but are far from being accessible to a legal philosophy novel reader that may not have any prior knowledge of who Freitas or /Vélez Sársfield were, let alone their work.

Finally, the authors refer in Chapter 6 to legal dynamics following a similar methodology to the one presented in Chapter 5. With a promising start by

introducing Raz the authors move once again onto Alchourrón and Bulygin. The rest of the Chapter results in a brief summary of Alchourrón and Bulygin's approaches and therefore it is mainly descriptive. Examples follow but once again they are limited to the Argentinean legal system so some readers may find difficulty in grasping the application of these conceptual elements without prior knowledge of certain localisms or regionalisms.

### **General comment on the book**

Rodriguez and Navarro's latest monograph offers a well-written example of what we do when we use abstraction to review legal discourse, it includes an extensive bibliography for those who want to further their research, and it is copiously footnoted.

Whether Rodriguez and Navarro have chosen a useful objective will be for the reader to decide. Indeed, for the Anglo-American tradition in legal philosophy and legal theory may be a useful resource in the sense analytical style could benefit from the application of value-neutral deontic logics. However, it is true that the Anglo-American legal philosopher more inclined to pragmatism and a black-letter law approach may see the use of such level of abstraction and formulism rather questionable in what has to do with its usefulness.

Indeed, as a whole deontic logic introduces the reader into a mainly theoretical exercise and may, in principle, be assumed to have theoretical interest and importance only. Nevertheless, many of the conceptual elements and formulas reviewed, studied, and applied in deontic logics such as permission, obligation, and prohibition have to do with the way in which our behavior is seen and expected to be seen within society or, put it in different terms, in our life when in interrelation with other human beings. Therein, deontic logic will by default have a certain degree of practical relevance too since whichever the normative system we refer to—e.g. law, morality, religion—they all will have to do with broadly either the creation or application of rules or norms that regulate human behavior. Hence, a better understanding of the way in which these conceptual elements and formulas work will simply result in a better understanding of how the rules or norms

applied and created by and for human beings work, their nature, and their semantic and syntactic implications.

With regards the method Navarro and Rodriguez apply, it would be appropriate to think of this monographs as—literally—two different parts. The first one, probably the more accessible and useful for a novel reader in legal philosophy introduces us gently to the world of logic and deontic logic applied to normative discourse, in particular, the legal one. Basic conceptual elements are clearly defined, several examples that could potentially be applied anywhere in the world without previous necessary knowledge are offered, and classical and more modern theories are hinted. It is unfortunate the second part does not follow suit. Mainly inspired in the work of Alchourrón and Bulygin's *Normative Systems* the three last Chapters are a brief presentation of the key elements of the former. Moreover, the examples provided have to do with Argentina and the Argentinean legal system so the level of abstraction and generality presented in the first part of the monograph is missing. Therein, a more robust understanding of this part and the conceptual individual elements, structures, and classifications offered may remain inaccessible for the level of the beginner—and in consequence, it would not fulfil one of the core aims of this book. In other words, the novel reader in legal theory or legal philosophy may find the first part of the monograph a good start in order to develop a basic understanding of deontic logic applied to law. However, if he wished to have that same level of understanding about how normative systems differ from a static and dynamic point of view, the relevance of assuming the existence of normative gaps, and many more issues that are fundamental to jurisprudence, the same novel reader would have to further his research.

In tune with the previous paragraphs, there is a certain degree of contribution to the debate on the subject matter. What Navarro and Rodriguez intend to do in the sense of bridging the gap between Anglo-American and Continental styles when referring to legal theory is of an immense value. The same legal discourse reviewed by two different scholars from two different traditions brings about at times problems that may appear to be irreconcilable. Let us

think of, for example, the way in which Kelsen's works have been misinterpreted when translated into English and, in particular, after Hart's criticism that has become a dogmatic view in Anglo-American legal philosophy. Therein, by being familiar with value-neutral deontic logics it is likely that these two scholars might finally agree on the methodology to be applied when reviewing legal discourse, they would be able to utilise the same formulas and level of abstraction, and in the case of disagreement, they would be in the presence of a real difference of opinions rather than these opinions being different because they simply depart from different conceptual elements, or better expressed, they use different lenses when reviewing them.

With regards the future of deontic logic applied to the legal discourse a word of caution is appropriate at this point. Navarro and Rodriguez's monograph is an introductory work as they make clear several times. Therein, the contribution to the subject matter is mainly of didactic nature and for academics in the classroom and their students mainly. Similarly, it may be considered as being a source of future academic writing in two ways, that is a) as the first step into a more elaborated and more detailed monograph that may actually bridge the differences between the Continental and the Anglo-American style; and b) as a valuable resource for the jurisprudence, legal theory, or legal philosophy student in order to have a better understanding of legal discourse and legal reasoning.

### **Final words: recommendation**

*Deontic Logic and Legal Systems* is a welcome addition to the literature that considers the legal discourse from a level of abstraction that only legal theory or legal philosophy can offer. But while other authors have either followed Continental or Anglo-American tradition, Navarro and Rodriguez have attempted to bring the two together. Moreover, they have envisioned to do so from the level of the beginner.

Whether to recommend the book to the reader will depend, once again, on what type of reader we refer to. This book follows eminently Continental style but rather than being written in Italian, Spanish, or German, it is presented in

English. Therefore, if the novel Anglo-American reader in legal philosophy was familiar with Continental style or decided to challenge himself, I would wholeheartedly recommend the book. However, for the reader who expects to be presented with a monograph that has finally been able to bridge the difference in style, and not only does he seek a translation of language but also an adaptation of stylistic nature, that reader should keep on waiting. Indeed, this monograph could have perfectly been written in Spanish and this review could have been only about its translation into English. For a more elaborated and detailed work, as Navarro and Rodriguez suggest in the *Preface* may follow in the future, it would be advisable for the authors to either think of a less ambitious claim and make clear they will follow Continental tradition in style, or to actually adapt the style and apply the Anglo-American one.

In addition to the style, if the recommendation has to be centred on the level of analysis and the insight the monograph offers into deontic logics applied to legal discourse, the authors are very clear: this book is introductory in nature, and they are right. Particularly useful for the novel reader in legal philosophy or legal theory because of the accessible methodology applied, Part I. The same reader, however, may find Part II rather more challenging.

All in all, Navarro and Rodriguez offer another means to keep us all engaged with the most abstract side of the legal discourse and its debate, and with that only the novel and more experienced reader in legal philosophy or legal theory should already be grateful. Indeed, for the Anglo-American reader more used to a black-letter law approach when dealing with normative systems this monograph may be both a challenging yet illuminating experience.

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