

The *Tractatus Logico-Philosophicus* and the Pure Theory of Law: Points of Contact between the Early Wittgenstein's Philosophy of Language and Kelsenian Legal Positivism

*This article identifies and analyzes the structural points of contact between the philosophy of language of the early Wittgenstein — as developed in the *Tractatus Logico-Philosophicus* — and Hans Kelsen's *Pure Theory of Law*. The central hypothesis is that both works share common philosophical-epistemological assumptions: a descriptive and value-free conception of scientific language; a logical isomorphism between proposition and object; a rigid separation between fact and value; and the ideal of systematic knowledge. Through a comparative analysis of primary sources — the second edition of the *Reine Rechtslehre* (1960) and the *Tractatus Logico-Philosophicus* (1921/1922) — the article develops four thematic axes: the descriptive function of science, the distinction between causality and imputation, methodological value-freedom, and the systemic conception of the legal order. The analysis shows that the Kelsenian epistemological project finds a precise philosophical parallel in Tractarian logic, allowing for considerations on the analytical-philosophical foundations of legal positivism and on the critical implications that Wittgenstein's later revision in the *Philosophical Investigations* holds for that positivism. Once the parallels are established, Wittgenstein's own critique of his previous assertions could be directed at Kelsen's theory.*

Keywords: *Pure Theory of Law; Tractatus Logico-Philosophicus; Analytical Philosophy; Legal Positivism; Philosophy of Language.*

Introduction

Hans Kelsen and Ludwig Wittgenstein are two of the most influential figures in twentieth-century philosophical and legal thought. Kelsen, a philosopher of law, sought to elevate jurisprudence to the status of rigorous science through his *Reine Rechtslehre* — the *Pure Theory of Law* — and became the most celebrated representative of legal positivism. Wittgenstein, a philosopher of language, revolutionized Western philosophy by proposing, in the *Tractatus Logico-Philosophicus*, a theory of language as the logical picture of reality, establishing precise limits for what can be said with meaning.

Contemporaries situated in the same cultural context of early twentieth-century Vienna — an intellectual environment permeated by the scientific ideal of logical positivism, formalized mathematics, and the break with metaphysics — Kelsen and Wittgenstein are rarely studied together in a systematic, comparative fashion in the legal literature. When they do appear together, it is usually in passing, with reference to the general influence of the Vienna Circle on legal positivism. The present article aims to move beyond this superficial reference and to demonstrate that the affinity between the two projects is structural and specific, identifiable along precise thematic axes.

The shared intellectual context is relevant. Wittgenstein composed the *Tractatus* during the First World War and published it in 1921, with an English edition following

in 1922. Kelsen published the first edition of the Pure Theory of Law in 1934 and its definitive version in 1960. Between the two works, the Vienna Circle — a group of philosophers, logicians, and scientists gathered around Moritz Schlick — took the *Tractatus* as one of its central references and promoted the ideal of rigorous scientificity that also pervades the Kelsenian project. What is at stake here, however, is not a claim of direct, documented influence, but a structural convergence between two philosophical projects that respond to the same intellectual climate with strikingly analogous solutions.

The central hypothesis guiding this investigation is that the Kelsenian epistemological project and Tractarian philosophy share four structural assumptions: (a) a descriptive and value-free conception of language and science; (b) a logical isomorphism between proposition and object; (c) a rigid distinction between fact and value, with the exclusion of the evaluative from the scientific domain; and (d) a conception of the object of knowledge as a logically structured system. Demonstrating these four axes constitutes the argumentative core of the article.

The method employed is a comparative analysis of primary sources: the Pure Theory of Law, cited from the original German of the second edition (Kelsen 1960), consulted in the *Studienausgabe* edited by Matthias Jestaedt (Mohr Siebeck, 2017), with page references to the 1960 Deuticke edition; and the *Tractatus Logico-Philosophicus*, likewise cited from the original German (Wittgenstein 1984). All English renderings of the German and Portuguese sources are the author's; the original texts are given in the notes. The secondary sources — Pinto (1998), Moreno (2000), Grayling (2002), Afonso (1984), Barzotto (2004) and Vilanova (1997) — serve as interpretative support, without replacing the analysis of the original works.

The article is organized in four sections, with section 1 being this introduction. Section 2 focuses on Wittgenstein's *Tractatus*, with emphasis on the theory of the proposition, the picture theory, and the distinction between fact and value. From there, section 3 examines Kelsen's Pure Theory of Law — the descriptive function of legal science, the distinction between causality and imputation, the idea of pure science and systematic meaning. In section 4 the two theories are compared. Section 5 brings the concluding remarks, inviting the critical instance of the later Wittgenstein.

The *Tractatus Logico-Philosophicus* and the Philosophy of Language as Picture

Wittgenstein and the Context of the Tractatus

Ludwig Wittgenstein was born in Vienna in 1889, into one of the wealthiest and most cultivated families of the Austro-Hungarian Empire. He studied engineering in Manchester between 1908 and 1911 before devoting himself to philosophy at Trinity College, Cambridge, under the supervision of Bertrand Russell. During the First World War he served in the Austrian army and composed what would become his most influential work. The *Tractatus Logico-Philosophicus* was completed in 1918 and published in German in 1921; the English edition of 1922 carried an introduction by Russell, who praised the work in unequivocal terms:

To have constructed a theory of logic which is not at any point obviously wrong is to have achieved a work of extraordinary difficulty and importance. This merit, in my opinion, belongs to Mr. Wittgenstein's book, and makes it one which no serious philosopher can afford to neglect.¹

The impact of the *Tractatus* on the philosophical world was immediate and profound, especially on the current of logical positivism. Several members of the Vienna Circle took the work as a definitive guide for the project of unifying the sciences under the ideal of logical rigor. The logical positivists drew upon the Wittgensteinian criterion of meaning to support their verificationism — the view that only empirically verifiable propositions carry scientific meaning. Although Wittgenstein never formally joined the Circle — and explicitly disagreed with some of its theses — the influence of the *Tractatus* on the movement is undeniable.

The form of the *Tractatus* is singular: a series of aphoristic propositions, numbered and hierarchically organized, in which the logical weight of each proposition is indicated by its decimal numbering. Proposition 1.1 is a comment on proposition 1; proposition 2.014 elaborates 2.01, which in turn clarifies proposition 2. This structure formally mirrors the very view of language the work defends: that of a logically ordered system.

The Proposition as the Unit of Meaning

The starting point of the *Tractatus* is the claim that all philosophical problems arise from a misunderstanding of the logic of language. As Wittgenstein declares in the preface: “Das Buch will also dem Denken eine Grenze ziehen, oder vielmehr — nicht dem Denken, sondern dem Ausdruck der Gedanken” [“The book will therefore draw a limit to thinking, or rather — not to thinking, but to the expression of thoughts”] (Vorwort). More precisely, as he states in §4.003: “Die meisten Sätze und Fragen, welche über philosophische Dinge geschrieben worden sind, sind nicht falsch, sondern unsinnig” [“Most of the propositions and questions that have been written about philosophical matters are not false but nonsensical”].

The minimal unit bearing meaning in the *Tractatus* is the proposition. A proposition is a declarative sentence capable of describing a state of affairs in the world. Its sense derives from the possibility that the state of affairs it describes may or may not obtain. This criterion of meaning is rigorous: only propositions that describe possible facts are meaningful; everything else is, literally, nonsense. As the *Tractatus* states: “Nur im Zusammenhange des Satzes hat ein Name Bedeutung” [“Only in the context of a proposition does a name have meaning”] (§3.3).²

The complex propositions of ordinary language are resolved, through logical analysis, into elementary propositions, which are in turn composed of names. A name in isolation means nothing; it acquires reference only within the context of a

¹Russell's introduction to the *Tractatus* was written in English and is quoted here in the original (Wittgenstein 1961). In the Portuguese edition consulted, the passage appears at Wittgenstein 1995, p. 24.

²Original German: “Nur der Satz hat Sinn; nur im Zusammenhange des Satzes hat ein Name Bedeutung.” (Logisch-philosophische Abhandlung, §3.3). Translation by the author.

proposition. This logical atomism reveals the influence of Bertrand Russell and Gottlob Frege on the young Wittgenstein's thinking.

The process of logical analysis cannot proceed indefinitely. The decomposition of complex propositions into simpler ones must arrive, at some point, at elementary propositions — the “atoms of language”, in Margutti Pinto's formulation:

We may define it as the minimal linguistic unit, the one obtained as the ultimate result of logico-transcendental analysis: the elementary proposition is an “atom of language”.³

This propositional atomism is a condition of possibility for the entire theory of knowledge the *Tractatus* sustains. If language can describe the world with precision, it is because there exists an ultimate structure — elementary propositions — that guarantees the isomorphism between language and reality.

The Picture Theory: Language as the Image of the World

The most original contribution of the *Tractatus* to the philosophy of language is the so-called picture theory (*Bildtheorie*). According to this theory: “Der Satz ist ein Bild der Wirklichkeit. Der Satz ist ein Modell der Wirklichkeit, so wie wir sie uns denken” [“The proposition is a picture of reality. The proposition is a model of reality as we imagine it”] (§4.01).

The origin of this idea, according to biographical accounts, goes back to Wittgenstein's wartime reading of a report on a Paris court case in which a road accident was reconstructed with scale models. The philosophical question it raised was: what makes it possible for a model — an arrangement of miniature objects — to represent a real situation? The answer of the *Tractatus* is that model and reality share the same logical form:

Das Bild ist ein Modell der Wirklichkeit. [...] Das Bild besteht darin, daß sich seine Elemente in bestimmter Art und Weise zueinander verhalten. [...] Daß sich die Elemente des Bildes in bestimmter Art und Weise zueinander verhalten, stellt vor, daß sich die Sachen so zueinander verhalten. Dieser Zusammenhang der Elemente des Bildes heie seine Struktur und ihre Mglichkeit seine Form der Abbildung. [The picture is a model of reality. [...] A picture consists in its elements being related to one another in a determinate way. [...] That the elements of a picture are related to one another in a determinate way represents that things are so related to one another. Let this connection of the elements of the picture be called its structure, and its possibility, its pictorial form.] (§§2.12, 2.14, 2.15; trans. A. C. A. Maia)⁴

³Original (Portuguese): “Podemos defini-la como constituinte de uma unidade lingística mnima, aquela que obtenha como resultado ltimo da anlise lgico-transcendental: a proposio elementar  um ‘tomo de linguagem’.” (Pinto 1998, p. 148).

⁴Original German: “Das Bild ist ein Modell der Wirklichkeit. [...] Das Bild besteht darin, da sich seine Elemente in bestimmter Art und Weise zueinander verhalten. [...] Da sich die Elemente des Bildes in bestimmter Art und Weise zueinander verhalten, stellt vor, da sich die Sachen so zueinander verhalten. Dieser Zusammenhang der Elemente des Bildes heie seine Struktur und ihre Mglichkeit seine Form der Abbildung.” (Logisch-philosophische Abhandlung, §§2.12, 2.14, 2.15). Translation by the author.

The picture theory establishes a logical isomorphism between language and world: to each element of language corresponds an element of the world, and to each logical structure of propositions corresponds a structure of facts. This isomorphism can be summarized in the following schema, adapted from Grayling (2002, p. 47):

Language ↔ *World*
Propositions ↔ *Facts*
Elementary propositions ↔ *States of affairs*
Names ↔ *Objects*

What makes scientific description of the world possible is precisely this isomorphism: the proposition can describe a fact because it shares with that fact the same logical form. As Calvet de Magalhães puts it: “the logical structures of the world, thought and language are isomorphic.”⁵ It is this isomorphism that guarantees the objectivity of scientific knowledge: it is not the subject who imposes a structure on the world, but the logical form that is common to both.

It follows that the role of philosophy in the *Tractatus* is not to produce philosophical propositions about the world, but to clarify the propositions the sciences produce: “Der Zweck der Philosophie ist die logische Klärung der Gedanken” [“The purpose of philosophy is the logical clarification of thoughts”] (§4.112).⁶ This clarificatory role is analogous, as will be seen, to the role Kelsen assigns to legal science in relation to the norms enacted by authority.

Language, Fact and Value: The Limits of the Sayable

One of the most significant consequences of the picture theory concerns the status of ethics, aesthetics and values in general. If the meaningful proposition is one that describes a fact of the world — a possible state of affairs — then propositions about values lie outside the limits of meaning. Values are not facts of the world and therefore cannot be pictured by language.

Wittgenstein does not deny the existence of the ethical horizon. What he denies is the possibility of speaking about it meaningfully. Values can only be shown, lived — never said. As Moreno notes: “The ethical, like the aesthetic and the religious, cannot be expressed by language: of them we can say nothing; we can only show them.”⁷ The *Tractatus* is even more radical:

Der Sinn der Welt muß außerhalb ihrer liegen. In der Welt ist alles, wie es ist, und geschieht alles, wie es geschieht; es gibt in ihr keinen Wert — und wenn es ihn gäbe, so hätte er keinen Wert. [The sense of the world must lie outside the world. In the world

⁵Original (Portuguese): “as estruturas lógicas do mundo, do pensamento e da linguagem são isomorfas.” (Magalhães 1997, p. xxix).

⁶Original German: “Der Zweck der Philosophie ist die logische Klärung der Gedanken.” (Logisch-philosophische Abhandlung, §4.112). Translation by the author.

⁷Original (Portuguese): “O ético, assim como o estético e o religioso não podem ser expressos pela linguagem: deles nada podemos dizer, mas apenas mostrar.” (Moreno 2000, p. 24).

everything is as it is, and everything happens as it does happen; in it there is no value — and if there were, it would be of no value.] (§6.41; trans. A. C. A. Maia)⁸

The conclusion of the *Tractatus* is famous and lapidary: “Wovon man nicht sprechen kann, darüber muß man schweigen” [“Whereof one cannot speak, thereof one must be silent”] (§7).⁹ This imperative of silence before the evaluative is, as will be shown, the direct philosophical analogue of the Kelsenian methodological cut that separates legal science from ethics and politics.

It is important to stress that the distinction between the sayable and the unsayable in the *Tractatus* is not empirical but transcendental in origin: the limits of language are the limits of the world and of thought. As Pinto observes: “the fundamental objective of Tractarian philosophy is to establish the logico-transcendental conditions of possibility of language.”¹⁰ This transcendental orientation is, again, analogous to Kelsen’s concern with establishing the conditions of possibility of legal knowledge as a science.

The Pure Theory of Law and its Epistemological Presuppositions

Kelsen’s Project: A Pure Science of Law

Hans Kelsen (1881–1973) devoted his intellectual life to a single avowed objective: to raise law to the status of rigorous science, freeing jurisprudence from the influence of politics, morality, sociology and any other element “foreign” to its object. This project is announced in the very first lines of the Pure Theory of Law:

If it designates itself a “pure” theory of law, it is because it seeks to secure a cognition directed at the law alone, and because it wishes to exclude from this cognition everything that does not belong to the object exactly determined as law. That is: it aims to free legal science from all elements foreign to it. This is its basic methodological principle.¹¹

The “purity” Kelsen seeks is above all epistemological: it concerns method and object, not the content of the norms. A legal system that is unjust from a moral standpoint may be perfectly valid from a legal standpoint — and the task of the scientist of law is to describe it, not to judge it. This methodological formalism

⁸Original German: “Der Sinn der Welt muß außerhalb ihrer liegen. In der Welt ist alles, wie es ist, und geschieht alles, wie es geschieht; es gibt in ihr keinen Wert — und wenn es ihn gäbe, so hätte er keinen Wert.” (Logisch-philosophische Abhandlung, §6.41). Translation by the author.

⁹Original German: “Wovon man nicht sprechen kann, darüber muß man schweigen.” (Logisch-philosophische Abhandlung, §7). Translation by the author.

¹⁰Original (Portuguese): “o objetivo fundamental da filosofia tractatiana é estabelecer as condições lógico-transcendentais de possibilidade da linguagem.” (Pinto 1998, p. 144).

¹¹Original German: “Wenn sie sich als eine „reine“ Lehre vom Recht bezeichnet, so darum, weil sie nur eine auf das Recht gerichtete Erkenntnis sicherstellen und weil sie aus dieser Erkenntnis alles ausscheiden möchte, was nicht zu dem exakt als Recht bestimmten Gegenstande gehört. Das heißt: sie will die Rechtswissenschaft von allen ihr fremden Elementen befreien. Das ist ihr methodisches Grundprinzip.” (Kelsen 1960, p. 1). Translation by the author.

distinguishes Kelsen both from natural law theory and from the sociological and political currents of legal thought.

The legal positivism to which Kelsen belongs has its historical roots in the Enlightenment project of scientizing human knowledge. As Afonso notes, the link between Kelsen's two great purposes is clear: "to construct an autonomous and independent science of law, and to carry legal positivism to its ultimate consequences."¹² In this sense, Kelsen is at once the heir of legal positivism and its radicalization.

The Descriptive Function of Legal Science

For Kelsen, legal science is fundamentally a descriptive activity. The legal scientist does not create norms, does not evaluate them morally, does not deliberate on their justice: the scientist describes the positively valid norms as they are. This descriptive stance is the condition of possibility of scientific objectivity:

As a theory, it seeks solely and exclusively to know its object. It attempts to answer the question of what the law is and how it is — not the question of how it ought to be or how it ought to be made. It is legal science, not legal politics.¹³

The knowledge produced by the scientist is presented through descriptive propositions. These propositions have a meaning of their own precisely because they refer to their object — the legal norm — describing it without interfering with it. The scientist's role is that of a distant, external observer, whose detachment from the object guarantees the neutrality of knowledge:

Legal science has to know the law — from the outside, as it were — and to describe it on the basis of its knowledge. The legal organs — as legal authority — have first of all to produce the law, so that it can then be known and described by legal science.¹⁴

Considering Wittgenstein, the whole of natural science is the totality of true propositions about the world: "Die Gesamtheit der wahren Sätze ist die gesamte Naturwissenschaft" ["The totality of true propositions is the whole of natural science"] (§4.11).¹⁵ In both theories, scientific knowledge is a set of descriptive

¹²Original (Portuguese): "o de construir uma ciência do Direito autônoma e independente e o de levar o Positivismo Jurídico às últimas consequências." (Afonso 1984, p. 5).

¹³Original German: "Als Theorie will sie ausschließlich und allein ihren Gegenstand erkennen. Sie versucht, die Frage zu beantworten, was und wie das Recht ist, nicht aber die Frage, wie es sein oder gemacht werden soll. Sie ist Rechtswissenschaft, nicht aber Rechtspolitik." (Kelsen 1960, p. 1). Translation by the author.

¹⁴Original German: "Die Rechtswissenschaft hat das Recht – gleichsam von außen her – zu erkennen und auf Grund ihrer Erkenntnis zu beschreiben. Die Rechtsorgane haben – als Rechtsautorität – das Recht allererst zu erzeugen, damit es dann von der Rechtswissenschaft erkannt und beschrieben werden kann." (Kelsen 1960, p. 74). Translation by the author.

¹⁵Original German: "Die Gesamtheit der wahren Sätze ist die gesamte Naturwissenschaft (oder die Gesamtheit der Naturwissenschaften)." (Logisch-philosophische Abhandlung, §4.11). See also §6.341: "Die Newtonsche Mechanik z.B. bringt die Weltbeschreibung auf eine einheitliche

propositions that maintain an isomorphic relationship with their object. The role of science is to describe, and only that; it does not prescribe, evaluate or judge.

Causality and Imputation: The Logical Form of the Legal Norm

One of the most original distinctions in the Pure Theory of Law is that between the principles of causality and imputation, which grounds the difference between natural sciences and normative sciences. Although all sciences share the descriptive function, the objects they describe are different — and so, consequently, are the logical forms of their propositions.

In the natural sciences, propositions describing natural laws connect antecedent and consequent through what Vilanova (1997) calls an ontic functor — causal necessity. When metal is heated, it expands; this occurs necessarily, by virtue of physical laws. The proposition of natural science takes the form: “If A is, then B necessarily is.”

In the normative sciences, and in law above all, antecedent and consequent are connected through a deontic functor — the principle of imputation. Kelsen introduces the distinction clearly: “In the description of a normative order of the mutual behavior of human beings, that other ordering principle, different from causality, is applied — the principle that can be designated as imputation.”¹⁶ A legal norm that punishes theft with imprisonment does not establish a relation of natural necessity: a person may steal and yet never be imprisoned. The link is conventional, enacted by legal authority, and therefore operates on the plane of the ought. As Kelsen states:

Quite evidently, the crime is not linked to the punishment, the civil delict to compulsory execution, or the contagious disease to the internment of the sick person, in the way a cause is linked to its effect. The legal proposition does not state, as the law of nature does, that when A is, B is, but that when A is, B ought to be — even if B perhaps actually is not.¹⁷

The crucial epistemological consequence is that the legal proposition — through which the scientist describes the norm — must share with its object (the norm) the same logical form. A deontic norm cannot be adequately described by causal propositions, because the logical forms diverge. As Kelsen clarifies:

The legal propositions to be formulated by the science of law can only be ought-propositions (*Soll-Sätze*). But — and herein lies the logical difficulty in the presentation of this state of affairs — in using the word “ought”, the legal proposition formulated by

Form.” [“Newtonian mechanics, for example, imposes a unified form on the description of the world.”] Translations by the author.

¹⁶Original German: “In der Beschreibung einer normativen Ordnung des gegenseitigen Verhaltens von Menschen kommt jenes andere, von der Kausalität verschiedene Ordnungsprinzip zur Anwendung, das als Zurechnung bezeichnet werden kann.” (Kelsen 1960, p. 79). Translation by the author.

¹⁷Original German: “Ganz offenbar ist das Verbrechen mit der Strafe, das Zivildelikt mit der Zwangsvollstreckung, die ansteckende Krankheit mit der Internierung des Kranken, nicht als eine Ursache mit ihrer Wirkung verknüpft. Im Rechtssatz wird nicht, wie im Naturgesetz, ausgesagt, daß, wenn A ist, B ist, sondern, daß, wenn A ist, B sein soll, auch wenn B vielleicht tatsächlich nicht ist.” (Kelsen 1960, p. 80). Translation by the author.

the science of law does not take on the authoritative significance of the legal norm it describes; in the legal proposition, the “ought” has a merely descriptive character.¹⁸

Considering the similarities, Wittgenstein establishes that “Das Bild hat mit dem Abgebildeten die logische Form der Abbildung gemein” [“The picture has the logical form of representation in common with what it depicts”] (§2.2).¹⁹ On the other hand, Kelsen reaffirms this principle by requiring that legal propositions reflect the deontic nature of the object they describe, without losing their descriptive character. The logical isomorphism between proposition and object — the condition of possibility of scientific knowledge — is present in both theories. The very conception of logical form as the mode of combination of the constituents of the proposition, which the *Tractatus* carries to its limit, has its roots in the Russellian program of philosophical logic (Milkov 2023); Russell had, in fact, initially proposed “Philosophical Logic” as the title of Wittgenstein’s work.

Law as a Matter of Fact: Methodological Value-Freedom

For the methodological purity of legal science to be preserved, Kelsen requires that law be treated by the scientist as fact — the set of positively valid norms — and not as value. The legal scientist formulates no moral judgements about the norms described: the scientist describes what is, regardless of what ought to be according to any ethical system.

This demand for value-freedom places Kelsen in a position diametrically opposed to natural law theory, for which the validity of law depends on its conformity with morality or reason. For Kelsen, legal validity is a matter of belonging to the positive normative system, not of moral content. As Bobbio puts it:

In legal-positivist language the term “law” is thus absolutely value-free, that is, devoid of any evaluative connotation or emotional resonance: law is law regardless of whether it is good or bad, a value or a disvalue.²⁰

The consequence for the theory of interpretation is significant. Since science can only describe, not evaluate, it cannot determine which is the “correct” interpretation of a norm among the various possible ones. The most that legal science can do is identify the “frame” — the set of possible interpretations within the semantic limits of the norm — without deliberating on which should be chosen:

¹⁸Original German: “Die von der Rechtswissenschaft zu formulierenden Rechtssätze können nur Soll-Sätze sein. Aber – und dies ist die logische Schwierigkeit, die in der Darstellung dieses Sachverhaltes vorliegt – mit dem Gebrauch des Wortes „sollen“ nimmt der von der Rechtswissenschaft formulierte Rechtssatz nicht die autoritative Bedeutung der von ihm beschriebenen Rechtsnorm an; das „Sollen“ hat im Rechtssatz einen bloß deskriptiven Charakter.” (Kelsen 1960, p. 83). Translation by the author.

¹⁹Original German: “Das Bild hat mit dem Abgebildeten die logische Form der Abbildung gemein.” (Logisch-philosophische Abhandlung, §2.2). Translation by the author.

²⁰Original (Portuguese): “Na linguagem jurisdpositivista o termo ‘direito’ é então absolutamente avalorativo, isto é, privado de qualquer conotação valorativa ou ressonância emotiva: o direito é tal que prescinde do fato de ser bom ou mau, de ser um valor ou um desvalor.” (Bobbio 1996, p. 131). Translation by the author.

If by “interpretation” we understand the cognitive ascertainment of the sense of the object to be interpreted, the result of a legal interpretation can only be the ascertainment of the frame that the law to be interpreted represents, and thereby the cognition of the several possibilities given within this frame.²¹

For Wittgenstein, meaningful propositions describe the factual world; with values lying beyond the limits of the sayable: “Der Sinn der Welt muß außerhalb ihrer liegen” [“The sense of the world must lie outside the world”] (§6.41).²² For Kelsen, the evaluative content of the norm lies beyond the limits of scientific knowledge: science describes legal facts, not ethical values. In any case, there is no room for a scientific discourse on values.

The Legal Order as a Normative System

The Kelsenian conception of law is essentially systemic: law is not an isolated norm but a system of valid norms, hierarchically organized around a basic norm (*Grundnorm*). The *Grundnorm* is not a norm enacted by authority; it is a logical presupposition of legal thought, a transcendental condition of possibility of the legal order as a unity.

Barzotto’s definition is precise: “law is not, however, a norm, but a system of norms. The legal character of a norm derives from its belonging to a system of legal norms known as the ‘legal order’.”²³ Validity, in this context, is the criterion of the norm’s belonging to the system — not a criterion of moral justice or social efficacy.

Positivist reasoning is, for this reason, typically systemic. The legal order is conceived as a set of norms that enjoy internal harmony and a hierarchy among themselves. Legal science, in turn, must reflect this systematization in its description. Kelsen is explicit about the unifying role of legal science:

Just as the chaos of sense perceptions becomes a cosmos — that is, nature as a unitary system — only through the ordering cognition of science, so the multitude of general and individual legal norms enacted by the legal organs — the material given to legal science — becomes a unitary, contradiction-free system, a legal order, only through the cognition of legal science.²⁴

²¹Original German: “Versteht man unter „Interpretation“ die erkenntnismäßige Feststellung des Sinnes des zu interpretierenden Objektes, so kann das Ergebnis einer Rechtsinterpretation nur die Feststellung des Rahmens sein, den das zu interpretierende Recht darstellt, und damit die Erkenntnis mehrerer Möglichkeiten, die innerhalb dieses Rahmens gegeben sind.” (Kelsen 1960, p. 349). Translation by the author.

²²Original German: “Der Sinn der Welt muß außerhalb ihrer liegen. In der Welt ist alles, wie es ist, und geschieht alles, wie es geschieht; es gibt in ihr keinen Wert — und wenn es ihn gäbe, so hätte er keinen Wert.” (Logisch-philosophische Abhandlung, §6.41). Translation by the author.

²³Original (Portuguese): “o direito não é, contudo, uma norma, mas um sistema de normas. O caráter jurídico de uma norma dá-se por sua pertinência a um sistema de normas jurídicas conhecida por ‘ordenamento jurídico’.” (Barzotto 2004, p. 36). Translation by the author.

²⁴Original German: “So wie das Chaos sinnlicher Wahrnehmungen erst durch die ordnende Erkenntnis der Wissenschaft zum Kosmos, das heißt zur Natur als einem einheitlichen System wird, so wird die Fülle der von den Rechtsorganen gesetzten generellen und individuellen Rechtsnormen, das ist das der Rechtswissenschaft gegebene Material, erst durch die Erkenntnis

This systemic conception has its precise parallel in the *Tractatus*. For Wittgenstein, “Die Gesamtheit der Sätze ist die Sprache” [“The totality of propositions is language”] (§4.001), and “Die Welt ist die Gesamtheit der Tatsachen, nicht der Dinge” [“The world is the totality of facts, not of things”] (§1.1). The system precedes its parts: an elementary proposition makes sense only in the context of language as a totality, just as an individual legal norm is valid only in the context of the legal order as a whole. In both cases, unity is the condition of possibility of the parts.

Comparative Analysis: The Structural Affinity between the Works

The Common Intellectual Climate: Vienna and the Scientific Ideal

Before systematizing the points of convergence, the affinity between Kelsen and Wittgenstein must be situated historically. Both are products of the same cultural context: Vienna in the early twentieth century, a city where a rigorous philosophical inheritance — Kant’s critical philosophy, Mach’s empiricism, the new logic of Frege and Russell — met an intense debate over the foundations of scientific knowledge.

The Vienna Circle, formed around Moritz Schlick in the early 1920s and including Carnap, Neurath, Feigl and others, took the *Tractatus* as one of its central references. As noted earlier, the logical positivists drew on the Wittgensteinian thesis about the limits of language to ground their verificationism — even though Wittgenstein himself never belonged to the Circle and rejected several of its conclusions.

Kelsen, in turn, was well acquainted with the Viennese intellectual environment. His project of methodological purification of jurisprudence responds to the same impulse as logical positivism: to purge from science everything that cannot be treated objectively and verifiably. The Kelsenian methodological cut — which excludes morality, politics and sociology from legal science — is structurally analogous to the logical positivists’ criterion of meaning, which excludes the metaphysical and the evaluative from scientific language.

The Four Axes of Convergence

The analysis in the preceding sections allows us to identify four axes of structural convergence between the *Tractatus* and the Pure Theory of Law, which sustain the article’s central hypothesis:

- (1) The descriptive conception of language and science. Both the *Tractatus* and the Pure Theory of Law share a descriptive view of scientific knowledge, without taking values into consideration. For Wittgenstein, the meaningful proposition describes a state of affairs in the world: it asserts that a given fact exists or can exist. For Kelsen, legal science describes the positively valid

der Rechtswissenschaft zu einem einheitlichen, widerspruchsfreien System, zu einer Rechts-Ordnung.” (Kelsen 1960, p. 74). Translation by the author.

- 1 norms: it asserts what the law is, not what it ought to be. Kelsen makes the
 2 point clear that science deals with what it is, not what it ought to be.
- 3 (2) The logical isomorphism between proposition and object. Wittgenstein, in the
 4 *Tractatus*, asserts that the proposition is a picture of reality because it shares
 5 with reality the same logical form. Kelsen distinguishes causal propositions
 6 (for the natural sciences) from deontic propositions (for legal science): the
 7 scientific proposition must share with its object — the norm — the logical
 8 form that characterizes it. In the end, scientific knowledge is possible because
 9 language can mirror the structure of its object.
- 10 (3) The separation between fact and value. For Kelsen, moral and political values
 11 are excluded from the object of legal science because they contaminate the
 12 methodological purity of scientific knowledge. As for Wittgenstein, values
 13 are not facts of the world and therefore cannot be expressed by meaningful
 14 propositions: about them one must remain silent (the idea of the mystic). In
 15 both cases, the exclusion of the evaluative is structurally necessary to
 16 guarantee scientific objectivity.
- 17 (4) The systemic conception of the object of knowledge. The *Tractatus* conceives
 18 the world as “die Gesamtheit der Tatsachen” [“the totality of facts”] (§1.1)
 19 and language as “die Gesamtheit der Sätze” [“the totality of propositions”]
 20 (§4.001): systems in which the parts acquire meaning only in relation to the
 21 whole. Kelsen conceives law as the totality of valid norms, a system in which
 22 the validity of each individual norm depends on the complete system, from a
 23 formal point of view. In the end, the parts have meaning — or validity — only
 24 within the horizon of totality.

25 26 *The Question of Influence versus Structural Affinity*

27
28 A methodological clarification is in order. The convergence identified between
 29 Kelsen and Wittgenstein does not imply a demonstrable relation of direct influence.
 30 There is no textual evidence that Kelsen read the *Tractatus* or that he formulated his
 31 theory on the basis of Wittgensteinian theses. What can be asserted with confidence
 32 is that the two works respond to the same intellectual climate — the Viennese
 33 scientific positivism of the early twentieth century — with philosophically analogous
 34 solutions.

35 This structural affinity is, in fact, more significant than a simple relation of
 36 influence would be. It indicates that the epistemological presuppositions the *Tractatus*
 37 articulates explicitly and systematically — description, isomorphism, the exclusion of
 38 the evaluative, systematicity — are the very ones that underlie the Kelsenian project,
 39 even if Kelsen does not thematize them philosophically in the same terms. The
 40 *Tractatus*, in this sense, functions as a kind of philosophical explication of the implicit
 41 foundations of the Pure Theory of Law.

42 This has an important interpretative consequence: by shedding light on the
 43 analytical-philosophical bases of the Pure Theory of Law, the comparison with the
 44 *Tractatus* allows us to identify with greater precision what the revision Wittgenstein
 45 undertook of his own philosophy — in the *Philosophical Investigations* — implies
 46 for the Kelsenian project. If the *Tractatus* is the philosophical analogue of the Pure

Theory of Law, the critique that the later Wittgenstein directs at his earlier self reaches Kelsen's theory as well, indirectly but powerfully.

Concluding Remarks

This article has demonstrated that Hans Kelsen's Pure Theory of Law and Ludwig Wittgenstein's *Tractatus Logico-Philosophicus* share common structural presuppositions that make them philosophically convergent works. The convergence was identified along four axes: the descriptive and value-free conception of science, the logical isomorphism between proposition and object, the separation between fact and value, and the systemic conception of the object of knowledge.

This convergence is not accidental. It reflects the same intellectual impulse that marked early twentieth-century Vienna: the desire to construct objective knowledge, freed from metaphysics, with absolute precision. This knowledge would be the one worth producing, resulting, in Wittgenstein, a theory of language as the logical picture of reality and, in Kelsen, a theory of law as a normative system describable with scientific objectivity, not bowing to the unscientific demands of morals.

The relevance of this demonstration carries direct interpretative implications for understanding the internal limits of legal positivism. If the Pure Theory of Law rests, structurally, on the same philosophical-linguistic presuppositions as the *Tractatus*, then the criticisms the later Wittgenstein directs at his own earlier philosophy — by introducing, in the *Philosophical Investigations*, the concepts of language-games, forms of life and meaning as use — constitute an indirect but powerful philosophical critique of the Kelsenian project.

In the *Philosophical Investigations*, Wittgenstein revisits the descriptive and referential conception of language: language is no longer just a picture of the world, but a set of practices embedded in forms of life, a much more complex view of how language works and interacts with reality. Language games are multiple and complex, including the language of science, and neither can be reduced to a single logic.

Transposed to the legal domain, this revision suggests that law cannot be adequately described by a single method, from a single angle. The Kelsenian methodological cut — which excludes morality, politics and sociology from the legal domain — yields not a neutral description of law, but a partial image of it, one in which the method determines in advance what will count as its object. Law, as a human activity embedded in forms of life, demands to be understood in its multiplicity of language-games — and cannot be reduced to a system of valid norms abstracted from their context. The search for precision, as much as it would supposedly benefit Law in general, is bound to fail under the incredibly complex nature of language and values.

This critical horizon, however, exceeds the limits of the present article and constitutes the object of a subsequent investigation, which will take the *Philosophical Investigations* as an instrument for a critical reading of the Pure Theory of Law. What the present work has established is the necessary presupposition for that critique: the structural affinity between the *Tractatus* and Kelsenian theory, which makes the later Wittgenstein a solid basis for a critique of normativist legal positivism.

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