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Law, Truth, and Reason

A Treatise on Legal Argumentation

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Chapter 3
Coherence Theory of Law: Shared Congruence Among Arguments Drawn from the Institutional and Societal Sources of Law

3.1 Truth As Coherence Among the Sentences of a Scientific Theory

Coherence is derived from the Latin term *cohaerentia*, with reference to the quality of certain things, objects, phenomena, or entities of being *connected* or *interrelated* vis-à-vis one another. The respective verb *cohaereo* refers to the quality of being *connected* (to something), *interrelated* (with something), or *held together* (by something). Here, coherence is taken in the linguistic and philosophical, and not literary or psychological, sense of the term. Thus, coherence has to do with the *semantics*, and not with the syntax or pragmatics, of language. The *syntagmatic* and *paradigmatic* qualities of language will be addressed in detail below, since they are an integral part of any narrative structure or pattern in language.

The coherence theory of truth rejects the idea that the truth of an idea, belief, assertion, or conception could be defined as the presence of an isomorphic, picture relation between a linguistic expression and a state of affairs in the world. Instead, all knowledge we may have of the world is intertwined and interlocked with the totality of other beliefs and conceptions we consider true. Moreover, all human knowledge is ultimately conditional on the epistemic and logico-linguistic prerequisites that define the prevailing *order of things*, in the sense of the links that bind together the "words", or linguistic expressions, and the "things", or the phenomena in the world. The French philosopher Michel Foucault has suggested adopting the two terms *épistémè* and *historical* a priori of the phenomenon under consideration.[1] Contrary to what the adherents of philosophical phenomenology would have us believe, there is no *epistemic shortcut* or a somehow privileged access to the true, a priori essence of the "things", entities, or phenomena "out there", to the effect of bypassing and placing into brackets the epistemic and logico-linguistic constraints that are placed on all human knowledge by the prevalent world-view. Thus, the coherence theory of truth bypasses, ignores, or "brackets" the external reference of linguistic concepts "out there".

[1] Foucault, *Les Mots et les choses*; cf. also Foucault, *L'Archéologie du savoir*.

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The philosophical predicament of truth and knowledge under such premises has to do with the lack of any external reference of linguistic propositions: how can we distinguish true assertions of the world from, say, perfectly coherent fairy-tales and other plain fiction tales? According to the critics, naïve belief in textual coherence as the ultimate criterion of the validity of an assertion resembles Ludwig Wittgenstein's argument in his *Philosophical Investigations* to the effect that buying several copies of some newspaper would guarantee the validity of some individual item of news in it.[2] Still, even if the *definition* of truth were attached to the existence of structural similarity between language and a state of affairs in the world, as suggested by the correspondence theory, the operative *criteria* for judging the truth-value of an individual assertion still need to attached to the web of sentences and beliefs that are collectively upheld by the members of the community, since all knowledge must be somehow *conceptualized* before its validity can be judged. Any intuitive beliefs or revelations that cannot be given a comprehensible linguistic formulation and be communicated to others cannot satisfy the criteria of true knowledge, either.

According to the coherence theory of truth, knowledge can only be based on an internally *coherent* set of ideas, beliefs, sentences, or assertions expressed by means of language. As a consequence, the truth-value of an individual assertion can only be judged in its relation to all the other sentences concerning that field of life. Truth is a quality *internal* to a system of beliefs that is collectively sustained by the members of the community at a certain moment of time, and not an isomorphic relation between a linguistic expression and the states of affairs in the world. We have no access to reliable knowledge of the states of affairs in the world without first having gained access to some (fairly coherent) system of linguistic concepts by means of which the phenomena, states of affairs, or the like entities in the world can be depicted.

Ordinary language is not a closed system of concepts and sentences. Since the number of concepts and meaningful linguistic sentences is unlimited, judging the truth-value of a sentence – at least in principle – necessitates having acquired an understanding of an infinitely large set of other linguistic expressions. In real life, the set of sentences under investigation is of course much more focused, in line with the epistemic needs and interests involved in the investigation. As a consequence, the frame of linguistic sense and reference may be restricted to, for instance, the set of sentences that make up the branches of theoretical physics and astronomy, if the individual assertion under scrutiny deals with the Einsteinian general and specific theory of relativity. Similarly, it might be focused on a set of sentences on how to construct and read the law, as derived from the institutional and societal sources of law in a given legal system, if the individual assertion under consideration is a legal assertion.

[2] Wittgenstein, *Philosophical Investigations – Philosophische Untersuchungen*, § 265 (p. 94/94e).

Otto Neurath (1882–1945), one of the key figures of logical positivism (the *Wiener Kreis*), put the philosophical and scientific credo of the coherence theory vis-à-vis knowledge and truth concisely as follows[3]:

> If a statement is made, it is to be confronted with the totality of existing statements. If it agrees with them, it is joined to them; if it does not agree, it is called "untrue" and rejected; or the existing complex of statements of science is modified so that the new statement can be incorporated; the latter decision is mostly taken with hesitation. *There can be no other concept of "truth" for science*.

He also pointed out[4]:

> *Assertions are to be compared with assertions*, not with "experiences" or with a world, or with anything else. All of these senseless *duplications* belong in a more or less refined metaphysics and are therefore unacceptable. Each new assertion will be contrasted with the totality of those available assertions that have already been brought into harmony with each other. *An assertion is called "correct" when it can be incorporated* into this totality.

In legal analysis, the coherence theory places the focus on the relation between the two kinds of sentences involved, viz. sentences on the *outcome* of interpretation, on the one hand, and sentences on *justificatory reasons* for reaching the said outcome, on the other. If the presence of an isomorphic relation between the two fact-descriptions is successfully challenged, the isomorphic theory of law will leave the judge empty-handed, with no further means of legal analysis and construction. The coherence theory of interpretation, on the contrary, provides the judge or a legal scholar with a far more flexible intellectual toolbox for legal analysis. In terms of Wróblewski's equally three-partite categories of judicial decision-making we are now dealing with *legal* and *rational* judicial decision-making. Still, the very notion of *coherence* needs to be further elaborated and, if possible, defined.

3.2 In Search for the Concept of Coherence

3.2.1 A Quantitative Approach: "The More/Longer/Greater (. . .), the More Coherent the Theory"

What does the concept of *coherence* mean, to be more precise, when applied to a scientific theory, a set of assertions on how to construct and read the law, or any other set of linguistic assertions that share a common subject matter?

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[3]Neurath, *Philosophical Papers*, p. 53. (Italics by Neurath.) Cited in Coffa, *The Semantic Tradition from Kant to Carnap*, p. 365. – Coffa's book is an excellent account of the historical unfolding of modern semantics "from Kant to Carnap", as the title of the book has it.

[4]Neurath, "Soziologie im Physikalismus", p. 403 (italics by Neurath), as cited in Coffa, *The Semantic Tradition from Kant to Carnap*, p. 365. Cf. Quine, "Two Dogmas of Empiricism", pp. 42–43.

The concept of coherence can be divided into the two categories of *synchronic* and *diachronic* coherence. The presence or absence of *synchronic* coherence in a set of linguistic assertions can be determined *sub speciae aeternitatis*, in disregard of the constraints of time and possible change in time of the object considered. The notion of *diachronic* coherence, on the other hand, underscores the impact of tradition, history, and temporal change (or immutability) upon the subject matter. In the context of law, both the synchronic and the diachronic conceptions of coherence may gain relevance.[5] As argued above, the presence or absence of coherence in a set of linguistic expressions must be sustained without making reference to the states of affairs "out there" in the world, if a coherentist stance in philosophy is to be maintained in a consistent manner.

The definition of coherence in a standard legal dictionary makes a reference to Aleksander Peczenik's notion of *normative coherence* in the sense that "legal principles support and explain a number of legal rules and make them coherent".[6] The definition then makes a reference to Ronald Dworkin's idea of legal integrity. I will first consider Aleksander Peczenik's and Robert Alexy's notion of coherence, and I will then evaluate Ronald Dworkin's contribution to the topic.

Aleksander Peczenik and Robert Alexy define coherence as a set of qualities that have to do with the *internal sentential structure*, the *concepts* utilized, and the *subject matter* of the theory.[7] The two authors then introduce the idea of *perfect supportive structure* as the normative ideal to be pursued when judging assertions on how to construct and read the law[8]:

> The more the statements belonging to a given theory approximate a perfect supportive structure, the more coherent the theory.

According to Peczenik and Alexy, the following criteria are pertinent for the evaluation of the attainment, or failure of attainment, of a *perfect supportive structure* of a theory[9]:

1. *Number of Supportive Relations*:
   Ceteris paribus, the more statements belonging to a theory are supported, the more coherent the theory.
2. *Length of Supportive Chains*:
   Ceteris paribus, the longer the chains of reasons belonging to a theory are, the more coherent the theory.

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[5] On the two notions of *synchronic* and *diachronic* coherence, cf. Peczenik, "Coherence", p. 124.

[6] Peczenik, "Coherence", p. 124.

[7] Peczenik, "Coherence", pp. 124–125.

[8] Peczenik, *On Law and Reason*, p. 160; Alexy and Peczenik, "The Concept of Coherence and Its Significance for Discursive Rationality", p. 131.

[9] Peczenik, *On Law and Reason*, pp. 160–177; Alexy and Peczenik, "The Concept of Coherence and Its Significance for Discursive Rationality", pp. 132–143, 144–145.

3. *Strong Support Between Statements*:
   Ceteris paribus, the more statements belonging to a theory are strongly supported by other statements, the more coherent the theory.
4. *Connections Between Supportive Chains*:

   4.1. *Ceteris paribus*, the greater the number of conclusions supported by the same premise belonging to the theory in question, the more coherent the theory.
   4.2. *Ceteris paribus*, the greater the number of independent sets of premises within the theory in question, such that the same conclusion follows from each one of these sets, the more coherent the theory.

5. *Priority Order Between Reasons*:
   If the theory in question contains principles, then, *ceteris paribus*, the greater the number of priority relations between the principles, the more coherent the theory.
6. *Reciprocal Justification of Statements*:

   6.1. *Ceteris paribus*, the greater the number of reciprocal empirical relations between statements belonging to a theory, the more coherent the theory.
   6.2. *Ceteris paribus*, the greater the number of reciprocal analytical relations between statements belonging to a theory, the more coherent the theory.
   6.3. *Ceteris paribus*, the greater the number of reciprocal normative relations between statements belonging to a theory, the more coherent the theory.

7. *Generality of Concepts and Arguments*:

   7.1. *Ceteris paribus*, the more statements without individual names a theory uses, the more coherent the theory.
   7.2. *Ceteris paribus*, the greater number of general concepts belong to a theory, and the higher their degree of generality, the more coherent the theory.
   7.3. *Ceteris paribus*, the more resemblances between concepts used within a theory, the more coherent the theory.

8. *Conceptual Cross-Connections*:

   8.1. *Ceteris paribus*, the more concepts a given theory T_1 has in common with another theory T_2, the more coherent these theories are with other.
   8.2. *Ceteris paribus*, the more concepts a given theory T_1 contains that resemble the concepts used in another theory T_2, the more coherent these theories are with each other.

9. *Number of Cases Covered*:
   Ceteris paribus, the greater number of individual cases a theory covers, the more coherent the theory.
10. *Diversity of Fields of Life Covered*:
    Ceteris paribus, the more fields of life a theory covers, the more coherent the theory.

Peczenik's and Alexy's definition of coherence is thus given in terms of attaining (or at least pursuing) *perfect supportive structure* in a theory or set of sentences. But can the concept of coherence really be defined with a set of *quantified* attributes attached to a scientific theory or other set of sentences? I think not. As I see it, the notion of coherence needs has to be defined existing in the world a set of *qualitative*, not quantitative, criteria.

In specific, the number of cases and the diversity of fields of life covered by a theory (= points 9 and 10) do not deal with the coherence or incoherence of a theory or a set of sentences at all, but rather the field of application of the theory or set of sentences, which ought to be kept apart from the criteria of internal consistency and coherence involved. Similarly, the generality of the terms utilized in a theory (= point 7) does not have with the coherence of the theory to do, but only with the scope of concepts used in it. In addition, I find several of Peczenik's and Alexy's criteria less than entirely self-evident as constituents of the concept of coherence, such as the number, rather than the intensity, of the supportive relations (= point 1), the length of the chains of reasons (= point 2),[10] the number of priority relations between principles (= point 5),[11] relation of the theory to individual and general concepts (= point 7),[12] coverage of the theory vis-à-vis individual cases and fields of life (= points 9 and 10).[13]

On the other hand, the criteria that have to do with the relative portion of strongly supported sentences (= point 3), the connections between supportive chains (= point 4), the impact of analytical, empirical, and normative relations between sentences (= point 6), and the conceptual cross-connections between concepts (= point 8) are patently significant, when judging the presence or absence of coherence in a theory or set of sentences. Still, Peczenik's and Alexy's claim of stating such criteria in quantified terms cannot be upheld.[14]

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[10] With reference to Peczenik's points 1 and 2: an interlocking "seamless web" of a few apt reasons given in support of a certain conclusion might well be more coherent than an elaborate puzzle-work of hundreds or even thousands of wildly criss-crossing sentences, since in the latter case the internal relations between sentences are prone to become more complex and open to alternative interpretations (unless we are dealing with the fully unambiguous sentences of formal logic, artificial languages, or mathematics).

[11] Value-laden principles and other legal standards that satisfy Dworkin's twin criteria of enjoying adequate *institutional support* and *sense of approval* in the legal community cannot be locked into a fixed system of legal concepts or decision-making criteria, due to the methodology of *weighing and balancing* the value-laden principles for the case at hand. In this, legal principles are radically different from legal rules that can be placed in such a system, as exemplified by Hans Kelsen's and A. J. Merkl's idea of the norm hierarchy or norm pyramid.

[12] Why should general concepts yield more easily into parts of a theory of coherence? In fact, the issue at hand concerns the extent of the field of application of the theory in question, with general concepts providing for a larger domain of application than individual concepts, and not the coherence of the theory.

[13] In other words, the semantic reference of a theory should be distinguished from its internal structure of argumentation, while it is only the latter issue that has something to do with the concept of coherence.

[14] Peczenik answers the critique of possibly highly coherent fairy-tales by writing: "The contact with reality is provided by the criteria of coherence. Criterion 9 [number of cases covered]

It may even be the case that Peczenik and Alexy commit a *category-mistake* in the Rylean sense,[15] when they define the concept of coherence in a such purely quantified terms with reference to the common argumentation structure: "the more/longer/greater (some element of) the theory *x*, the more coherent the theory *x*". To put it bluntly, the presence or absence of coherence in a theory or a set of sentences cannot be captured by quantified formula of the type "*ceteris paribus*, the more statements belonging to a theory are supported, the more coherent the theory" (= point 1), "*ceteris paribus*, the longer the chains of reasons belonging to a theory are, the more coherent the theory" (= point 2), or "*ceteris paribus*, the greater the number of independent set of premises within the theory or the number of conclusions supported by the same premise in the theory in question, the more coherent the theory" (= points 4.1. and 4.2.), without transforming the traditional notion of law into a something like a mathematical calculation of legal theory-construction. As I see it, a totally different approach is needed here.

Moreover, the notion of coherence, too, is patently exposed to G. E. Moore's *open question argument*. The primary target of Moore's critique was the variety of theories on ethics that, according to him, all fell victim to the *naturalistic fallacy*, when they gave a definition of "good" in terms of, say, the greatest quantity of happiness brought to the greatest number as in Jeremy Bentham's utilitarian social philosophy. According to Moore, the concept of *good* is in the last resort indefinable. Any naturalistic or reductive would-be definition of "good" is invariably exposed to the open question argument: now that you have defined the notion of "good" as *x*, is *x* (genuinely) "good"?[16]

The only escape from Moore's open question argument is by acknowledging the ultimately *indefinable* character of the notion of "good", and by then having resort to the *meta-level* linguistic analysis of the concepts of "good", "right", and "just" in the different contexts or situations of ordinary language, as exemplified by the Oxford school of linguistic philosophy. Gilbert Ryle's *The Concept of Mind*, Georg Henrik von Wright's *The Varieties of Goodness*, and H. L. A. Hart's *The Concept of Law* are prime examples thereof.[17] Moore's open question argument of course affects any would-be definition of coherence, no matter whether given in quantified or qualified terms, so that route will not lead us very far out from the deadlock.

As I see it, the validity of any suggested definition of the notion of coherence can only be judged in light of its use in the legal analysis and its match with the subject

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thus demands that a coherence theory covers a great number of 'data candidates', or 'certain statements'. Criterion 3 [strong support between statements] relates coherence to presupposed statements, which characterise a certain practice, such as legal reasoning." Peczenik, *On Law and Reason*, pp. 179–181 (the citation on p. 179). – Still, the Moorean open question argument haunts the theory: *is* such a notion in fact equal to coherence?

[15] Ryle, *The Concept of Mind*, pp. 17–19.

[16] Moore, *Principia Ethica*, pp. 58–72. " 'Good', then, if we mean by it that quality which we assert to belong to a thing, when we say that the thing is good, is incapable of any definition, in the most important sense of that word." Moore, *Principia Ethica*, p. 61. On the naturalistic fallacy and its critique, Moore, *Principia Ethica*, p. 62 et seq.

[17] von Wright, *The Varieties of Goodness*.

matter of such analysis. I think a qualitative approach fares better in that respect. As a consequence, coherence is a *relational* concept that has to do the *internal structure* of a scientific theory or set of sentences with reference to the mutual relations of the concepts, sentences, or arguments entailed vis-à-vis one another, when read in light of some key of interpretation adopted. I will return to the (re)definition of coherence after having tackled the role of legal principles in Ronald Dworkin's jurisprudence and the impact of the *Duhem-Quine Thesis*, as adopted in the philosophy of science, on Dworkin's theory of law.

3.2.2 A Qualitative Approach: "That the Law is Structured by a Coherent Set of Principles About Justice and Fairness and Procedural Due Process. . ."

Ronald Dworkin has defined legal coherence as *law as integrity*, i.e. as "the best constructive interpretation of past political decisions".[18] He is committed to a set of *qualitative*, not quantitative criteria, as constitutive of legal coherence. His conception of law is intertwined with the idea of legal principles with possibly no more than oblique but still legally adequate *institutional support* and *societal approval*.[19] Yet, instead of presenting a fairly precise, down-to-earth definition of legal coherence, Dworkin opts for a loose-edged collection of metaphors and analogies to corner the issue, such as the *chain novel* metaphor, where the judge is likened to the author of a novel written *seriatim*, based on a constructive reading of the prior legal and political decisions; the idea of courts as the capitals and the judges as the princes of law in the law's empire[20]; and the famous idea of the fictitious super-judge *Hercules*, "a lawyer of superhuman skill, learning, patience, and acumen",[21] who alone is allegedly capable of reaching *the best constructive interpretation of past political decisions* for a novel case at hand.[22] True, Dworkin avoids the philosophical pitfalls related to the quantification of legal coherence à la Robert Alexy and

[18] Dworkin, *Law's Empire*, p. 262. – Cf. "According to law as integrity, propositions of law are true if they figure in or follow from the principles of justice, fairness, and procedural due process that provide *the best constructive interpretation of the community's legal practice*." Dworkin, *Law's Empire*, p. 255. (Italics added.)

[19] ". . . in those in hard cases. . . [the lawyers] make use of standards that do not function as rules, but operate differently as principles, policies, and other sorts of standards." Dworkin, *Taking Rights Seriously*, p. 22.

[20] "The courts are the capitals of law's empire, and judges are its princes, but not its seers and prophets. It falls to philosophers, if they are willing, to work out law's ambitions for itself, the purer form of law within and beyond the law we have." Dworkin, *Law's Empire*, p. 407.

[21] Dworkin, "Hard Cases", p. 105; cf. Dworkin, *Law's Empire*, p. 239 et seq.

[22] Dworkin, *Law's Empire*, p. 262. – At times, Dworkin's style of argumentation is reminiscent of Lon L. Fuller's sky-soaring rhetoric, with reference to the ideals of *perfection in legality*, *legal excellence*, and *utopia in legality*, plus the appeal to *a sense of trusteeship* and *the pride of the craftsman* on part of the legislator.

Aleksander Peczenik, but his sky-soaring legal rhetoric is prone to invite trouble of another kind.

The modern conception of legal principles in guiding the judge's legal discretion is to a great extent outlined by Ronald Dworkin since the late 1960s. In his influential essay "The Model of Rules, I", Dworkin criticized the then predominant, exclusively rule-aligned notion of law that had been established in H. L. A. Hart's *The Concept of Law* in 1961. Hart had argued that in a *hard case* of legal adjudication where there is no legal rule in the legal order that could guide the judge's legal discretion and thus determine the outcome of the case,[23] the judge's role in legal discretion can be compared to that enjoyed by the legislator, free of constraints other than those imposed by the valid constitution and, in light of the subsequent legal development, international legal conventions, such as the Treaty of the European Union or the European Convention for the Protection of Human Rights and Fundamental Freedoms.

Dworkin has forcefully – and, it would seem, quite convincingly – argued that there is no area of free discretion even in a hard case of legal decision-making. Far from being totally free and unconstrained, the judge is bound by the principles of law, on the condition that they enjoy adequate institutional support and a sense of approval in the legal community. Dworkin, moreover, put forth the argument that there often is one right answer to a legal case due to the normative impact of legal principles.[24] It would seem that the role accorded to the one right answer thesis has gained too much weight in the subsequent literature, while the reservations pinpointed by Dworkin have mostly gone unnoticed by his readers and critics. First of all, Dworkin points out that there often, but not always, is one right answer to a legal problem. Secondly, the issue is looked upon from the lawyer's, and not the philosopher's, point of view.[25] What all that signifies is not easy to evaluate as concerns the legal and/or philosophical validity of Dworkin's argument.

[23] We are thus dealing with a normative gap situation in Makkonen's terminology, or a situation where there are two or more mutually conflicting legal rules that cannot be applied to the case at the same time.

[24] Cf. e.g. "Hard Cases" and "Can Rights Be Controversial?", both reprinted in *Taking Rights Seriously*; "Is There Really No Right Answer in Hard Cases?", in *A Matter of Principle*; and in "Appendix: A Reply to Critics", in the second, enlarged edition of *Taking Rights Seriously* in 1978.

[25] Dworkin, "Pragmatism, Right Answers, and True Banality", p. 365 where the author underscores the *pragmatic*, *anti-metaphysical* character of the one right answer thesis: "My thesis about right answers in hard cases is, as I have said, a very weak and commonsensical legal claim. It is a claim made within legal practice rather than at some supposedly removed, external, philosophical level. I ask whether, in the ordinary sense in which lawyers might say this, it is ever sound or correct or accurate to say, about some hard case, that the law, properly interpreted, is for the plaintiff (or for the defendant). I answer that, yes, some statements of that kind are sound or correct or accurate about some hard cases." – Similarly in "Can Rights Be Controversial?", p. 279: "My arguments suppose that there is *often* a single rights answer to complex questions of law and political morality." (Italics added.)

Be that as it may, in the heated debate with H. L. A. Hart Dworkin did consistently defend the idea of one right answer to a legal problem.[26] It is only in his later writings that Dworkin has changed the weight of emphasis onto the notion of *law as integrity*, with reference to "the best constructive interpretation of the community's legal practice".[27] The contested claim of the one right answer to a legal problem has given room to the analysis of legal coherence in such terms. Law as integrity entails a greater degree of inherent systematicity of law than the earlier idea of legal principles defended in "The Model of Rules, I". In that article Dworkin underscored that legal principles have only weak mandatory force on the judge's discretion[28]:

> Only rules dictate results, come what may. When a contrary result has been reached, the rule has been abandoned or changed. Principles do not work that way; they *incline a decision one way, though not conclusively*, and they survive intact when they do not prevail.

Still, Dworkin's assertion of the non-conclusive character of legal principles is in flat contradiction with the notion he defended a moment earlier in the same writing, when he commented on *Riggs v. Palmer* (115 N.Y. 506; 22 N.E. 188 (1889)). In it, the *general, fundamental maxims of the common law*, such as the principle that "no one shall be permitted to profit by his own fraud, or to take advantage of his own wrong, or to found any claim upon his own iniquity, or to acquire property by his own crime", were now enforced by the court, to the effect of overriding the valid statutory legal rule (then) in force, to the effect that the duly documented last will of the deceased person is to be enforced as such *post mortem*.[29] Contrary to Dworkin's express claim, in *Riggs v. Palmer* the general, fundamental maxims of the common law had a strong mandatory force. In fact, they had an even stronger normative impact than the statutory rule to the contrary effect. The term "mandatory force" refers to the normative impact that a legal norm or argument exerts upon the judge's or other official's legal discretion.

A legal system consists of legal norms. A *legal norm* is a combination of two states of affairs, viz. a legal *fact-situation* in the sense of some state of affairs described *in abstracto* and a set of *legal consequences* attached to those facts, as connected to one another by the *deontic operator*. The deontic operator gives the fact–legal consequences relation a legally binding quality, to the effect that legal consequences specified in the legal norm *ought* to be enforced by the judge or other

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[26] See e.g. Dworkin, *Taking Rights Seriously*, pp. 331–338 ("Munzer and No Right Answer").

[27] "According to law as integrity, propositions of law are true if they figure in or follow from the principles of justice, fairness, and procedural due process that provide the best constructive interpretation of the community's legal practice." Dworkin, *Law's Empire*, p. 225.

[28] Dworkin, "The Model of Rules, I", p. 35. (Italics added.) – Cf. also Dworkin, "The Model of Rules, I", p. 26: "All that is meant, when we say that a particular principle is a principle of our law, is that the principle is one which officials must take into account, if it is relevant, as a consideration inclining in one direction or another."

[29] Dworkin, *Taking Rights Seriously*, p. 23: ". . . all laws as well as all contracts may be controlled in their operation and effect by general, fundamental maxims of the common law. No one shall be permitted to profit by his own fraud, or to take advantage of his own wrong, or to found any claim upon his own iniquity, or to acquire property by his own crime."

legal official, if the facts given in the fact-description of the legal norm are present. Following Ronald Dworkin's analysis, legal norms may be of two kinds, legal *rules* or legal *principles*.

Legal principles differ from legal rules on several accounts. In *Taking Rights Seriously*, Dworkin depicts legal principles with the following kind of criteria:

(a) *validity* and *recognition of law*: the normative impact of legal principles on the discretion of a judge is not based on their formal source of origin in legislation or individual judicial decisions to the effect of satisfying the "test of pedigree" in Dworkin's terminology, but on the *institutional support* they are able to draw from the legal source material and the *sense of approval* they enjoy in the legal community[30];
(b) *normative logic*: legal principles are applied in a *more-or-less* kind of manner, in contrast to legal rules that are applied in an *all-or-nothing*, or *either/or*, kind of manner[31];
(c) *value-ladenness*: legal principles, unlike legal rules, have a *dimension of weight* or *importance*, expressive of a *sense of appropriateness* that is attached to them in the legal community[32];
(d) *mandatory force*: the *binding effect* of legal principles is weaker than that of legal rules, as the former no more than "incline a legal decision in one

[30] "Yet we could not devise any formula for testing how much and what kind of institutional support is necessary to make a principle a legal principle, still less to fix its weight at a particular order of magnitude. We argue for a particular principle by grappling with a whole set shifting, developing and interacting standards (themselves principles rather than rules) bout *institutional responsibility*, *statutory interpretation*, *the persuasive force of various sorts of precedents*, the relation of all these to *contemporary moral practices*, and hosts of *other such standards*. We could not bolt all of these together into a single 'rule', even a complex one, and if we could the result would bear little relation to Hart's picture of a rule of recognition, which is the picture of a fairly stable master rule specifying 'some feature or features possession of which by a suggested rule is taken as a conclusive affirmative indication that it is a rule . . .'" Dworkin, *Taking Rights Seriously*, pp. 40–41. (Italics added.) – "But this *test of pedigree* [i.e. a rule of recognition à la Hart] will not work for the *Riggs* and *Henningsen* principles. The origin of these as legal principles lies not in a particular decision of some legislature or court, but in a *sense of appropriateness* developed in the profession and the public over time. Their continued power depends upon this sense of appropriateness being sustained." Dworkin, *Taking Rights Seriously*, p. 40. (Italics added, except in the two cases *Riggs* and *Henningsen*.)

[31] "The difference between legal principles and legal rules is a *logical* distinction. Both sets of standards point to a particular decision about legal obligation in particular circumstances, but they differ in the character of the direction they give. Rules are applicable in an *all-or-nothing* fashion. If the facts a rule stipulates are given, then either the rule is valid, in which case the answer it supplies must be accepted, or it is not, in which case it case it contributes nothing to the decision. (. . .) But this is not the way the sample principles in the quotations operate. Even those which look most like rules do not set out legal consequences that follow automatically when the conditions provided are met." Dworkin, *Taking Rights Seriously*, pp. 24, 25. (Italics added.)

[32] "Principles have a dimension that rules do not – *the dimension of weight or importance*. (. . .) it makes sense to ask how important or how weighty [a principle] is." Dworkin, *Taking Rights Seriously*, pp. 26, 27. (Italics added.)

direction or another", without being able to determine a particular outcome in the case[33]; and

(e) *method of application*: legal principles and other standards need to be *weighed and balanced* against each other, whereby the social values and goals entailed in legal principles are each weighed for the case at hand.[34]

In his subsequent writings, Dworkin has introduced the notion of *law as integrity*, with reference to the constraints placed upon the discretion of the legislator and the courts alike.[35] Integrity in adjudication is intertwined with legal coherence[36]:

> [Integrity in adjudication] requires our judges, so far as this is possible, to treat our present system of public standards as expressing and respecting a *coherent set of principles*, and, to that end, to interpret these standards to find implicit standards between and beneath the explicit ones. (. . .) Law as integrity asks judges to assume, so far as this is possible, that the law is structured by a *coherent set of principles* about justice and fairness and procedural due process, and it asks them to enforce these in the fresh cases that come before them, so that each person's situation is fair and just according to the same standards.

The notion of *law as integrity*, introduced in *Law's Empire*, sets the pace for Dworkin's later works, such as *Freedom's Law*, *Life's Dominion* and *Justice in Robes*. The precise content of legal integrity to some extent varies in different texts.[37] Still, the phrase *the best constructive interpretation of past political*

[33] "Only rules dictate results, come what may. When a contrary result has been reached, the rule has been abandoned or changed. Principles do not work that way; they incline a decision one way, though not conclusively, and they survive intact when they do not prevail." Dworkin, *Taking Rights Seriously*, p. 35. – Cf.: "Rather, [a legal principle] states a reason that argues in one direction, but does not necessitate a particular decision. (. . .) All that is meant, when we say that a particular principle is a principle of our law, is that the principle is one which officials must take into account, if it is relevant, *as a consideration inclining in one direction or another*." Dworkin, *Taking Rights Seriously*, p. 26. (Italics added.) – Nonetheless, in Dworkin's own classic example *Riggs v. Palmer*, however, the legal principles according to which no one may profit from his own wrong-doing was allowed to supersede the perfectly valid legal rule according to which the last will of the deceased person is to be respected.

[34] "When principles intersect (the policy of protecting automobile consumers intersecting with principles of freedom of contract, for example [in Henningsen *v.* Bloomfield Motors, Inc.]), one who must resolve the conflict has to take into account the relative weight of each. This cannot be, of course, an exact measurement, and the judgment that a particular principle or policy is more important than another will often be a controversial one." Dworkin, *Taking Rights Seriously*, p. 26. – According to Dworkin, the collision of legal rules and legal principles has to be resolved at the level of principles: "The court weights two sets of principles in deciding whether to maintain the rule . . ." Dworkin, *Taking Rights Seriously*, p. 78.

[35] Dworkin, *Law's Empire*, p. 217: "I distinguished two branches or forms of integrity by listing two principles: integrity in legislation and integrity in adjudication."

[36] Dworkin, *Law's Empire*, pp. 217, 243. (Italics added.)

[37] E.g.: "According to law as integrity, propositions of law are true if they figure in or follow from the principles of justice, fairness, and procedural due process that provide *the best constructive interpretation of the community's legal practice*." Dworkin, *Law's Empire*, p. 225 (italics added); "how to make . . . the best story . . . from the standpoint of political morality", Dworkin, *Law's Empire*, p. 239; "Judges who accept the interpretive ideal of integrity decide hard cases by trying to

decisions would seem to capture its core fairly accurately.[38] But what is legal integrity, to be more precise?

For the first, Dworkin compares the task of the judge or other legal official to that of an author who is writing a novel *seriatim*. The judge, like the co-author of a *chain novel*, is required to continue the evolving legal narrative as found in, or rather to be reconstructed from, the sum total of prior legislative and judicial decisions, in as coherent a manner as is possible.[39] The judge, like the co-author of a chain novel, cannot resolve a hard case of adjudication in a haphazard, whimsical, or capricious manner, in disregard of the evolving legal and political narrative on how the allocation of legal rights and duties among citizens, the institution and division of decision-making authority, and the allocation of scarce material resources in society have previously been accomplished. Law as integrity equals the idea of reconstructing and carrying on the prevailing meta-narrative of law and society so that the outcome of legal discretion for the individual case under consideration and the earlier legal decisions, when read together, make up as *coherent* a narrative as is possible in light of the institutional and societal values involved.

An author of a (fictitious) novel, whether written *seriatim* or by a single author, can always bring about some unpredictable turn in the narrative. Without the possibility of such twists and turns in the evolving narrative, detective stories and other crime fiction could hardly be possible, and most other fiction would lose its edge as well if the future course of events could be fully predicted beforehand. Similarly the judge always has the possibility of overruling a precedent in favour of a totally different rule. The narrative structure of the narrative so far evolved constrains any later co-author of a chain novel, but it does so to a certain degree only.

As a consequence, a judge who is to rule on the facts of a case always has the final say on how to construct and read the law within the legal tradition, as defined by the prevailing conception of the institutional and societal sources of law and the models of legal reasoning acknowledged in the community. The judge may opt for a novel reading of the *ratio decidendi* of a prior precedent, turning the previously settled conception of *ratio/dicta* dichotomy in that case into a wholly new direction. In a chain novel effort, that would count as a fully unexpected turn in the narrative. Moreover, a judge may explicitly overrule or bluntly disregard a perfectly valid

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find, in some coherent set of principles about people's rights and duties, *the best constructive interpretation of the political structure and legal doctrine of their community*." Dworkin, *Law's Empire*, p. 255 (italics added); ". . . that the grounds of law lie in integrity, in *the best constructive interpretation of past political decisions* . . ." Dworkin, *Law's Empire*, p. 262 (italics added); "[Hercules] is guided instead by a sense of *constitutional integrity*; he believes that the American Constitution consists in the best available interpretation of American constitutional text and practice as a whole, and his judgment about which interpretation is best is sensitive to the great complexity of political virtues bearing on that issue." Dworkin, *Law's Empire*, pp. 397–398 (italics added); ". . . which interpretation, all things considered, makes the community's legal record *the best it can be from the point of view of political morality*." Dworkin, *Law's Empire*, p. 411. (Italics added).

[38] Dworkin, *Law's Empire*, p. 262.

[39] Dworkin, "How Law Is Like Literature"; Dworkin, *Law's Empire*, pp. 228–238,

precedent, which would correspond to the act of effecting a by-plot or sidetrack in the chain-novel or turning the prior course of action in the novel upside down.

For the second, the notion of integrity in law is closely intertwined with value-laden *principles* and *standards* of law that help sustain a common frame for the law and political morality in society.[40] In a hard case of legal adjudication, the normative force of legal principles on the discretion of the judge is to be duly acknowledged as pertinent criteria for legal decision-making. It seems there are three typical legal decision-making situations in which the normative impact of legal principles ought to be duly recognized: (a) a situation where the normative, guiding force of legal rules has run out or proven inadequate for the case, leaving the judge without guidance, in the sense of a normative gap or an unregulated situation in Kaarle Makkonen's terminology; (b) a situation of norm conflict between two or more legal rules which can only be solved by taking the impact of material legal principles into consideration, as are effective at the back of the rules in question[41]; and (c) a situation where the application of formally valid legal rules would yield an axiologically intolerable or totally unacceptable outcome.

For the third, Dworkin underscores the inherently *deliberative,* constructive, and self-reflective character of law and legal discretion[42]:

> Law's empire is defined by attitude, not territory of power or process. (...) It is an *interpretive, self-reflective attitude* addressed to politics in the broadest sense. It is a protestant attitude that makes each citizen responsible for imagining what his society's public commitments to principle are, and what these commitments require in new circumstances. (...) Law's attitude is *constructive*: it aims, in the interpretive spirit, to lay principle over practice to show the best route to a better future, keeping the right faith with the past. It is, finally, a fraternal attitude, an expression of how we are united in community though divided in project, interest, and conviction.

Dworkin illustrates the notion of legal integrity with the fictitious super-judge Hercules, J. whom he first introduced in the essay "Hard Cases" in 1975. In one of Dworkin's most memorable "purple passages",[43] the courts are described as the capitals and judges as the princes of the "law's empire", and Justice Hercules

[40] Cf.: "... in those in hard cases... [the lawyers] make use of standards that do not function as rules, but operate differently as principles, policies, and other sorts of standards." Dworkin, *Taking Rights Seriously*, p. 22.

[41] Cf. Dworkin, *Taking Rights Seriously*, pp. 77–78. "Suppose a court decides to overrule an established common law rule that there can be no legal liability for negligent misstatements, and appeals to a number of principles to justify this decision, including the principle that it is unjust that one man suffer because of another man's wrong. The court must be understood as deciding that the set of principles calling for the overruling of the established rule, including the principle of justice just mentioned, are as a group of greater weight under the circumstances that the set of principles, including the principle of stare decisis, that call for maintaining the rule as before. The court weighs two sets of principles in deciding whether to maintain the rule; it is therefore misleading to say that the court weighs the rule itself against one or the other set of these principles."

[42] Dworkin, *Law's Empire*, p. 413. (Italics added.)

[43] The term of *purple passages* was introduced by Ronald Dworkin's (now deceased) wife who referred to the highly metaphorical notions in Dworkin's text with it, as Dworkin himself mentioned during his visit in my researcher seminar in Finland in May 2008.

is depicted as "a lawyer of superhuman skill, learning, patience, and acumen".[44] Justice Hercules, and only he, may attain "the best constructive interpretation of past political decisions",[45] i.e. the most coherent reading of the legal rules and legal principles, policies, and other sorts of legal standards that can be inferred from the valid institutional and societal legal source material in the community. Though no human judge could follow Hercules in his meticulous process of such sophisticated legal construction and analysis, the former is still required to do his best to imitate Hercules' legal discretion[46]:

> The law may not be a seamless web; but the plaintiff is entitled to ask Hercules to treat it as if it were. (. . .) He [i.e. Hercules] must construct a scheme of abstract and concrete principles that provides a coherent justification for all common law precedents and, so far as these are to be justified on principle, constitutional and statutory provisions as well.

Hercules provides a reference for the human judges by means of which the degree of coherence attained in reading a series of precedents, other judicial decisions, or statutes may best be critically evaluated. Under such deliberative terms, even the claim of attaining one right answer to a legal problem is possible, Dworkin argues. Still, like Chaïm Perelman's notion of the *universal audience*, Dworkin's super-judge *Hercules* is a subjective thought construct only, and not something that could be subjected to some objective criteria or tests. Because of the fictitious, hypothetical character of the super-judge Hercules, any assertion on how to construct and read the law that has judge Hercules among its set of truth-constitutive premises is an *as if* kind of a claim only: if the deliberation of judge Hercules and the resulting concept of coherence is conceived in *z* manner, then the content of law vis-à-vis the fact-constellation *x* will be *y*.

But how could we possibly corroborate the bold claim as expressly or tacitly made by an audacious judge driven by such Herculean aspirations, to the effect that the outcome of his legal discretion truly meets up with Dworkin's standard? There is always more than one way of (re)constructing the internal coherence of law, and a host of alternative interpretative options is ruled out each time a choice for one particular outcome is made among them. It seems that belief in Dworkin's approach requires a sheer an act of faith by the legal community vis-à-vis such would-be Herculean oracles of the law, since there is no means of finding out or controlling whether the criteria of legal integrity have been met with, if the reasons given for the decision fail to fully convince the audience. Moreover, there are all too many "purple passages" of the sky-soaring, abstract metaphors, and too little of sober legal analysis, in Dworkin's account of the judge's legal deliberation.

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[44] Dworkin, "Hard Cases", p. 105; cf. Dworkin, *Law's Empire*, p. 239 et seq.

[45] Dworkin, *Law's Empire*, p. 262.

[46] Dworkin, "Hard Cases", pp. 116–117. – *Iudex non calculat*: if the decision-making procedure of a human judge, or of super-judge Hercules, J. for that matter, could be captured in purely quantified terms, that would be equal to justice computerized and calculated. If such were the case, legal decision-making could well be entrusted to a computer. But computers rate low in the weighing and balancing of value-laden arguments.

3.3 The *Duhem-Quine Thesis*: The Inherently Holistic and Underdetermined Character of a Scientific Theory, and Its Implications for Legal Analysis

The *Duhem-Quine Thesis* as a scientific and philosophical stance is attributed to two individual thinkers, the one a physicist, Pierre-Maurice-Marie Duhem (1861–1916), and the other a philosopher, Williard Orman Van Quine (1918–2000).[47] There are two elements entailed in the *Duhem-Quine Thesis*, i.e. the *holistic* character of a scientific theory and its *underdetermined* character vis-à-vis any individual empirical observations.

For the first, judging of the truth-value of a scientific theory is a *holistic* issue, to the effect that the totality of sentences that make up a scientific explanation is considered primary vis-à-vis any individual empirical findings or, to be more exact, individual assertions based on such findings. Scientific explanation is an *all-inclusive* venture where some individual phenomenon cannot be explained except by reference to the totality of sentences that make up a scientific theory. There is no method of evaluating any individual assertion as such, or detached from the wider theoretical context or background provided by the scientific theory in question.

Science is an inherently *tradition-bound* phenomenon. Therefore, prior empirical findings and settled conceptual truths of a branch of scientific study have a strong impact on how the new empirical findings are to be treated scientifically. If the on-going tradition of a particular branch of science is abruptly broken, we are witnessing a *scientific revolution* in the Kuhnian sense of the term, or a profound *epistemic break* in the prevailing order of things that connects the "words", or linguistic expressions, and "things", or phenomena in the world, to one another.[48] In the context of law, a thorough transformation of the settled legal order would signify a social upheaval or at least a small-scale revolution. Alternatively, it could signify a return to the original position that conceptually precedes the entering into a social contract.[49]

Far more frequent than a total upheaval of the prevailing *status quo* in science is the adoption of smaller, step-by-step changes in the edifice of a scientific theory or metanarrative of law, induced by some recalcitrant empirical findings vis-à-vis a scientific theory or some novel legal or social ideas vis-à-vis the question of how to construct and read the law under some frame of legal analysis, leaving the prevailing meta-theory of science or law otherwise intact. Such *small-scale dynamics*

[47] Actually, the conceptions held by Duhem and Quine to a significant degree differ from each other, as is quite expectable, since the one author was a physicist and the other a philosopher. One reason for the said doctrine being commonly known as the *Duhem-Quine Thesis* is due to Quine's acknowledgment of the significance of Duhem's original ideas in the key section of his own classic article. Cf. Quine, "Two Dogmas of Empiricism", p. 41, note 17.

[48] Kuhn, *The Structure of Scientific Revolutions*; Foucault, *Les Mots et les choses. Une Archéologie des sciences humaines*.

[49] On the social contract that would be reached in the *original position* behind the *veil of ignorance* in Rawls' influential theory of social justice, Rawls, *A Theory of Justice*, pp. 136–142.

of change that may take place within the semantic confines of a scientific theory is admirably captured by Otto Neurath (1882–1945) in his metaphor of the sailors at the open sea who have to repair their ship in the midst of the ocean, never having the privilege of taking it to the dock for a total renewal and reconstruction[50]:

> *There is no way of taking conclusively established pure protocol sentences as the starting point of the sciences*. No *tabula rasa* exists. We are like sailors who must rebuild their ship on the open sea, never able to dismantle it in dry-dock and to reconstruct it there out of the best materials. Only the metaphysical elements can be allowed to vanish without trace. Vague linguist conglomerations always remain in one way or another as components of the ship. If vagueness is diminished at one point, it may well be increased at another.

The logic of scientific change, i.e. a change effected in a set of assertions that make up a *scientific explanation*, and the logic of change in *legal analysis*, i.e. a change effected in set of assertions on how to construct and read the law in light of arguments duly derived from the institutional and non-institutional sources of law, are in this respect similar. Rather than inducing a total upheaval of the meta-context of scientific or legal analysis, intellectual endeavours far more often lead to some small-scale, step-by-step adjustments in the prevailing world-view, when faced with some recalcitrant empirical findings in the natural sciences or some odd fact-constellations in the legal analysis.

For the second, and closely related to the former tenet of scientific holism, any scientific theory or set of sentences that share a common focus, common subject matter, and common context of knowledge is by necessity *underdetermined* in relation to the world of empirical observations. In the case of legal analysis, an analogical situation of underdetermination may prevail between the sentences on legal interpretation and the sentences of legal justification that are brought in their support, as drawn from the prevailing set of institutional and societal sources of law. According to the *Duhem-Quine Thesis*, a frame of scientific explanation can always be saved from the thrust of recalcitrant phenomena or empirical counter-evidence by modifying the scientific theory to such an extent as is necessary.

In the philosophy of science, the inherently *holistic* and *underdetermined* character of a scientific theory vis-à-vis any empirical evidence is known as the *Duhem-Quine Thesis*, as suggested by Pierre-Maurice-Marie Duhem and Willard Orman Van Quine. As Quine wrote[51]:

> The dogma of reductionism survives in the supposition that each statement, taken in isolation from its fellows, can admit of confirmation or infirmation at all. My countersuggestion, issuing essentially from Carnap's doctrine of the physical world in the *Aufbau*, is that our

[50] Neurath, "Protocol Sentences", p. 210. (Italics by Neurath). Cf. also: "The fate of being discarded may befall even a protocol sentence. No sentence enjoys the *noli me tangere* which Carnap ordains for protocol sentences." Neurath, "Protocol Sentences", p. 203.– Cf. Coffa, *The Semantic Tradition from Kant to Carnap*, p. 358: "The elements of the Protocol are 'the sentences that need no justification but serve as foundation for all of the remaining sentences of science.'" (The inner quotation from Carnap's "Die physikalische Sprache als Universalsprache der Wissenschaft", p. 438).

[51] Quine, "Two Dogmas of Empiricism", pp. 41, 43. (Italics added in the full sentence).

> statements about the world face the tribunal of sense experience not individually but only as a corporate body. (. . .) *Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system*. Even a statement very close to the periphery can be held true in the face of recalcitrant experience by pleading hallucination or by amending certain statements of the kind called logical laws. Conversely, by the same token, no statement is immune to revision. Revision even of the logical law of the excluded middle has been proposed as a means of simplifying quantum mechanics; and what difference is there in principle between such a shift and the shift whereby Kepler superseded Ptolemy, or Einstein Newton, or Darwin Aristotle?

As a consequence, no individual item of empirical counter-evidence can invalidate or falsify a scientific theory, since a scientific theory can always be "saved" by making some profound enough adjustments in it. Scientific explanation is a *holistic* phenomenon that, moreover, *inconclusive* in respect to any specific body of empirical evidence.

The proper domicile of the *Duhem-Quine Thesis* is in the philosophy of science, as it deals with the relation that prevails between *empirical observations* and a *scientific theory* by means of which the empirical findings are to be explained and their future occurrence predicted. Still, the *Duhem-Quine Thesis* may be analogically extended to the relation that pertains between a *legal assertion* on how to construct and read the law vis-à-vis a given fact-constellation and the constitutive premises at the back of such assertions as defined by the *frame of legal analysis* in question. The initially scientific context of the *Duhem-Quine Thesis* ought to be kept in mind, though. As a consequence of the *Duhem-Quine Thesis*, any outcome of legal construction and interpretation, no matter how implausible it might *prima facie* seem, can always be "saved" from critique, if some radical enough changes are effected in the frame of legal analysis adopted. Once such alterations have been made to a scientific theory or a frame of legal analysis, it of course no longer is the same as it was before such alterations.

Finally, what is the relation of the *Duhem-Quine Thesis* to Ronald Dworkin's theory of legal coherence as *legal integrity* and the idea of one right answer, if the former is analogically extended to the sphere of law and legal analysis under such coherentist terms? Can Dworkin's idea of "the best constructive interpretation of the political structure and legal doctrine of their community"[52] survive the scientific and philosophical thrust of the *Duhem-Quine Thesis*? If that turns out to be the case, Dworkin's Judge Hercules could defend any legal outcome once a seamless web of legal reasons were provided in its support. Or should we rather yield to the critique presented by Duhem and Quine, to the effect that any scientific theory or legal theory is – by force of definition – underdetermined and to some extent immune to the force of any counter-evidence (in science) and counter-arguments (in law)? If that turns out to be the case, any legal outcome could be defended through making some radical enough adjustments in the frame of legal analysis adopted. Both alternatives, i.e. Dworkin's idea of legal integrity and the Quinean

[52] "According to law as integrity, propositions of law are true if they figure in or follow from the principles of justice, fairness, and procedural due process that provide *the best constructive interpretation of the community's legal practice*." Dworkin, *Law's Empire*, p. 255. (Italics added.)

thesis of the holistic and underdetermined character of any scientific theory, cannot be simultaneously sustained, or so it would seem.

The *Duhem-Quine Thesis* challenges Dworkin's coherence-aligned position on the one rights answer to a legal issue. The conflict between the two cannot be levelled in the field of law unless Dworkin's initial thesis of the one right answer to a legal problem is given up. In his later writings Dworkin has in fact softened the premises of the one right answer doctrine, though his position on the issue remains slightly ambivalent.[53] The *Duhem-Quine Thesis*, on the other hand, would seem to refute the validity of one right answer to a scientific or, analogically, legal issue, due to the holistic and underdetermined character of any scientific theory or a theory-laden conception on how to construct and read the law. To the extent that the impact of one right answer to a legal problem has been downsized in Dworkin's subsequent writings on jurisprudence, the tension between his legal philosophy and the *Duhem-Quine Thesis* is reduced. The other alternative is to lower down the level of coherence to be attained from a *total* coherence to a *partial* coherence in law, loosening the grip of the *Duhem-Quine Thesis* on legal analysis.

3.4 Towards Partial Coherence in Law

Dworkin's notion of legal integrity as the best constructive interpretation of the political structure and legal doctrine of the community, the idea of the fictitious super-judge Hercules, and the chain novel metaphor all exemplify a striving for total coherence in law. Because of the increasingly fragmented and multi-valued character of modern law, the Herculean task of attaining total coherence in law may not be a very realistic goal. Moreover, under the (alleged) post-modern condition of law, there cannot be any credible candidate for an all-encompassing meta-theory of law, with full coverage over the highly divergent, fragmented tenets of legal and social justice. Rejecting Dworkin's "noble dream" of reaching all-inclusive coherence in law,[54] we may have to content ourselves with a set of "small-scale narratives" of law, political morality, and social justice only, so as to tackle the fragmented, polycentric, and polyphonous patchwork of law.[55]

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[53] Cf. Dworkin, *Justice in Robes*, p. 41: "My thesis about right answers in hard case is, as I have said, a very weak and commonsensical legal claim. It is a claim made within legal practice rather than at some supposedly removed, external, philosophical level. I ask whether, in the ordinary sense in which lawyers might say this, it is ever sound or correct or accurate to say, about some hard case, that the law, properly interpreted, is for the plaintiff (or for the defendant). I answer that, yes, some statements of that kind are sound or correct or accurate about some hard cases." Cf.: Dworkin, "Pragmatism, Right Answers, and True Banality", p. 365. – Thus, "a very weak and commonsensical legal claim (. . .) made within legal practice", but the more philosophical issues are not evaded thereby.

[54] On Dworkin's "noble dream", cf. Hart, "American Jurisprudence through English Eyes: The Nightmare and the Noble Dream"; Lacey, *A Life of H. L. A. Hart: The Nightmare and the Noble Dream*.

[55] On "small-scale narratives" of law and social justice, cf. Wilhelmsson, *Senmodern ansvarsrätt. Privaträtt som redskap för mikropolitik*, pp. 193–239.

Partial, small-scale coherence in law is based on the constant interplay of relative *similarity* and *difference* of some tenets in the states of affairs considered. The process of reaching a judgment in a case may accordingly be based on *analogical reasoning*, where the prior rule is now extended to cover the facts of the novel case, or fact-based *distinguishing*, where the novel case is excluded from the field of application of the prior rule. Such a model of legal reasoning has been widely adopted in the United States and Great Britain.

In the American case law on product liability for articles sold by some other instance than their original manufacturer, the two legal categories of *articles found inherently dangerous* and *articles that are dangerous only if improperly constructed* were distinguished, and the legal consequences of each category were judged differently.[56] As a consequence, a judge who is to evaluate the possible dangerousness of some novel article is facing the following question[57]:

> Taken that a loaded gun, possibly a defective gun, mislabeled poison, defective hair wash, collapsing scaffolds, a defective coffee urn, and a defective aerated bottle have been found to be articles that are *inherently dangerous*; while a defective carriage, a bursting lamp, a defective balance wheel for a circular saw, and a defective boiler have been classified as articles *dangerous only if improperly constructed*, how should e.g. a defective soldering lamp be classified in light of the two categories of articles discerned?

What is essential is the relation of relative similarity or difference that the novel facts have to the two types of categories discerned. Such a model of reasoning may be analogically extended to apply to the interpretation of statutes and possibly other sources of law, too.

A system of law based on case-to-case reasoning may quite unpredictably deviate from its sofar well-settled course, if social values or the scientific and technical environment of law go through a radical enough change. Phrasing the issue in the Wittgensteinian terms, we may say that a system of judge-made law is a *moving classification system* that is in a constant state of flux, since the rules and principles of law it entails are always subject to changes and modifications while being enforced in the context of some novel fact-situation. In the classification of "articles found inherently dangerous" *vs*. "articles dangerous only if improperly constructed" that is exactly what took place, when the New York Court of Appeals chose to take a novel stance on the possibly dangerous character of an automobile. In the case, the plaintiff had been injured because of a defective wheel of the car. In the court ruling, the well-established rule on product liability was reversed, and the former exception to the main rule was raised into a new main rule.[58] Such an inherent logic of legal

[56] One of the best representations of case law reasoning based on the interplay of analogy and distinguishing is given in Levi, *An Introduction to Legal Reasoning*, pp. 9–25. Cf. also Dworkin, *Justice in Robes*, pp. 66, 69; Smith, "The Redundancy of Reasoning", passim.

[57] Cf. Levi, *An Introduction to Legal Reasoning*, pp. 18–19.

[58] Levi, *An Introduction to Legal Reasoning*, pp. 20–25. The case was *MacPherson v. Buick Motor Company* (Court of Appeals of New York, 1916; 317 N.Y. 382; 111 N.E. 1050), with Benjamin Cardozo presenting the key line of argumentation in it.

argumentation may be compared Ludwig Wittgenstein's idea of a game the rules of which may – and, in fact, frequently are – altered in the course of the game.[59]

3.5 The Concept of Coherence Redefined

Above, I rejected Robert Alexy's and Aleksander Peczenik's definition of legal coherence given in *quantified* terms, i.e. "the more/longer/greater (some specific quality of) a theory, the more coherent the theory", with reference to the internal *sentential structure*, the *concepts* utilized, and the *subject matter* of the theory. Such a quantified definition of coherence yet fails to grasp the core of the issue, due to inherently *constructive* character of coherence. Ronald Dworkin, on the other hand, has opted for the *qualitative* criteria of coherence as law as integrity, or "the best constructive interpretation of past political decisions" for the novel case at hand.[60] To my mind, Dworkin succeeds better in this respect. However, he never gives a proper *definition* of coherence in the strict sense of the term, opting for a host of "purple passages" or sky-soaring metaphors instead, viz. the judge engaged in the task of writing a chain novel *seriatim*; courts as the capitals of the law's empire and judges its princes; the human judge seeking to imitate the fictitious super-judge Hercules, and so on. What we need is a far more down-to-earth definition of coherence in law.

As I see it, coherence is a relational and inherently constructive concept that has to do with the *semantic* relations that prevail among a set of assertions, sentences, concepts, or other linguistic entities that make up a scientific theory or other set of linguistic expressions. Moreover, coherence cannot be defined in quantified terms without distorting its identity. Thus, I propose the following qualitative definition, or perhaps rather a characterization, of the phenomenon of coherence, linking it to the ideas presented by structural semiotics[61]:

> Coherence is a *semantic* – and not e.g. syntactic or pragmatic – quality that is internal to the *narrative structure* or narrative pattern of a scientific theory or, in more general terms, any set of linguistic sentences, assertions, or propositions, defined as their *mutual match*, *reciprocal support*, *common alignment*, *absence of dissonance*, and/or *shared congruence*, to the effect that they collectively make sense when inserted in, and read as part of, the same narrative structure or pattern. The narrative structure or narrative pattern of a theory or a set

[59] Wittgenstein, *Philosophical Investigations – Philosophische Untersuchungen*, § 83 (p. 39/39e).

[60] "Law as integrity asks judges to assume, so far as this is possible, that the law is structured by *a coherent set of principles* about justice and fairness and procedural due process, and it asks them to enforce these in the fresh cases that come before them, so that each person's situation is fair and just according to the same standards. (. . .) Judges who accept the interpretive ideal of integrity decide hard cases by trying to find, in some coherent set of principles about people's rights and duties, *the best constructive interpretation of the political structure and legal doctrine of their community*." Dworkin, *Law's Empire*, pp. 243, 255. (Italics added.)

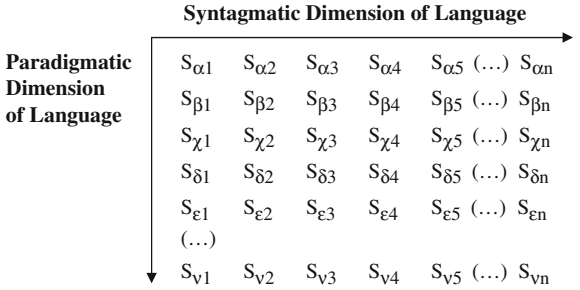
[61] The definition of coherence suggested is not very simple, but the subject matter does not seem to admit of one, either. The bunch of criteria of *mutual match*, *reciprocal support*, *common alignment*, *absence of dissonance*, and/or *shared congruence* may be taken as an approximation of the issue, with focus on different tenets involved in the notion of coherence.

of sentences, assertions, or propositions consists of a set of successive choices made in the *logico-conceptual space* or logico-conceptual universe that consists of the *syntagmatic* and *paradigmatic* dimensions of language.

Syntagmatic relations in language are based on a *sequence* or *combination* of signs, as effected in their *linear succession* in language taken as a flow of speech (*parole*). The syntagmatic axis of language follows the logic of *conjunction* ($x \wedge y$; "*x and y*"). *Paradigmatic* relations in language are based on the ever-present possibility of effecting a *selection* among the set of mutually exclusive signs, where one sign can be substituted, or replaced, by another with an equivalent or parallel value in language taken as a momentary system of signs (*langue*). The paradigmatic axis of language follows the logic of *disjunction* ($x \vee y$; "*x or y*").[62]

Roman Jakobson has called the syntagmatic dimension of language the *axis of combination*, and the paradigmatic dimension the *axis of selection*.[63] The structure of language could also be rephrased as *diachronic* positivity, as has actually come into existence in some specific discourse formation, and *synchronic* alternativity or substitutability of language, in the sense of the options open for linguistic variation, respectively.[64] The syntagmatic and paradigmatic dimensions of language can be presented with the following diagram:

Diagram 3.1 The syntagmatic and paradigmatic dimensions of language



The syntagmatic and paradigmatic axes of language define a *logico-conceptual universe* or *logico-conceptual space*, within which any set of linguistic signs are situated and which makes it possible to evaluate the degree of coherence attained in the various narrative structures or narrative patterns displayed under such premises.

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[62] Greimas and Courtés, *Sémiotique. Dictionnaire raisonné de la théorie du langage*, pp. 266–267, 376–377 (entries on *paradigmatique*, *paradigme*, *syntagmatique*, and *syntagme*).

[63] Jakobson, "Linguistics and Poetics", p. 358: "The selection is produced on the basis of equivalence, similarity and dissimilarity, synonymity and antonymity, while the combination, the build up of the sequence, is based on contiguity."

[64] Cf. Foucault, *Les mots et les choses*, passim. – The notion of a *discourse formation* is based on Michel Foucault's *archaeology of knowledge* of the human sciences, as presented in his works from the late 1960s and early 1970s, viz. *Les mots et les choses*, *L'Archéologie du savoir*, and *L'Ordre du discours*, Foucault's inauguration lecture at the *Collège de France* in December 1970 (published in 1971).

The same goes for the "building blocks" of the semantic domain of law, too, such as the rules and principles of law in a legal system. In the diagram, S_{xn} stands for a sign, concept, sentence, or other linguistic entity.

The *syntagmatic* axis in the diagram signifies the step-by-step unfolding of linguistic entities in a narrative structure in the *diachronic*, or temporal, sense. The *paradigmatic* axis, in turn, signifies the totality of alternatives to the linguistic element chosen for the narrative pattern in a *synchronic*, non-temporal sense. The scheme of interpretation chosen for the analysis determines the narrative pattern or structure that is to be attained by means of the syntagmatic and paradigmatic dimensions of language. Different schemes of interpretation will yield divergent narrative patterns and, as a consequence, different conceptions of coherence thereby effected.

If placed in the context of the fact-constellations provided by Erik Stenius above in his reading of Wittgenstein's *Tractatus*, the values of $\mathbf{S_{xn}}$ might concern the different properties of the members of a family, stated as the (exceptional) intelligence of some of them and the existence of a parent–child relationship in the famility; or those of a military unit, stated as the (exceptional) bravery of some of the soldiers and the existence of a relation of military authority within the unit. In such a case, an unfolding narrative of the family or the military unit would deal with the historical evolving of the said characteristics in the family or in the military unit.

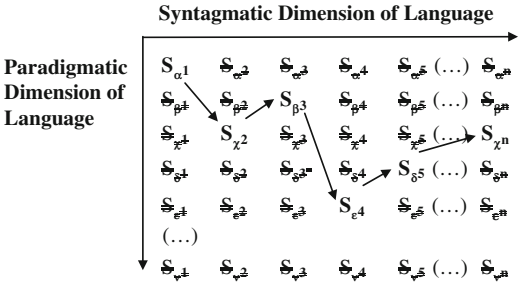
The variable $\mathbf{S_{xn}}$ in the diagram may of course stand for a set of legal rules and principles, as well, like (a set of) constitutional rules, statutory rules or precedents in some branch of law. In the context of contract law there are several possible schemes of interpretation available, and each of them will yield different kinds of legal results *vis-à-vis* legal coherence. If the constitutional provisions, statutes, the *travaux préparatoires*, precedents, and possibly other kind of legal source material are read in light of protecting the legitimate expectations of the parties to a contract, the legal narrative $\mathbf{A = [S_{\alpha 1}] + [S_{\chi 2}] + [S_{\beta 3}] + [S_{\varepsilon 4}] + [S_{\delta 5}] + (\ldots) + [S_{\chi n}]}$ might produce the highest level of coherence. If the very same legal material is, instead, read with the purpose of reconstructing, as authentically as possible, the intentions originally held by the parties to the contract at the time of drafting it and reaching the agreement, the legal narrative $\mathbf{B = [S_{\varepsilon 1}] + [S_{\chi 2}] + [S_{\beta 3}] + [S_{\alpha 4}] + [S_{\chi 5}] + (\ldots) + [S_{\alpha n}]}$ might produce the highest level of coherence.

In a diagram, the two alternatives might be presented as follows, with the choices actually made designated in bold and the options rejected designated with double strikethrough, and an arrow designating the course preferred for action.

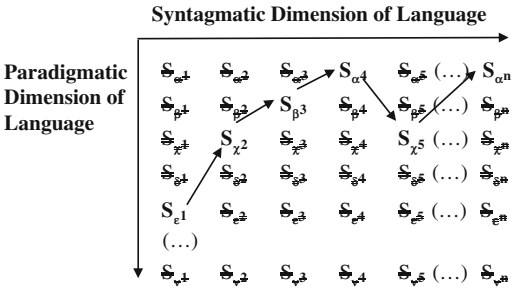
Reading the legal material in light of the requirement of attaining *reasonableness* or equity and the balance of mutual contributions given to, and the profits drawn from, the contract would most probably produce another kind of pattern of legal rules or precedents as the highest attainable level of coherence, such as: $\mathbf{C = [S_{\varepsilon 1}] + [S_{\delta 2}] + [S_{\alpha 3}] + [S_{\alpha 4}] + [S_{\beta 5}] + (\ldots) + [S_{\alpha n}]}$. Finally, reading the material in light of the enhanced protection of the interests of the weaker party to the contract under a *socially sensitive* conception of private law would produce still another pattern of constructing coherence among the legal rules and principles, such as $\mathbf{D = [S_{\beta 1}] + [S_{\alpha 2}] + [S_{\chi 3}] + [S_{\delta 4}] + [S_{\chi 5}] + (\ldots) + [S_{\beta n}]}$. The array of feasible narratives of law and the degree of attainable legal coherence could of course be continued existing

Diagram 3.2 The syntagmatic and paradigmatic dimensions of language in the two narrative patterns A and B, with reference to two different schemes of interpretation, i.e. the legitimate expectations (= Scheme A) or original intentions (= Scheme B) of the parties to a contract

a) *Narrative Pattern A*: Legitimate Expectations of the Parties to a Private Law Contract as the Scheme of Interpretation Adopted



b) *Narrative Pattern B*: Original Intentions of the Parties to a Private Law Contract as the Scheme of Interpretation Adopted



in the world any other possible scheme of interpretation to be applied to the legal material in question.

As can be seen in the diagram above, the very same legal rules or principles may be used as part of several different schemes of coherence. In the diagram, the rules or principles $\mathbf{S_{\chi 2}}$ and $\mathbf{S_{\beta 3}}$ are both able to provide support for two different narrative structures, aligned with the protection of legitimate interests of the parties to a contract, on the one hand, and the protection of the original intensions of the parties, on the other hand.

An analysis of the syntagmatic and paradigmatic dimensions of language can of course be extended to apply to any narrative pattern, no matter whether we are dealing with a scientific theory, a set of sentences of legal argumentation on how to construct and read the law, or the oddities that may take place in the fictitious world of *The Wizard of Oz*, *Alice's Adventures in the Wonderland*, or the *Hogwarts School of Wizardry and Witchcraft* in J. K. Rowling's lucid flow of imagination. The *narrative pattern*, or *narrative structure*, has a decisive role here, and it will vary according to the subject matter of the narrative. As I see it, the concept of a narrative pattern or narrative structure, plus the idea that a set of linguistic signs makes sense when read together, cannot be formalized or quantified without distorting the very issue at stake, contrary to what Alexy and Peczenik wrote above. Instead, the notion

of coherence necessitates a *qualitative* approach to the issue, and the use of figurative speech cannot be wholly avoided in that task. Still, the metaphorical overload of Dworkin's approach should be avoided, if only possible.

3.6 A Critical Evaluation of the Coherence Theory of Law

There are two essential features in the coherence theory of law that need to be taken into account when compared to its alternatives among the frames of legal analysis. Firstly, the coherence theory of law acknowledges the normative impact of the various kinds of institutional and non-institutional sources of law on the legal discretion of the judge or other official, giving effect to a variety of legal sources, which is a good thing. The catalogue of legal sources acknowledged is significantly wider than under the isomorphic theory of law considered above.

Secondly, and unlike the isomorphic theory, the coherence-based approach covers the hard cases of legal adjudication, as well, where there is no isomorphic relation between the two fact-constellations. They, too, are subject to the same set of criteria of *mutual match*, *reciprocal support*, *common alignment*, *absence of dissonance*, and/or *shared congruence* under the *narrative pattern* adopted. In addition, the coherence theory of law may be combined with at least the key elements of legal argumentation theory under the Perelmanian new rhetoric.

The trouble with the notion of coherence in law has to do with its profoundly *constructivist* nature and the resulting lack of control as to the outcomes of legal discretion, at least if conceived in line with Dworkin's quest for all-encompassing coherence in law. The claim of one right answer, as put forth by a judge driven by the Herculean passion of attaining legal integrity as "the best constructive interpretation of past political decisions", can always be questioned by having reference to the inherently disputable, open character of law, as captured by the *Duhem-Quine Thesis* in the philosophy of science and as analogically extended to the field of law.

Moreover, the frequently voiced critique against the coherence theory of letting *coherent fairy-tales* pass the test of truth is difficult to answer in a convincing manner. The uneasy relation of the coherence theory of truth to any empirical observations can best be illustrated with an anecdote from within the *Wiener Kreis*. The mathematician Hans Hahn is said to have asked Otto Neurath for a reason why the physicists should conduct empirical experiments, if all scientific knowledge is in the last resort based on the coherence among a set of linguistic assertions, as Neurath had effectively argued.

Regrettably, Neurath's answer to Hahn's enquiry has not been preserved in the archives of the *Wiener Kreis*. According to Alberto J. Coffa, an outstanding analyst of the semantic tradition before, during, and after logical positivism, the only logical answer to Hahn's enquiry would have been that there is no reason for such experiments under Neurath's coherentist premises.[65] Still, the claimed match of

[65] Coffa, *The Semantic Tradition from Kant to Carnap*, p. 367.

Neurath's *protocol sentences*, or of any other empirical assertions of the world, are based on a relation of *correspondence* between a set of linguistic assertions and the phenomena in the world. Without the conjectured prevalence of such a language – world correspondence, there could be any *observation* sentences either, which Neurath's coherentism yet seems to totally forget.