CSABA VARGA[*]

The Quest for Formalism in Law
Ideals of Systemicity and Axiomatisability
between Utopianism and Heuristic Assertion

Abstract. After the relationship between form and content in art and law is surveyed and the axiomatic approach to systemicity in both philosophy and law of both the classic and modern ages is scrutinised, the want of axiomatisability–in presence of correlations between axiomatism and law notwithstanding–is established. The very nucleus of any axiomatic system is that in some set of building blocks there are few foundation stones from which one given overall building can be built up in one given form and with the inherent necessity of that the operation, in the security of reaching the same end result, can be repeated by any actor at any future time. However, the relationship amongst the constituents of legal systems is not such as to allow to make up their edifice in exclusively one form, only if the procedure is defined and some constituents as foundation stones are designated. For legal systems are truly dynamic systems thoroughly built on substantive interconnections. Therefore they resist–albeit idealise–axiomatisation. In consequence, exclusively the heuristic value of the axiomatic ideal can be fully implemented and scholarly realised in the domain of law.

Keywords: form, content, substance; philosophy, aesthetics; Hegel, Marx, Lukács; mos geometricus; legal concepts, law-codes

Formalism is a recurrent topic in debates on law without, however, its components being analysed to the adequate depth. In the English-speaking legal world it takes precedence as the duality or antagonism of form and substance[1] the fact notwithstanding that its origins in philosophy have once

---

[*] Scientific Adviser, Institute for Legal Studies of the Hungarian Academy of Sciences; Professor, Director of the Institute for Legal Philosophy of the Catholic University of Hungary.
E-mail: varga@jog.mta.hu

[1] For some classics, see Kennedy, D.: Form and Substance in Private Law Adjudication. *Harvard Law Review,* 89 (1976) 8, 1685–1778; Atiyah, P. S.: *Form and Substance in Anglo–American Law.* Oxford–New York, 1987; Summers, R. S.: *The Jurisprudence of Law's Form and Substance.* Aldershot–Brookfield, 2000. For some recent papers, cf. also Epstein, E. J.: Codification of Civil Law in the People's Republic of China: Form and Substance in the Reception of Concepts and Elements of Western Private Law. *University*

been formulated–as they continue on being termed in the European continental culture–in the dichotomy of form and content.

I. Systemicity

1. Form and Content

(In Arts and Law)   Facing the challenge of how to define literature and above all poetry as its subject, the American New Criticism came to recognise the essential moment in the phenomenal form of human objectivations, with decisive significance granted to the arrangement of contentual elements in some selected way. With the fresh and almost neophyte impulse of the movement, *Austin Warren* answered the underlying issue by claiming that poetry is *reducible to the methods it uses.*[2] Such a reply by one of today's classics (thanks to the *Theory of Literature* he co-authored with *René Wellek*[3]) is rather thought-provoking on account of its conciseness. What is even more striking is its one-sidedness augmented by its express simplicity. True, this is barely more simplified as compared to the one-sidedness in the opposite sense of the old formula, held universally valid in abstraction from any real connection, according to which content and form are reflexively co-existent. For the New Criticism opposed in fact the absolutism of contents, claiming that form can also become the generator of contents, at least in some specific domains of human artificiality with arts and law included, among others.

With human objectivations, formal moments may carry on various features and serve a variety of functions. As known, *Hegel* had once differentiated as *external* forms those components that can be utterly incidental to *internal* ones while also indifferent to the definition of the subject. "In a book, for instance,

of British Columbia Law Review, 32 (1998), 153 et seq.; Katz, L.: Form and Substance in Law and Morality. *University of Chicago Law Review,* 66 (1999) 566 et seq.; Madison, A. D.: Tension between Textualism and Substance-over-Form Doctrines in Tax Law. *Santa Clara Law Review,* 43 (2002–2003), 699 et seq.; Bigler, C. S.–Rohrbacher, B.: Form or Substance: The Past, Present, and Future of the Doctrine of Independent Legal Significance. *Business Law,* 63 (2007–2008), 1 et seq.

   [2] Warren, A.: Literary Criticism. In: Foerster, N. (et al.): *Literary Scholarship. Its Aim and Methods.* Chapel Hill, 1941, in particular at 143. Cf. also Rákos, P.: *Tények és kérdő-jelek.* Tűnődés az irodalmon [Facts and question marks: contemplations on literature]. Bratislava, 1971, 17.

   [3] Warren, A.–Wellek, R.: *Theory of Literature.* New York, 1949.

it certainly has no bearing upon the content, whether it be written or printed, bound in paper or in leather."[4]

In everyday life, formal moments play often the role serving as a criterion in distinction. Properly speaking, they may, by affording the *differentia specifica*, provide an outer sign identifying the subject and thereby lending it a proper denomination, certainly without playing any decisive role in shaping its substantial properties. In case of some metals, for example, defining specific gravity by indicating the proportion of weight to volume offers an easy way of differentiation. Moreover, a complete taxonomy can be achieved this way, without the criterion applied being able to furnish any information about the sorts of materials classified, besides serving with a merely pragmatic order helping classification in practice. In such cases, the distinctive role played by formal features, less significant in themselves, may perhaps be primarily explained by the particular relation of object to subject in everyday life, notably by the outstanding importance of the object's given features to the very subject.

Formal features may promote the certainty of recognition and designation anyway. In everyday practice, by mentally anticipating some contentual definitions issuing from a generalised experience we can select out any object classified according to and identified by its particular formal appearance. However, in case of law or literary work, mere phenomenal forms are not simply external(ised) properties or characteristics of the object in question, attached to it constantly or temporarily in a historically sanctioned manner. Anything appearing as a legal form (organised at a given hierarchical level through given procedures and methods) is only an external expression of deeper social relations and interests, that is, of material contents. Nevertheless, this very form represents and also embodies the contents expressed, moreover, by becoming an alienatingly reified entity, it may even master it.[5] And almost the same can be told of literature, too.

(In German Philosophysing)   Projected onto human objectivations, we may thus safely state the form being–instead of "a kind of envelope which

---

[4] By Hegel, G. W. F.: *Logic.* Oxford, 1975. <http://www.kern-ep.de/Internet/ Hegels_Logik/appearan.htm> and <http://www.marxists.org/reference/archive/hegel/ works/sl/slappear.htm#SL133_1> Also *Enzyklopädie der philosophischen Wissenschaften im Grundriss* [1817], § 133n. <http://pedagogie.ac-toulouse.fr/philosophie/textes/ wl131.htm>.

[5] Cf., by the author: 'Thing' and Reification in Law. In his *The Place of Law in Lukács' World Concept,* Budapest, 1985, [2]1998, Appendix, 160–184.

'contains' the 'content' "[6]–an organic medium of contents, without which the latter could hardly be more than dead abstraction, facing the risk of switching repeatedly into something else. This is by far not a new realisation. *Hegel* already formulated the *dialectic identity* of contents and form in a radical manner explicating that "the content, as such, is what it is only because the matured form is included in it", "So it comes about that the form is Content: and in its phase is the *Law of the Phenomenon*."[7] Following this course of development, neither the founders of *Marx*ism did content with merely establishing the mutual transubstantiation of contents and forms into one another but also found that an overwhelming role is being played by the former. However, not even within that tradition contentual priority must amount to nihilising the form. For, according to *Lukács*, "the specific examination of the form is by no means something unnecessary and even less a problem the exploration of which were […] opposed to the method of the dialectical and historical materialism."[8]

Returning to the starting point, the original objective of the New Criticism was to lead the formal organisation of contents back to the role it is due, of those contents which cannot indeed be but the outcome of such an organisation. By such a realisation the *"heresy of paraphrase"* become one of the central concerns of the New American Criticism. For, obviously, the production of some literary "contents" through non-literary "formless" means would deprive the outcome exactly of its specific quality. Due to its normatively posited character, the legal form too is strictly inseparable from all its underlying contents. Otherwise speaking, no contents can be asserted as specifically legal unless organised in/into a legal form. From this perspective, it is quite indifferent how we do appreciate the apparent antagonism between the law's positivistic and sociologistic approaches in describing what role of container we ascribe to legal form and what criteria we set to it. Irrespective of whether the legal form is generated as a text through previously defined procedures or as selected out from the actual practice (jurisprudence) of judicial organs or even if–ideally– it encounters both options to reach their synthesis, all show the emphatic

---

[6] Brooks, C.: *The Well Wrought Urn. Studies in the Structure of Poetry.* New York, 1947, 192, in which case "the 'form' [is] conceived as a kind of container, a sort of beautified envelope" (226), albeit (as continued on 197) "form and content, or content and medium, are inseparable."

[7] Hegel, § 133n and 133. <http://www.kern-ep.de/Internet/Hegels_Logik/appearan. htm> and <http://www.marxists.org/reference/archive/hegel/index.htm> and <http://pedagogie.ac-toulouse.fr/philosophie/textes/wl131.htm>.

[8] Lukács, G.: *Über die Besonderheit als Kategorie der Ästhetik.* Berlin–Weimar, 1985, 156.

formalism in anything coming into being as "distinctively legal".[9] Or, the "paraphrase" of generating alleged legal contents through extra-legal means could only result in the loss of the law's specific quality: failure in form ending in evaporation of substance, i.e., juridicity.

Consequently, what is at stake here is not simply "dialectic" identity. In addition, it also involves certain condensation of what makes its overall substance. In summary of his studies in *Hegel, Lenin* could only reassert that "Form is essential. Essence is formed. In one way or another also in dependence on Essence".[10] The form's essentiality can be varying in diverse types of human–societal–objectivation. For example, relating to the aesthetical quality of a work of art it has been found that "giving a form is the genuinely decisive principle while the aesthetical processing of contents is only preliminary to it, meaning but little artistically as stopping there could result–instead of some poorer artistic performance–nothing in the least in an aesthetical perspective." Although "this lack of independence […] does not change the priority of contents", all this is suitable to show "the form's decisive, independent, finishing function on the work."[11] The basic relationship between contents and form is not different in law either. For the processing of contents to be objectivated as a law, preceding the act of giving it its due form, is theoretically nothing else than "preparatory work […] which–as by itself it does not produce anything legally significant, valuable or valid–gains a normative character and strength, i.e., legal normativity, exactly in this particular legal formulation", as actually no kind of "legal-normative quality and significance" can arise preceding "the actual form-giving phase of the law-making process".[12]

Or, this emphatic significance attributed to formalism in law may not have been emerged by chance in history, as "all the needs of civil society–no matter which class happens to be the ruling one–must pass through the will of the

---

[9] For the duality of how to understand legal form (either as the law's internal criterion or external description) and the need and availability of a synthesis, see, by the author: Quelques questions méthodologiques de la formation des concepts en sciences juridiques. *Archives de Philosophie du Droit,* 18 (1973) 205–244. The term 'distinctively legal' is used by Selznick, P.: The Sociology of Law. In: *International Encyclopedia of the Social Sciences,* 9, ed. D. L. Sills, New York, 1968, 51 et seq.

[10] V. U. Lenin's Annotations on Book II (Essence) of Hegel's *Science of Logic* in his *Filosofskie tetradi* [Philosophical notebooks] in his *Collected Works* 38. Moscow, 1960–1967. 129–164. <http://www.marxists.org/archive/lenin/works/1914/cons-logic/ch02.htm>.

[11] Lukács: *op. cit.* 238 and 240.

[12] Peschka, V.: *Jogforrás és jogalkotás* [Source of law and law-making]. Budapest, 1965, 354, 360 and 357.

state in order to secure general validity *in the form of laws*."[13] As proved by the example of bourgeois society, this significance is rooted in the nature of law, that is, on the final account, in the very nature and underlying relations of a society within which the objectification of the fundamental relationships and needs has become the primary condition of survival. The human will getting expressed in laws is socially conditioned in view of both their contents and form. "The individuals who rule in these conditions [...] have to give their will [...] a universal expression as the will of the state, as law", because "Just as the weight of their bodies does not depend on their idealistic will or on their arbitrary decision, so also the fact that they enforce their own will *in the form of law*, and at the same time make it independent of the personal arbitrariness of each individual among them, does not depend on their idealistic will."[14] Or, the increased significance given to the *actual form* of expression involves, too, that the shaping of substance–not in any but in one given and exclusively in that given way–is no longer an external finishing but has itself been transformed into a *substantial property*, taking a share in the very substance of the subject, which will enter the scene as the given organisation of contents, moreover, as the substantive moment of the organised contents.

In addition to the need of the ruling class to express its will in form of laws, the same authors took a stand in their *German Ideology* also on the inherent consequences and side-effects all the above have at the level of both social and individual consciousness. For such objectified expressions as "their relations assume an independent existence over against them" as "the forces of their own life become superior to them" and, embodied by concepts, they offer large scope to "illusion" that may conceal or cover up their original determination and contents; for "Idea of law. Idea of state. The matter is turned upside-down in *ordinary* consciousness."[15] However, this upside-down turn is by far more than a mere appearance, a false image in consciousness that may appear as a specific distortion "in ordinary consciousness." In the case of law as a formalised objectivation through institutionalisation, it is "the matter" itself that is turned upside-down: as a result of objectification, a *ew quality* may emerge that *sublates* the old one (negating while retaining it), with the perspective of detaching itself from it on principle. To be sure, the formal side of legal objectivation is granted a stressed and essentialised significance just for the reason that once objectification is perfected, it will have gained own existence

[13] Engels, F.: *Ludwig Feuerbach and the End of Classical German Philosophy.* <http://www.marxists.org/archive/marx/works/1886/ludwig-feuerbach/ch04.htm>.
[14] <http://www.marxists.org/archive/marx/works/1845/german-ideology/ch03j.htm>.
[15] <http://www.marxists.org/archive/marx/works/1845/german-ideology/ch01c.htm>.

independent of its genesis, that is, in order that it can be applied–even if turned against its original determination, and preventing any criticism as may be for contents–as a means of social regulation, a pattern of behaviour with indisputable validity.

Accordingly, the *"enchantment"* of social relations through their trans-formation into legal form can also be recognised in the imperfection of their translation into abstract rules and in the latter's deliberately simplifying tendency.[16] "Enchantment" gets completed when social relations transcribed into legal contents will have already lost their original–primary–essentiality, sublated into a new quality.

Hegel encountered the specifically emphatic role of form where an *appropriate* form was needed, that is, with works of art, where "So far is this right form from being unaffected by the content that it is rather the content itself."[17] Or, there is a need for appropriate form in law, too, at least partially and in a restricted sense. This is the very problem of paraphrase. But certain elements of difference have also to be highlighted. Namely, the form appropriate in *aesthetical quality* is the individual form of a unique work of art, a concrete totality with a set of formative elements having organised the contents, that may have generated aesthetical quality in its uniqueness. In contrast, the form appropriate to legal quality is less unique and concrete. Otherwise expressed, to reach an aesthetical quality, the form has to be regenerated in a concrete and individual manner; for if anyone only "makes the aesthetical *a priori* of the acquisition and formation of reality",[18] will be incapable of creating any genuinely aesthetical quality. That is to say that the field of aesthetical quality is not formalised. There are no standardised forms there. As opposed to it, granting a specifically *legal form* is the normative *a priori* of the formation. It is indeed the schematic form or blanket formula that makes any formation transubstantiated into a legal quality as distinguished from anything else.

2. *Systemicity and Axiomatic Approach*

(The Idea of System and the Law-codes)   It is the law-code's *systemicity* as an externally distinctive mark that characterises its technological and instrumental novelty both comprehensively and substantively. Systemicity as a formal

---

[16] For an expressive description, see: Szabó, I.: *Les fondements de la théorie du droit.* Budapest, 1973.

[17] <http://www.kern-ep.de/Internet/Hegels_Logik/appearan.htm>.

[18] Lukács: *op. cit.* 159.

criterion forms a bridge between the historical proto-forms and the modern implementations of the ideal of codification. By breaking up the envelope of conceptuality and revealing its individual and particular (historical) layers (as in *Henrik Ibsen*'s drama *Peer Gynt* did), systemicity will remain the very core of any conceptuality as its innermost domain. Or, this is the *differentia specifica* of one of the law's paths and ways of getting objectified, its *sine qua non* property.[19]

Namely, systemicity as a technical term is in a position rather to suggest than to specify given contents. For systems can be constructed on different levels with differing structuration and complexity, with degrees of materialisation varied in "maturity" and "perfection". For the time being, the analysis of natural dynamic systems not having extended conventionalisedly onto linguistic and intellectual ones, general systems theory cannot yet offer a comprehensive definition to it. Nevertheless, its notion is suitable to reflect the heterogeneity of systemic contents. According to a minimum concept, "A *system* is a set of units with relationships among them." Or, "A system is a set of objects together with relationships between the objects and between their attributes."[20] According to a more sensitive and stricter definition, covering linguistic-theoretical systems as well, "A system is: (1) something consisting of a set (finite or infinite) of entities: (2) among which a set of relations is specified, so that (3) deductions are possible from some relations to other or from the relations among the entities to the behavior or the history of the system."[21] There is a significant difference in degree between the two definitions above, although both represent dynamic systems that can be found in both natural and social reality. Considering the depth of internal coherence, interdependence

---

[19] Cf., by the author: Codification at the Threshold of the Third Millennium. *Acta Juridica Hungarica,* 47 (2006) 2, 89–117.

[20] Bertalanffy, L.: General System Theory, and Hall, A. D.–Fagen, R. E.: Definition of System. In: *General System Yearbook,* 1 (1956), 1–10 and 18–28 and <http://isss.org/projects/general_system_yearbook>. Cf. also Uemov, A. I.: Sistemy i sistemnye issledovannia [Systems and systemic research]. In: Blauberg, I. V. (ed.): *Problemy metodologii sistemnogo issledovania* [Problems of the methodology of systemic research]. Moscow, 1970, 68. By adding "purposeful formation" as a common generic concept, a similar definition was in fact proposed by Sadovskij, V. N. in his K voprosu o metodologicheskikh printsipah issledovania predmetov, predstavliaiushchij soboi sistemy [On the question of the methodological principles of the investigation of subjects presupposed by their system]. In: Suchotin, A. K. (ed.): *Problemy metodologii i logiki nauk* [Problems of the methodology and the logic of science]. Tomsk, 1962.

[21] Rapoport, A.: General Systems Theory. In: *International Encyclopedy of the Social Sciences.* 15, ed. New York, 1968, 452–453.

and self-closure, their difference is by far not in degree but one resulting in new quality with those conceptual systems which, due to their logically exhaustive deductivity, are indeed axiomatic systems.

For there is *hierarchy* among systems. The minimum is perhaps the state when some loosely co-related aggregation of objects is scarcely interlaced by affinities and when the centripetal forces cementing the system together are hardly capable of anything more than neutralising centrifugal forces. The maximum may be the state when each and every element of a system is tied to all the other ones so closely that owing to their multiple mutual intertwinings, each of them will by its very existence strengthen the other, while withdrawing any element(s) out of–or, properly speaking, any change made in–the system would necessarily collapse the entire system. Thus the course of *systemic development* ranges from some rudimentary stage to the state of *axiomatisation* completed. It is not by chance that *Euclid'*s *Elements* has ever served to embody the ideal of law-codification in modern times. Within the scope of the classical model, "[t]he terms belonging to the theory are never introduced into it without being previously defined; the theses are developed in the theory only after having been previously proved, except for a small number of them which are laid down as principles in the beginning: this way the proof cannot be extended to the infinity but has to be founded on some primary theses which have been selected excluding any doubt regarding their conceivability in a healthy spirit. And although anything proposed is empirically certainly true, no reference is made to experience in justification: the geometer pursues only a demonstrative route, founding his proofs exclusively onto what has been previously proposed, while taking into consideration nothing but the laws of logic. This way, any theorem is connected with the chain of necessity to such theses from which it has been deduced as a consequence, until a strictly enclosed network is gradually reached, in which all theses are directly or indirectly interconnected to be eventually concluded in a system, of which not any single part could be withdrawn or modified without the whole being destroyed."[22]

In law, as early as in proto-forms, *codification* aimed at written recording of the law through its systematic elaboration. The quest for a systematic restatement of laws in one textual body emerged historically as functionally bound, and its social objectives always thematised the perspicuity and conclusion of regulation by its self-closing. Later on, hierarchical structures were built in, using a pyramidal construction. The lawyer, the jurisprudent and the legal philosopher were mostly led by other motives than inertia moment,

---

[22] Blanché, R.: *L'Axiomatique* [1955] 5ᵉ éd. Paris, 1970, 9–10.

instinct to self-development or pragmatic consideration on how to fulfil the ideal–or fall in trap–of axiomatism. Throughout history, the conception formed on the availability of axiomatic (re)construction through law codification had been closely connected with the idea of (re)structuring legal and social reality.

(Early Modern Times)   Although it was the 19th century to mature codification into a classical type, it was the 17th century to enhance ambitions to the law's *axiomatic (re)construction.* Through the discoveries by Kepler, Galilei, Harvey, Gassendi, Huygens, Newton and others, this was the century to attain decisive victory of natural-scientific world-view over mediaeval scholastic thought, proclaiming the triumph of human intellect in victorious self-assertion of middle classes at a time preceding their political success through revolution, and granting autonomy recognition to sciences during the *grand siècle*. The sciences themselves were unified according to mathematics' pattern, in a way to prompt *Galileo Galilei* to declare that the language of nature is set by the symbols of mathematics. In one of the milestones of human intellectual history, the *Discours de la méthode* (1637), *René Descartes* formulated his basic methodological tenets as follows: "The long chains of simple and easy reasonings by means of which geometers are accustomed to reach the conclusions of their most difficult demonstrations, had led me to imagine that all things, to the knowledge of which man is competent, are mutually connected in the same way and that there is nothing so far removed from us as to be beyond our reach, or so hidden that we cannot discover it".[23] Far from content with establishing mere structural similarity, *Descartes* applied his geometrical notion for mentally building up the philosophical-scientific universe on solid foundations through irrefutable principles, advancing step by step from the simple towards the complex. And just in the way as the stand of *cogito ergo sum* could become the cornerstone of *Cartes*ian rationalism, some maxims taken as universally valid could also substantiate the unfolding of law, while in political philosophy, based on the assumption of social contract, hypostatasing some natural state (by presuming isolated human beings without bonds of institutionally established trust amongst them) had to serve as starting point for reasoning.

Of course, *Cartes*ian rationalism was not launched in jurisprudence in a form achieved and completed like Pallas Athene, by one stroke and fully armed. *Descartes* himself, anticipating later developments, only accomplished the summation of progressive methodological tendencies already inherent in

---

[23] Descartes, R.: *Discourse on the Method of Rightly Conducting the Reason, and Seeking Truth in the Sciences.* 1637. <http://bdsweb.tripod.com/en/106.htm>.

his age. For starting by the 15th century, the progressing course natural sciences had been taking instigated jurists to lay the foundations of a new jurisprudence which could prove to be scientific, reliable and certain to the degree as the new science of *Newton* and *Copernicus* did. Accordingly, "many theorists wanted to ensure that choices among competing rights [were] constrained by clear and unambiguous principles, so that judicial judgment could be separated from the uncertainties of political rhetoric and metaphysical theory. The lawyers of the Enlightenment were, in a word, looking for a legal science in which certainty was guaranteed through method. Ever since the Enlightenment this implied that legal story [...] would have to be transformed from a religious fable into a scientific dissertation."[24]

Back in the early 17th century, *Johannes Althusius* investigated law in his *Dicaeologicae* (1617) as part of natural reality, undertaking to describe scholarly this specific part of reality. At the same time, he framed his notions–following the method of *Pierre de la Ramée*, i.e., the *Ram*ist logic–into a mathematical order. Thus his exposition was patterned by *Petrus Ramus* (in Latin),[25] who himself stood on the borderline between the Middle Ages and modern times.[26] Few years later, in 1625, *Hugo Grotius* erected in his *De jure belli ac pacis* a system of law, deduced with certainty that could only compare to conclusions reached in mathematics. For no doubt exists any longer for him. His law is quite autonomous a creature as "natural law has become the categorical imperative of creation";[27] and the proud words of its *Prolegomena* also reflect this unwavering confidence, freed from church theology and moral philosophy alike, only restricted by nature and common sense: "What we have been saying would have a degree of validity even if we should concede that which cannot be conceded without the utmost wickedness, that there is no God, or that the affairs of men are of no concern to Him."[28] This is how the axiomatic understanding of law and codification had gradually taken on a pure, theoretically sophisticated form; this is the way in which the great rationalising attempt by

[24] Walt, A. J.: Marginal Notes on Powerful Legends: Critical Perspectives on Property Theory. *Tydskrif vir Hedendaagse Romeins-Hollandse Reg,* 58 (1995), 402.

[25] E.g. Merwe, D.: Ramus, Mental Habits and Legal Science. In: Visser, D. P. (ed.): *Essays on the History of Law.* Cape Town, 1989. 32 et seq.

[26] Cf. Villey, M.: *La formation de la pensée juridique moderne.* Paris, 1968, 588–589.

[27] Brimo, A. *Les grands courants de la philosophie du droit de l'État* 2e éd. Paris, 1968, 86.

[28] Grotius, H.: *De jure belli ac pacis.* [1625], Prolegomena, sect. II. <http://www.lonang.com/exlibris/grotius>. The explication continues by stating that "The very opposite of this view has been implanted in us partly by reason, partly by unbroken tradition, and confirmed by many proofs as well as by miracles attested by all ages."

modern jurisprudence to reformulate the law within a geometrically inspired system of law-codes was finished and consummated.

Namely, following the transition by *Althusius* and the breakthrough by *Grotius*, quite a few jurisprudents ventured the impossible by attempting to implement it. The oeuvres of *Weigel, Felden, Pufendorf* and others are the methodical schools of deductive system building. *Georg Wilhelm Leibniz* was one of them, responding to the historical challenge of axiomatism with the entire passion of a lifetime's overall oeuvre, almost identifying his personal vocation on Earth with the underlying issue in a way to exert an impact upon us with his failures as well, up to the present day.[29]

(Recent Times)   True, the age of *Descartes and Leibniz* had passed once and for all, and *Cartes*ian rationalism lost its vitality as a philosophical system of its own, surviving–like other great heritages of human knowledge–no longer in its individuality but as integrated into our culture of the Western knowledge. Nevertheless, the attempt at axiomatisation was not just a historical adventure but a fundamental logico-methodological challenge to be faced by varying ages under differing conditions and scholarly predispositions. To be sure, it was not *Leibniz* the first and *Spinoza* the last who ventured transforming the language of philosophy into mathematics. One of the roughest, strikingly distorted versions of the aprioristic method as a "sublime nonsense, the most characteristic mass product of Germany's intellectual industry" practically flooded 19th century Germany with which, in preparation of launching the coming new epoch of positivism and empirism in scholarship, *Engels* too entered into passionate polemics.[30]

The revival (or renaissance) of axiomatism was accompanied by such and similar self-destructively sterile extremities, characterised by the brutal fact and inherent irony that, after all, it "yields nothing except a further image of itself. It is an elaborate tautology. Unlike numbers, words do not contain within themselves functional operations. Added or divided, they give only other words or approximations of their own meaning."[31]

---

[29] Cf., by the author: Leibniz und die Frage der rechtlichen Systembildung. In: Mollnau, K. A. (ed.): *Materialismus und Idealismus im Rechtsdenken.* Geschichte und Gegenwart, Stuttgart, 1987, 114–127.

[30] Engels, F.: *Herr Eugen Dühring's Revolution in Science. Anti-Dühring.* Moscow, 1947, 13.

[31] A passage continued by an idea dear to *Spinoza*: "Language is seen no longer as a road to demonstrable truth, but as a spiral or gallery of mirrors bringing the intellect back to its point of departure." Steiner, G.: *Language and Silence.* Essays on Language, Literature, and the Inhuman, New Haven–London, 1998, 20.

Or, the re-emergence of axiomatism with a renewed attempt at breaking down the law into an axiomatically erected system is encountered where and when a comprehensive methodological foundation, like the one once provided by the *Cartes*ian rationalism in 17th century, is made available. Such seems to be the case right in our mid-20th-to-early-21st century, when mathematical logic and cybernetics and legal informatics and e-government, as instruments of the ongoing second-to-third industrial revolution, are to recognise one of their forefathers in *Leibniz*; when *Marx* is referred to as one of the forerunners of mathematisation in social sciences;[32] when reasonable, moreover downright desirable attempts are made for both the computerisation of legal information and the cybernetic approach to law and its codification–with the risk of absolutisation, no need to add.[33]

In itself, the claim for the law's logical processing is by far not to lead necessarily to axiomatic system building. Nevertheless, the question of whether or not the law's formal reconstruction will necessarily imply axiomatic methodology arises at times, with the ensuing tendency to describe (or, rather to say: transcribe) legal operations in schemes of formal logic. The trend aiming at a complete and exhaustive formal logical reconstruction of the law's operations (usually referred to as formalist, in opposition to the anti-formalist direction)[34] does not exclude axiomatic reconstruction from the outset.[35] The very fact of a literary tradition of vague ideas and uncertain notions about axiomatisability in law is shown, for instance, by *Josef Esser* who, being far

[32] See, e.g., *Vospominaniya o Markse i Engelse* [Recollections on Marx and Engels]. Moscow, 1956, 6, quoted by Kazimirchuk, V. P.: *Pravo i metody ego izucheniya* [Law and the methods of its research]. Moscow, 1965, 166.

[33] Cf., only from the publications of the Viennese *Internationale Rechtsinformatische Seminare* at Salzburg, Schweighofer, E. (ed.): *Zwischen Rechtstheorie und e-Gouvernement, gewidmet Friedrich Lachmayer,* Wien, 2003 and Schweighofer, E. (ed.): *10 Jahre IRIS.* Stuttgart, 2007; as well as those titles including contributions by the present author as well, Schweighofer, E. (ed.): *Informationstechnik in der juristischen Realität. Aktuelle Fragen zur Rechtsinformatik 2004,* Wien, 2004, Schweighofer, E. (ed.): *Effizienz von e-Lösungen in Staat und Gesellschaft. Aktuelle Fragen der Rechtsinformatik.* Stuttgart, 2005, and Jakob, R.–Phillips, L.–Schweighofer, E.–Varga, Cs. (eds.): *Auf dem Weg zur Idee der Gerechtigkeit. Gedenkschrift für Ilmar Tammelo.* Münster, 2009 (forthcoming).

[34] For the basic controversy between anti-formalism and formalism, see the plenary session papers presented at the World Congress of the International Association for Philosophy of Law and Social Philosophy in Brussels in 1971, most eminently by Perelman, C.: Le raisonnement juridique, 1–15 and Kalinowski, G.: Le raisonnement juridique, 17–42, both in *Die Juristische Argumentation.* Wiesbaden, 1972.

[35] E.g., Kalinowski, G.: *Introduction à la logique juridique.* Paris, 1965.

away from formalism personally,[36] uses the dichotomy of "axiomatically oriented" and "problem-oriented" all along his work.[37] He conceives these opposites as synonymous to "closed system" presupposed by codification, on the one hand, and "open system" operating with case law, on the other.[38] – This same approach is solidified by *Julius Stone's* definite assertion, according to which "If a legal order were designed to contain within itself a sufficiently comprehensive set of legal propositions precise and stable enough in meaning so that only one answer could be deduced from them for every problem presented for legal solution, those who operated with it would need to use only formal logic. [...] Such a legal order would be an axiomatic system–an axiomatics–like geometry or algebra."[39] To be sure, logical conclusion does by no means presuppose an axiomatic structure, albeit by axiomatic character *Stone* exclusively means the logically operated nature of premises. His remark adds somewhat absolutistic a form to his thesis, claiming that "Clearly even the most axiom-oriented legal system will be only very imperfectly so, while even the most rhetorically, (that is, *tópoi-*) oriented legal order has within it numerous axiomatic sub-systems, some of its legal prepositions being apt for use as premises from which solutions can properly be deduced through stringent logical procedures. We are, indeed, accustomed to viewing a legal order as axiomatic to some extent, that is, as containing many major premises from which answers to legal questions can be deduced in a logically guaranteed way."[40]

Reverting to the German school of legal logic with strong axiomatic flavour, one of its most distinguished representatives, *Ulrich Klug*, treats both axiomatic system-building and the lawyers' desire for the law's axiomatic codification.[41] At the same time, he consistently avoids raising the dramatic issue, notably, its genuine feasibility. Apparently he is not even aware of the lack of deductivity from the law's notional structure and systemic components. On the final account and paradoxically, the only specific remark he has is echoing *Bochenski's* opinion on that every language, even if not elaborated, is

---

[36] Cf. Stone, J.: *Legal System and Lawyers' Reasoning.* London, 1964, 195.

[37] "A logically closed system–J. Esser writes in his *Grundsatz und Norm in der richterlichen Fortbildung des Privatrechts.* 4th ed. Tübingen, 1990, 218–on the top of which there are deductively fertile major premises is axiomatically oriented." [„Ein logisch geschlossenes Rechtssystem, an dessen Spitze deduktiv ergiebige Obersätze stehen, haben wir als axiomatisch orientiert bezeichnet."]

[38] Esser: *op. cit.*, especially at 44.

[39] Stone: *op. cit.* 330.

[40] *Ibid.*, 332.

[41] Klug U.: *Juristische Logik.* 3. Aufl. Berlin, 1966, 15–16 and 174–176.

spirited by axiomatism.[42] – *Ilmar Tammelo* goes further in offering an answer when he criticises the view arising out of "blind obscurantism" which holds as if it were the mere self-centred wish of logicians to systematise law axiomatically. But in fact, when he answers that "it is up to legal policy to decide whether or not the axiomatisation of law shall take place without the logician having any competence. Yet once a decision is taken, the logician may help", he seems responding the enigma in terms of professional competence in scholarship rather than in terms of realisability in practice.[43] – Finally, *Ota Weinberger* treats axiomatism, too, as just one of logical methods, without entering into details as to its difficulties when applied to law. All he concludes is reduced to a blank prophecy, saying that "the logical analysis of legal thought is going to lead to the elaboration of pure deductive systems".[44]

In addition to renewed approaches to axiomatism in law,[45] there is a specific impetus that may have promoted axiomatism in the codes' systematisation of law. This is the systemic investigation into conceptual sets, launched rather as a requirement than as a modest achievement.

(Drawbacks in Philosophy)   The tradition of systemic investigation into conceptual sets in philosophy is hardly sufficient for seconding the efforts in jurisprudence. Firstly, it concentrates on the analysis peculiar to philosophical systems. Secondly, drawing mainly on *Kant's Kritik der reinen Vernunft*,[46] both its issues and entire notional framework are inspired by the methodological limitations set by *Kant*ianism, old and new.[47]

As to the general systems theory and similar interdisciplinary trends, they are mostly preoccupied with dynamic systems in material and social reality. Consequently, conceptualisation in actual systems is secondary for them, seen mostly as a program to be addressed, if at all, in future.

Considering the fact that neither theory of science nor scientific methodology have made striking progress on the field, formal logic has remained in charge of conducting research on conceptual systems. And indeed, logic can successfully

---

[42] Bochenski, I. M.: *Die zeitgenössigen Denkmethoden.* 2. Aufl. München, 1959, quoted by Klug, 16 and 174.

[43] Tammelo, I.: *Rechtslogik und materiale Gerechtigkeit.* Frankfurt am Main, 1971, 48.

[44] Weinberger, O.: *Rechtslogik.* Wien–New York, 1970, 362.

[45] E.g., Ferrajoli, L.: *Teoria assiomatizzata del diritto,* Parte generale. Milano, 1970 as well as Wróblewski, J.: Axiomatization of Legal Theory. *Rivista internazionale di filosofia del diritto,* 49 (1972) 3. 380–389.

[46] Kant, I.: *Critique of Pure Reason* [Kritik der reinen Vernunft, 1781].

[47] See, e.g., Bartók, Gy.: *A 'rendszer' filozófiai vizsgálata* [Philosophical investigation of the 'system']. Budapest, 1928.

utilise its entire store of analytic instruments for systems research; the terrain, however, where it can make full use of its properties to achieve results suited to such a purpose is but its most narrow field, notably, axiomatics. Therefore the circumstance that research in conceptual systems is carried out unchangedly within the competence of logic has eventually deformed research itself, by diverting it onto the forced path of axiomatics. Thereby the very method of analysis creates an object for itself. Firstly, it addresses the subject with means and approach alien to the subject's own specificity. Secondly, this discrepancy with latent antinomy in between subject and approaching to it gets expressed in the subject's manipulation, equalling to distortion and falsification. Thirdly, axiomatism prevails with a subject transubstantiated. Or, what may have initially been a legal system, a mobile and dynamic conglomerate of both logical and alogical components, is going to eventually become a series of deductive conclusions, rigidified and broken into a construction unfolded and crystallised by the manipulator's axioms.

II. Axiomatism

1. The Want of Axiomatisability

(From Deductivity to Axiomatisation)   For an external observer, human knowledge appears in form of written texts, involving a definite store of concepts with relations established amongst them. These texts contain pieces of information at various levels. Propositions and the linguistic units carrying them textually are formulated not inordinately but as organised according to a given order, mutually co-related as components of a well-constructed intellectual system. The order manifested in such texts is neither self-determining nor set for itself. It is designed to represent the connections of the object which the text has to express on a conceptual level. However, the underlying order may have concurring notional representations. For the representation to be adequate, its basic substantive features need to be identical. Or, the notionally schemed order has to be partly natural yet partly artificial, reconstructed and constructed at the same time.[48]

---

[48] In its time, the Soviet philosophical literature elaborated the thesis of *correspondence* between formal and contentual components, and called it the principle of "parallelism of form and contents of thought". Accordingly, their *parallelism* was thought to be based upon the relative independence of both sides with exclusive operations within their basic correspondence. Shtshedrovitskiy, G. P.–Alekseev, N. G.: Printsip parallellizma 'formy i

In case the components of a system are grouped in a way that its theses are logically to conclude from one another as necessary consequences, both their connection and the system itself qualify as *deductive ones*.[49] The further development of deductive systems by re-formulating them at a qualitatively higher level leads to *axiomatisation.* As a strictly consequent formal perfection of the deductivity of systems, axiomatisation amounts to the formal description (or reconstruction) of an already established system, elaborated exclusively in a deductive order. Axiomatic reconstruction is achieved through *meta-language* formulation of theses specified in *object-language* provided by the underlying system. Its phases are rather strict as to the conditions to be met. At first, (1) the basic signs to be applied in the system are defined, followed by (2) the definition of the formulas suitable to provide the expressions of the system, then followed by (3) the selection of the basic propositions *(axioms)* from the formulas defined above as well as by (4) the determination of the (deductive) rules of inference (or derivation) to be accepted in the system, and finally, to be ended by (5) the conclusion of all the theses *(theorems)* provable within the system, according to the same accepted rules of inference.[50]

(Futile Approximations at the Most)   By projecting the *Aristotle*-inspired definition of *axiomatic systems*[51] onto the law after having performed the necessary substitutions,[52] we do reach the conclusion according to which the law can be conceived of and also treated as "a system *S* of normative concepts and propositions, whose property is that (a) all theses of *S* relate to the same domain of human behaviours and the relations among such behaviours; (b) all

---

soderzhaniia mysleniia' i ego znachenie dlya traditsionnyh logicheskih i psihologicheskih issledovanij [The principle of parallelism of 'form and content of thought' and its significance for the traditional logical and psychological research]. *Doklady Akademii Pedagogicheskih Nauk RSFSR,* (1960), paras. 2 and 4.

[49] Sadovskij, V. N.: The Deductive Method as a Problem of the Logic of Science. In: Tavanec, P. V. (ed.): *Problems of the Logic of Scientific Knowledge.* Dordrecht, 1970, 160–211 and 168.

[50] Sadovskij: *op. cit.* 173 and 187.

[51] Klaus, G.: *Einführung in die formale Logik.* Berlin, 1959. 290.

[52] The replacement of the category *Urteil* ['judgement'] by 'theses' and the use of 'validity' instead of *Wahrheit* ['truth']. For the intense debates they have otherwise rightly provoked, cf. Peczenik, A.: Doctrinal Study of Law and Science. *Österreichische Zeitschrift für öffentliches Recht,* 17 (1967) 1–2, 129–131 and 134–135; Opałek, K.: The Problem of Validity of Law. *Archivum Juridicum Cracoviense,* 3 (1970) 7–18; and as to the analogy between 'validity' and 'truth', Wright, G. H.: *Norm and Action.* A Logical Enquiry, London, 1963, 196–197.

theses of *S* are valid; (c) providing that certain theses belong to *S*, every further thesis inferable from these according to the rules of logic has to belong to *S*; (d) there has to be a finite number of concepts in *S* whose meaning needs no explication, and the meaning of all other concepts belonging to *S* has to be definable by that finite number of concepts; (e) there has to be a finite number of theses in *S* whose validity is evident, and all the further theses of *S* are inferable from that finite number of propositions according to the rules of logic."

The condition (a) refers to the unity of legal regulation in a wider sense. Condition (b), a *sine qua non* one for descriptive propositions stipulating that "all judgements of *S* are true judgements", is tautologic in law as accepted *per definitionem* from the very start. Condition (c) formulates a necessary presupposition for any logical treatment of law, postulating in doctrine [*Rechts-dogmatik*][53] that both the posited norms and their logical consequences are to be taken as propositions of the law at the same level and to the same effect.[54]

As to condition (d), the first specific requirement for the law's axiomatisation, we are now to encounter rather difficult dilemmas. In the first moment, however, a compromise solution may seem to offer itself. For instance, we could presume that both posited law and its doctrinal study (engaged in the law's linguistico-logical processing into a semantically higher-level meta-system), together with the set of principles asserted in standing jurisprudence and its underlying professional ideology, are to embody those principles of interpretation through which the meaning of the law's fundamental concepts can be established as evident, and the meaning of all the further concepts as validly accepted.[55] However, the neuralgic point is not here but on deductive sequence, on the inferability of concepts allegedly derived from some fundamental concepts in the given axiomatic system.

---

[53] Cf. by the author: Law and its Doctrinal Study (On Legal Dogmatics). *Acta Juridica Hungarica,* 49 (2008) 3, 253–274.

[54] E.g., Wróblewski, J.: *Zagadenienia teorii vykladni prawa ludowego.* Warszawa, 1959, 248 and 482, as well as Peczenik: *op. cit.* 131–134.

[55] A similar approach is suggested by Wróblewski *Zagadenienia teorii...*, passim; Ross, A: *On Law and Justice.* London, 1958, 138–139; and Jørgensen, S.: Argumentation and Decision. In: *Festkrift til professor dr. jur. et phil. Alf Ross.* København, 1969. as well. In fact, all such approaches share the conviction that meaning in law is a function of contexture and that the law's social context of interpretation is part of that contexture. Cf., by the author: On the Socially Determined Nature of Legal Reasoning. *Logique et Analyse* 16 (1973), Nos. 61–62 and in: Perelman, C. (ed.): *Études de logique juridique* V. Bruxelles, 1973, 21–78.

If this is so, then *law is unsuited to axiomatisation* by virtue of the very nature of its concepts, considering the fact that in any system-constructing quality the very sinse of *deductivity* is *alien* to them. Or, the basic condition of the law's axiomatisability remains unfulfilled already at a conceptual level. For no law has fundamental concepts with meanings evident in themselves; no principles of interpretation are exhaustively defined by or construable from the system; moreover, the law's concepts are not necessarily inferable from within the system.

Finally, condition (e), specific to law, raises drawbacks even more insurmountable.

(1) A preliminary remark has firstly to be made. Condition (b) stipulates that "all theses of *S* are valid" and condition (e) stipulates that "there has to be a finite number of theses in *S* whose validity is evident". Accordingly, we have already stated that all the law's components have to be held valid, as the amalgamate of valid and invalid elements in law is *per definitionem* excluded. Indeed, a number of interpretive principles, enacted rules as well as professional maxims have for long been developed to deprive propositions with no validity within or incompatible with the system of their belonging to that system.[56] Nevertheless, law is a specific continuum in the unbroken process of norms gaining and losing validity, a continuum with boundaries constantly forming in time.[57] (As it can be noticed, we are focussing here on the formal–positivistic–aspect of the very complex notion of validity.[58] Although this fits in better with the specific direction our investigation is taking, the sociological approach to the notion of validity would cause no change in accepting validity as a prime criterion.[59])

All that notwithstanding, the category *of truth* (expressing correspondence between reality and its cognition in epistemology) and the one of *validity* (designating the legally normative quality of the regulation) do not have the same position when complying with the above conditions. For in case of descriptive propositions, there is a close and somewhat intimate relationship between the truth and the evidence of truth, an organic coupling which is quite alien to norm-propositions. The evidence of truth is revelative of contents and of the quality how they are reflected. The evidence of validity tells only about

---

[56] See, e.g., Wróblewski *Zagadenienia teorii..., op. cit.* 282 adn 481.

[57] Cf., by the author: *Lectures on the Paradigms of Legal Thinking.* Budapest, 1999, particularly at para. 6.1. on 203 et seq.

[58] Cf., by the author: Validity. *Acta Juridica Hungarica,* 41 (2000) 3–4, 155–166.

[59] Cf., by the author: Quelques questions …, passim, especially at 601.

the respective norm's belonging to–by sharing in–the law's overall normativity.[60]
In contrast to the evidence of validity, the evidence of truth cannot be self-explanatory or tautologic. In his *Philosophical Notebooks*, also *Lenin* identified
the source of axiomatic evidence in the justificatory power of the continuity of
man's practical activity,[61] concluding therefrom that axioms "are not true
because they are evident, but they are evident because they are true".[62] No
"transcript" in law of such an allegation–claiming that "norms are not valid
because they are obvious but they are obvious because they are valid"–could
lead to any plausible result. The norm acquires normative form by gaining
normative expression in order to become separated from both epistemological
truth and ontological necessity, in a way of being also freed of disputability
any longer. This refers to the very fact that validity (like any other element of
norm systems) appears as "an artificial human construction",[63] a result of
man's social activity. Simultaneously, it gets applied as a criterion set vis-a-vis
norm systems as a *sine qua non* of the legal qualification of reality. Otherwise
speaking, it has a constructive role in the specific establishment of the law's
quality as "distinctively legal".

(2) Our genuine problem relate only to the second phrase of condition (e),
implying the cardinal query for the *sine qua non* condition of selecting axioms
from theses of the system, in order to construct it deductively this way.

Namely, law can be conceived as an axiomatic system in two ways.

According to alternative (A), the total sum of the laws' posited provisions
shall be taken simply as a set of axioms. Then the posited body of the law with
all its logical consequences will stuff the axiomatic system as a series of
axioms, and the theses elaborated by the law's doctrinal study, concluded
deductively therefrom, as theorems. According to alternative (B), distinction is

---

[60] Of course, the kind of validity referred to here accords with its *positivistic* understanding. Validity in a positivistic sense is indifferent to contents, so it carries the law's specificity–the "distinctively legal" quality–in a most pure form. Its *sociologistic* sense (which instead of signalling mere belonging–or ascription–to the system, describes actual functioning) remains a formal category on the whole. It asserts the normative quality of norm-propositions belonging to the legal system through their being asserted by (and in) judicial acts and other sociologically significant events. Besides these two senses, one may specify its *contentual* understanding as a further notion of validity. This relates to the value of norm-propositions some instrumental value (functionality, suitability, desirability, abstract acceptability, and so on), in view of the law's purposes accepted in a given circle.

[61] <http://www.marxists.org/archive/lenin/works/cw/volume38.htm>.

[62] Quoted by Klaus: *op. cit.* 291.

[63] *Ibid.* 72.

to be made between provisions that provide fundamental regulation and ones only executing the former as subordinate to it. Either solution can only be accepted as failing presupposition.

(Ad A) The first alternative of axiomatic system-construction is redundant as it can only offer a pseudo-solution. The qualification of the total sum of enacted provisions as axioms would deprive this artificial system exactly of its specific–axiomatic–character, for the selection of axioms would exclusively be directed by a wholly external factor, namely, by the act of the legislator having posited those provisions. In case if axiomatic quality is not defined by the suitability of the proposition in question to serve as a foundational stone for system construction, we may scarcely speak of an axiomatic system.[64]

Ad B) By selecting axioms, the other alternative, too, is to bring artificial division in the system, as it will distinguish between axioms and normatively posited and not posited propositions as logically inferable theorems.

In order to overcome artificiality, we could state that as regards the validity of *contents*, both normatively posited and not posited propositions, once logically inferable, are equivalent. Nevertheless, a division as outlined above could not be without problems. Partly because it is likely that we should select our axioms by far not exclusively from among the law's hierarchically upgraded provisions (from a Basic Law or a code's General Part with fundamental principles of the regulation). By this, we would unavoidably contradict the very spirit of the structured law and the normative significance attributed to it. And partly because there is high probability for axioms getting selected not only from the law's normatively posited stuff but of creating some of them, through mental (re)construction, as logical premise to some normatively posited provisions. Accordingly, our system would be constructed as an artificial set of four components, namely, normatively (1) posited and (2) not posited axioms and their normatively (3) posited and (4) not posited logical consequences, taken as theorems.[65]

---

[64] Opałek, K.–Wolenski, J.: *Das Problem der Axiomatisierung des Rechts.* Later in: Winkler, G. (ed.): *Rechtstheorie und Rechtsinformatik.* Wien–New York, 1975. 51–66, also foresaw such a solution (on 15–16) by accepting its set as a class of *independent* norms (axioms). Without objecting to or refuting it, they concluded that it cannot be but of a "minimum value" in practice.

[65] Opałek & Wolenski, 16 also find this option feasible for a procedure when, first, axioms are inductively formulated from the posited stuff of norms, and then, the system's theorems are deduced from them. The criticism the authors exert seems however to focuss on a secondary point. The issue of deducibility being left untouched, they are only

One of the prerequisites of axiomatisation according to condition (d) has been a network of concepts constituting the system that can be arranged in a deductive order. However, as we have seen, concepts of law are not of such a type. In law, as known, it is by far not only concepts that resist getting transformed into a deductive chain of consequences. For propositions defining the mutual relationships and connections amongst concepts withstand deductivity, too, by virtue of their nature shared with one of concepts. Posited law is scarcely stuffed with norms deducible from the law's other norms in a formal, strictly deductive way.[66] Propositions fundamental to delineate the contents of legal systems mostly appear as delimitations–actualisations and concretisations– of purposes set forth by high-level politico-legal documents, the normative regulation of which will mostly provide the definition of those instrumental behaviours which have been selected by the legislator to achieve the desired aims. This is the reason why both the basic arrangement and its regulation in details–often distinguishable through a thorough analysis of contexture exclusively–are provided by the legislator and in a normative way.[67] Whereas, if we were indeed in a position to rely on deductivity, the legislator could safely leave the job of deducing systemic theorems from given axioms to either the professionals of doctrine or the law-applier.

Or, as expounded elsewhere,[68] processes of law-application cannot be reduced to deductive operations. Accordingly, attempts throughout history at eliminating *par excellence* creative moments from judicial processes were always bound to failure.[69] Neither doctrinal study can be based upon mere deductivity.[70] In the law's proper domain, be it either made or applied, instead

---

preoccupied with the consequence that such an implementation will inevitably exceed the boundaries of the underlying system and result in a "substantial overextension", unacceptable for a *Rechtsdogmatik*.

[66] Wróblewski: Axiomatization…, *op. cit.* especially at 380–381. The structure of legal systems is described as a complex–at the same time dynamic and static–entity in his System of Norms and Legal System. *Rivista internazionale di filosofia del diritto,* 49 (1972) 2, 224–245, especially on 228–229 and 236.

[67] Cf., by the author: Structures in Legal Systems: Artificiality, Relativity, and Interdependency of Structuring Elements in a Practical (Hermeneutical) Context. *Acta Juridica Hungarica,* 43 (2002) 3–4, 219–232.

[68] Cf. Varga: On the Socially Determined..., *op. cit.* passim.

[69] Cf., by the author: A törvényhozó közbenső döntése és a hézagproblematika megoldása a francia jogfejlődés tükrében [The interim decision by the legislator as a way of filling gaps, as overviewed through the French legal development]. *Jogtudományi Közlöny,* 26 (1971) 1, 42–45.

[70] E.g., Peczenik: Doctrinal Study of Law…, *op. cit.* 135–138.

of purely formal logical connections there are only interrelations of contents, which delimit the field of formal deductivity to a sheer hyperbolic ideal.

(Lack of Deductivity in the Law's Deep Structure)   The very nucleus of any axiomatic system is that in some set of building blocks there are few foundation stones from which one given building can be built up in one given form with the necessity that the operation, in view of the result, can be repeated by any actor at any future time. However, the relationship amongst the constituents of legal systems is not such as to allow to make up their edifice in exclusively one form, if its axiomatic procedure is defined and some constituents as foundation stones are designated. The principle of deductivity is at the heart of all axiomatism. The eventual lack of the deductivity of legal concepts affects directly the alternative (B) only. The alternative (A) seems not to be excluded as a job to be undertaken. Or, this alternative could be realised without, however, bringing us closer to the gist of legal axiomatism. Its acceptance would be like claiming to explain the structure of a building by defining its construction procedure and one or two foundation stones assigned to it, but presenting in fact the whole edifice with each and every (different) piece of stone built in as foundation stones, and with each and every concrete (different) manner of their building in as fundamental procedures.

2. *The Heuristic Value of an Ideal*

(Cases of N/A)   As the basic characteristics of axiomatic systems are not applicable to law, we have to regard legal systems as *non-axiomatic and not axiomatisable* ones.

As to the further, accessory properties of axiomatic systems, neither the principle of the *independence of axioms*[71] nor the one of *irreducibility*[72] is applicable in law. For providing that we accept all the normatively posited provisions of the system as axioms (proposal (A)), we exclude the above principles from the outset. Providing that we accept exclusively the system's elaborated basic principles as axioms (proposal (B)), we do presume those principles already fulfilled from the very beginning.

---

[71] According to which none of the axoms can be deduced from any other, serving as the latter's theorem. Klaus: *op. cit.* 303.

[72] Fulfilled as an improved version of the former, "if each axiom of the system is independent of the conjunction of the other axioms", that is, "if both this very axiom and its logical negation are logically compatible with the conjunctions of the others". Klaus: *op. cit.* 321.

One of the advantages of axiomatic system construction is that by revealing the identical structure of seemingly differing theoretical and practical systems, it allows them to be analysed collectively and synthesisingly.[73] This collectivity is introduced by the term of *isomorphy* in logic. Namely, "[i]f the models differ only in the different character of the specific interpretations regarding their components, and if they coincide totally when we disregard this for the sake of their treatment on a formal axiomatic plane, we say that the models in question are of an isomorphous character as they have quite identical a logical structure".[74]

Well, in the domain of law, if we cannot speak of isomorphy among systems, the question itself becomes pointless. Although quite a few isomorphous structures can certainly be encountered among various institutions within given legal systems, their examination points beyond axiomatics. Consequently, also *dependence*–namely, "if the system itself or its logical negation can be inferred from the other"–is quite alien to legal systems, thus–apart from some exceptions in the domain of the techniques of legislation[75]–we may conclude that any legal system is "logically incidental" compared to other systems.[76]

(Cases of Correlation)   However, it does not result from the law's inherently non-axiomatic composition that legal systems could not carry features inter-pretable within an axiomatic perspective.[77] Even the law's geometric ideal can only gain a meaning in history if the law has a genuine façade suitable to be

[73] Cf., e.g., Blanché: *L'axiomatique…*, *op. cit.* ch. IV, § 23. *Lukács* too, albeit opposed (as flatly hostile) to any formalism in general, welcomed the tendency towards "the mathematisation of all sciences". Lukács, Gy.: *A különösség mint esztétikai kategória* [Particularity as an aesthetical category]. Budapest, 1957, 149–150.

[74] Blanché: *op. cit.* 46.

[75] Obviously, there is isomorphy in the exceptional cases of promulgating the same statutory texture in separate jurisdictions. Yet this is irrelevant for logic. Reception of legal texts can become relevant for isomorphy only provided that either the same basic principles are broken down differently in detailed regulations or differing basic principles will be asserted in the same texture of regulation. Properly speaking, this is not the issue of isomorphy to be at stake. Isomorphy is related to the identical structure of systems differently interpreted, while reception with variations testifies only to the dialectics inherent in the demand for harmony between basic principles and their detailed breaking down in a regulatory concretisation.

[76] Klaus: *op. cit.* 321.

[77] E.g. Savigny, E.: Zur Rolle der deduktivaxiomatischen Methode in der Rechts-wissenschaft. In: Jahr, G.–Maihofer, W. (ed.): *Rechtstheorie.* Beiträge zur Grundlagen-diskussion. Frankfurt am Main, 1971, 315–351 and Rödig, J.: Axomatisierbarkeit juristischer Systeme. In: Rödig, J.: *Schriften zur juristischen Logik.* Berlin, 1980, 65–90.

brought into connection with the characteristics of axiomatism in some way. Or, our basic rejection will reckon with moments suggesting a certain connection notwithstanding.

Although, according to the general theory of science, "[t]here is something asserting itself as a rule in the development of sciences, driving them in an irreversible sequence in function of their place in the hierarchy along four subsequent phases, that is, the descriptive, the inductive, the deductive, and, finally, the axiomatic ones",[78] yet we may agree with *Klaus* that "there is no science which could exclusively be axiomatic-deductive".[79] For not even the focus of axiomatisation on formal definition can exclude that–methodologically speaking–axiomatics will be acknowledged as the endpoint of all processes arising from the analysis of any concrete totality of material or intellectual phenomena. "It may occur only in books that axiomatics begins with axioms, for with the axiomatician it is just the axioms where it ends. Namely, axiomatics presupposes substantive deduction to which it gives a shape, which requires lengthy inductive preliminary work in collecting the materials to be organised this way. On such a basis, the axiomatician's genuine job will be to identify axioms, that is, instead of drawing mere consequences from given principles, he will have, once a set of propositions is given, to find the minimum system of those principles from which the propositions in question can be deduced."[80] This is but a concretisation in logic, the epistemological formulation of which was already provided by *Engels* in his crude polemics with *Dühring:* "The general results of the investigation of the world will only be obtained when the investigation is already over: these are *results* in accomplishment rather than *basic principles* to start on. To construct the former mentally through concluding from the latter as reliable basis in order to reconstruct the world is sheer ideology".[81]

Or, axiomatic system building is by far not simply a game with signs for themselves, a futile exercise in some vacuum, but a way of systematising knowledge itself. Accordingly, its pattern may become an instrument of the

---

[78] Blanché: *L'axiomatique… op. cit.* 84.

[79] Klaus: *op. cit.* 325.

[80] Blanché: *op. cit.* 87.

[81] Engels, F.: *Anti-Dühring.* In: Marx, K.–Engels, F.: *Werke,* 20. Berlin, 1987, 574. Or, formulated elsewhere in the same developments, "the principles are not the starting-point of the investigation, but its final result; they are not applied to nature and human history, but abstracted from them". <http://www.marxists.org/archive/marx/works/download/Engels_Anti_Duhring.pdf>.

theoretical appropriation of the world, albeit its suitability is by far not unlimited. Moreover, if we stated beforehand that there is no system exclusively axiomatic, now we may risk the opposite-direction statement, namely that there is no system with absolutely no features of axiomatism. *For absolute axiomatism* is an empty category so much as *absolutely no axiomatism* is.

The two pillars of axiomatic system building is *formal construction* and its *deductive definition*. These are basically not proper to law, yet they may have some aspects within the perspective of which they may become method-ologically significant for it. For instance, the very fact that "in the axioms of the *Euclidean* geometry, all propositions of this geometry are in principle involved,"[82] is characteristic of all axiomatic systems. Among norm systems, there are in principle–as theoretical models–so-called static systems, in which the basic norm of validity elevates–by delineating the system's contentual boundaries as a general condition of validity, and with the rules of inference given–the whole system to be a logical consequence of the basic norm.[83] No need to say that such systems are scarcely set up anywhere in practice. Yet in law, norms authorising the issuance of, or extending validity to, certain subordinate norms may be defined in a way that the conformity (e.g., constitu-tionality) of the latter to this hierarchically higher level can be adjudicated, for instance, on the basis of the particular deducible from the general, or of its lack of contradictions, or of its recognition as embodying an instrumental value. On the other hand, there are general principles in law-codes, which may matter especially when treated quasi-axiomatically in the delimitation of the generalisable features of the details of the regulatory arrangement, as well as when decision is to be made in atypical or borderline cases, or when just filling gaps in the law are at stake. Or, the contentual superiority of general principles in so-called code systems[84] does by far not amount to their suitability to be taken as axioms in the sense of entailing all the code's propositions on principle. For general principles as the system's basic propositions may, by formulating the objectives and the overall ethos of the entire regulation, greatly delimit the circle of instrumental behaviours to be specified and legally qualified by the said regulation, without, however, defining them, as there is

---

[82] Klaus: *op. cit.* 319.

[83] Cf. Wróblewski: System of Norms …, *op. cit.* 226–227.

[84] Cf. Szabó, I.: Régi és új kérdések a szocialista jogelméletben [Old and new questions in socialist legal theory]. In his *Szocialista jogelmélet–népi demokratikus jog* [Socialist legal theory–people's democratic law]. Budapest, 1967, 119–120; and also Wróblewski, J.: The General Principles of Law. In: *Rapports polonais présentés au sixième Congrès international de Droit compare.* Varsovie, 1962, 220–222.

no exclusive, categorical equivalence between the objective set and the way the law may intend to reach it.[85]

What is therefore proper to legal systems–instead of formal derivation and consequence–is but a *mutual contentual relationship*, within which eventual contradictions or disconformities between principles and actual realisations can quite well be detected, but not in a way to be substituted by relations of mutual definition and inferability.

Finally, two further basic characteristics should as well be mentioned, ones that are requirements formulated in axiomatic systems as attached directly to their systemic character (rather than to their deductivity) and thus are asserted in law far more directly. The "requirements of deductive systems have different theoretical-cognitive 'force'"–according to science theory. "The most important of them is the requirement of *consistency* since otherwise the system is ruined. The other requirements have less importance."[86] Well, this requirement can be formulated easily. An axiomatic system is consistent if it "does not contain two statements, one of which is the negation of the other." Or, in other words, if "of any two contradictory sentences at least one cannot be proved."[87] If, therefore, consistency means that "it is not possible to prove from the given axioms both a certain formula *X* and the logical contradiction to *X*",[88] then, in the domain of law, this will correspond to the requirement that, within the system, any behaviour can be qualified either as *X* or as *non-X*. That is, the same behaviour cannot be regarded as lawful and unlawful by the same system at the same time. Or, *freedom from contradictions* is of an extraordinary significance in and for law. In the technological elaboration of its store of instruments, this is one of the primary conditions of the law's internal "morality", that is, of its efficient socio-political functioning.[89] Simultaneously, this is also a presumed and necessarily postulated element of the legislator's rationality

[85] Cf., by the author: The Preamble: A Question of Jurisprudence. *Acta Juridica Academiae Scientiarum Hungaricae,* 12 (1971) 1–2, 101–128.

[86] Sadovskij: *op. cit.* 202.

[87] Sadovskij: *op. cit.* 200 and Tarski, A.: *Introduction to Logic and to the Methodology of Deductive Sciences.* 2nd American ed., New York, 1994, 125.

[88] Klaus: *op. cit.* 300.

[89] The freedom of contradictions was defined as the basic feature of law (which has to be "an expression coherent in itself") by *Engels*, and as one of the preconditions of the law's *"inner morality"*, by Fuller, L. L.: *The Morality of Law.* New Haven–London, 1965, 65–70. For the latter, cf., by the author: Reflections on Law and on its Inner Morality. *Rivista Internazionale di Filosofia del Diritto,* 62 (1985) 3, 439–451 and The Inner Morality of Law. *Acta Juridica Academiae Scientiarum Hungaricae,* 29 (1987) 1–2, 240–245.

that allows and also necessitates kinds of interpretation which can prevent any contradiction that there may still be.[90]

In connection with consistency, the feature of *categoricity* as a specifically formulated prerequisite for freedom from contradictions has also to be mentioned. As known, in the mid-19th century, *János Bolyai* and *Nicolai Ivanovich Lobatchevsky* proved on *Euclid*ean geometry, the very first system of axioms ever elaborated in scientific development, that all its abstract perfection notwithstanding, it is not the exclusively feasible system of geometry, for when the system gets reorganised by changing its axiom(s) of, e.g., parallelism, the result can again be a system freed from contradictions which, among its boundaries, provides a complete answer to all questions that can at all be raised within the said system of geometry. Accordingly, we can state that a system "is not categorical, if a thesis *p* and also its logical negation can be proposed in an axiomatic system".[91] Well, while–as we have seen–in axiomatics it might have been conspicuous that *Euclid*'s geometry was proved not to be categorical for, e.g., parallelism, categoricity in and for law may turn out to be of interest first of all in a positive sense. Namely, in law there are so-called *basic principles*, mostly particular to given types of legal arrangements.[92] And this may lead us to the tentative conclusion that, on the last analysis, the legal system is a function of various "basic principles" taken as general theses, characterised by categoricity. However, legal systems are neither static, nor rigidified, and we know from legal sociology how contradictory tendencies law may incorporate and what tensions it may endure until a new start (e.g., by a revolution) brings a break into the system's development.[93] Or, the flexibility of legal systems is also a function of their categoricity to a considerable extent.

Along with consistency, another basic feature of axiomatic systems is the requirement of *completeness*. "A formal system is semantically complete in the absolute sense if every sentence, having value in reference to any model of this system, is inferable in it." That is, if "every sentence which is formulated by

---

[90] Cf. Nowak, L.: *Próba metodologicznej charakterystyki prawoznawstwa* [Essay on the methodological characteristics of legal knowledge]. Poznan, 1968, 199–200.

[91] Klaus: *op. cit.* 322.

[92] For the socio-political bounds of–especially socialist–basic principles, see, by Szabó, I.: *A szocialista jog* [Socialist law]. Budapest, 1963, 454 and 72–79 and Régi és új kérdések… [Old and new questions…]. *op. cit.* 122–124. For some principles universalised and thereby also self-emptying, see Péteri, Z.: The Nature of the General Principles of Law. In: Szabó, I. (ed.): *Studies in Jurisprudence for the Sixth International Congress of Comparative Law.* Budapest, 1962, 43–59.

[93] Cf., e.g., Lévy-Bruhl, H.: Tensions et conflits au sein d'un même système juridique. *Cahiers internationaux de Sociologie,* 30 (1961), 35–46.

employing the terms of this theory can be proved or disproved within it."[94] Searching for the equivalent of axiomatic completeness in law, we can formulate that a legal system is complete if the qualification of any behaviour covered by the regulation of the given system can be deductively inferred from its propositions. The opposite of completeness is obviously incompleteness, the case of which can be established depending on how we define the system's boundaries to which it is related. Usual definitions relate it to theses either drawn "from the system's area" or "correctly formulated in terms of the system".[95] This way, applying axiomatism to law, we are to see that such a logical approach corresponds to the positivistic understanding of gaps in law: both define the system's boundaries from inside, by the system's own terms. Opposed to it, a sociological approach may result in a "more complete" concept of completeness, as it draws its boundaries from outside, by assessing the widely felt demands of social reality.[96]

3. Conclusion: Ideals and the Dialectics of Substantivity

With the present investigations concluded, it seems that the creed of David *Hilbert*, one of perhaps the greatest representatives of modern mathematics–according to which "I believe that all that can at all be an object of scholarly thought is, by achieving its maturity for theory-building, suitable for axiomatic elaboration and thereby also for mathematisation."[97]–is based on an unproved and unprovable generalisation. Albeit it is true in a figurative sense that "the block is not on the mason's side, but against him, and the first thing that happens in its shaping seems the most unnatural of all",[98] yet it is not merely the inertia of the material concerned I mean by referring to law. For legal systems are truly dynamic systems thoroughly built on substantive interconnections. Therefore they resist axiomatisation.[99] At the same time, the *substantivity of inherently dialectic interrelations* may not prevent theoretical reconstruction from treating legal systems in their *sui generis* type of intellectual representa-

---

[94] Sadovskij: *op. cit.* 202 and Tarski : *op. cit.* 135.

[95] Klaus: *op. cit.* 321–322.

[96] For the dichotomic approach of gaps in law and their feasible synthesis, see, by the author: Quelques questions méthodologiques…, *op. cit.* 205–241.

[97] Hilbert, D.: Axiomatisches Denken. *Mathematische Annalen,* 78 (1918), 415.

[98] Mann, T.: *The Tables of the Law.* [Das Gesetz, 1944] New York, 1945, section 15, 36.

[99] Peczenik, A.: Jumps and Logic in the Law: What can one Expect from Logical Models of Legal Argumentation? *Artificial Intelligence and Law,* 4 (1996) 3–4, 297–329 will abstract his final message as follows: "A strict and formal logical analysis cannot give us the full grasp of legal rationality."

tions within which "the Parts altogether define the Whole by defining each other mutually". For such a system–as the arguments holds on[100]–may prove to be "not only an organised but an organising unit to finally organise itself into one single entity with Parts organised by the Whole and the Whole prevailing through the Parts organised".[101]

[100] Bartók: *op. cit.* 19.