ISSN 1995-6134
2020-Suppl.

English translation of updated version of the original article published in Ukrainian
Tiaglo, O. V. (2017). *Forum Prava,* (1). 188–194.
URL: http://nbuv.gov.ua/jpdf/FP_index.htm_2017_1_33.pdf

TRANSLATION OF PUBLISHED ARTICLE

UDC *340:16*
DOI: http://doi.org/10.5281/zenodo.4082815

O.V. TIAGLO,
Professor, Chair of Social Sciences and Humanities, Kharkiv National University of Internal Affairs, Doctor of Philosophy, (Full) Professor, Kharkiv, Ukraine; e-mail: olexti@yahoo.com;
ORCID: http://orcid.org/0000-0003-0721-1153

IS THERE A SPECIFICALLY JURISTIC LOGIC?

(ABSTRACT, KEY WORDS)

Two main approaches to understand juristic logic are analyzed. In accordance with the first approach, called trivial, juristic logic is the application of general, or formal, logic in field of law (I. Tammelo, H. Kelsen, etc.). However, some remarks by Kant, Heidegger, or Toulmin help to derive that along with general logic special, or material, logics exist. These material logics are determined not only by frames of their fields of application but also by essential contents of these diverse fields, i.e., they are content-of-field-dependent. Juristic logic is one of the material logics: this approach to understand it is called nontrivial. In other words, a specifically juristic logic does exist as the material logic of field of law. An essential feature of the nontrivial understanding of juristic logic is that it does not limited by recognition of formal validity and material validity but takes into account special pragmatic – juristic – validity, which has priority in correct legal reasoning. The idea of material logic at all and of the nontrivial juristic logic in particular looks like a manifestation of informal logic, of the total nowadays movement to make logic more empirical.

Key words*: juristic logic; legal reasoning; pragmatic validity; juristic validity; formal logic; informal logic; Ilmar Tammelo*

Problem statement

Title of this my article reproduces the title of final chapter of Hans Kelsen's last book, published posthumously in 1979, almost literally (Kelsen 1979 : 216–220). The question formulated in this title got factually negative answer, supported, in particular, by reference to the position of Ilmar Tammelo[1]. Namely, Kelsen agreed with the basic statement of Tammelo's 1955 article that *juristic logic is formal logic employed in legal reasoning. It does not constitute a special branch, but is one of the special application of formal logic* (Tammelo 1955 : 278). This quoting by the world-known authority in field of theory and philosophy of law of the less known colleague a decade and a half after publication of his article indicates clearly that Tammelo expressed the widespread opinion about juristic logic very successfully. However, must we agree with this opinion unconditionally? To find a grounded answer to this question, I will, firstly, to analyse critically the Tammelo's relevant logical heritage, practically unknown to many researchers today. Secondly, I will consider discussions concerning juristic logic over a wider period, taking into account different points of view[2].

[1] Ilmar Tammelo was born on February 25, 1917 in Narva, Estonia, which was then a part of the Russian Empire. He was educated in law at the University of Tartu (Mag. Jur., 1943). According to colleagues, he liked to say that in his first year at the University of Tartu he studied Estonian law; in his second year Soviet forces invaded and he studied Soviet law; in his third year the Germans invaded and he studied German law. Degree of Dr. Jur. Tammelo received at the University of Marburg, Germany in 1944. He migrated to Australia in 1948. Studied law and philosophy at the University of Melbourne (MA, 1951). Started to work at the Department of jurisprudence and international law at the University of Sydney in 1951. Tammelo removed to Europe to head his own department at the University of Salzburg, Austria in 1972. Nevertheless, he returned to Australia eventually. Died on 8 February 1982. Ilmar Tammelo composed thirteen books and hundreds of articles, mostly in German and English; two collections of his articles in Estonian were published posthumously in 1993 and 2001. One of the founders of the Australian Society of Legal Philosophy. See more details, e.g., in (Blackshield 2012).

[2] Different points of view on juristic logic as well as analysis of some of them one can find, e.g., in the contemporary Ukrainian logician V. D. Titov's paper (Titov 2005).

ISSN 1995-6134

Trivial approach to understanding of juristic logic

Main purpose of the Ilmar Tammelo's article "Sketch for a Symbolic Juristic Logic" was to demonstrate that *symbolic juristic logic provides valuable tools for legal reasoning definitely superior to those available from traditional logic. The possibilities in the application of symbolic logic to law promise benefit to both legal dogmatists and sociological jurists*… (Tammelo 1955 : 306). Although complete analysis of this article concerning the ***symbolic*** juristic logic goes beyond my research scope now, several basic ideas have to be considered.

Firstly, Tammelo insisted that logic and formal logic are one and the same. In frame of such logic he distinguished classical, or Aristotelian, logic as well as symbolic logic, developed by G. Frege, G. Peano, B. Russell, and A. N. Whitehead. *The logic reformed by an extensive application of symbols is related to classical logic as non-Euclidian geometries to Euclidian geometry* (Tammelo 1955 : 278–279).

The presentation of logic as formal logic is far from new but until our days seems quite debatable. I would like to reference to Immanuel Kant at first. He delivered a course of logic at the University of Konigsberg since 1755 to 1796. Gottlob Benjamin Jäsche published the relevant text "Immanuel Kant's Logic. A Manual for Lectures" in 1800. In this manual was stated that logic is *a science of the necessary laws of the understanding and of reason in general, or what is one and the same, of the mere form of thought as such*. A little further logic was defined *as a science a priori of the necessary laws of thought, not in regard to particular objects, however, but to all objects in general*… (Kant 1992 : 528–531). It seems that Kant defined logic by means of two interconnected attributes: this science concerns 1) only form of reasoning, and 2) these reasoning are about any subject-matter; hence, such logic by nature inevitably is both formal and general. It may be called simply general or simply formal for brevity. However, earlier – in the "Critique of Pure Reason" – this famous thinker pointed out that logic "*can be undertaken with two different aims, either as the logic of the general or of the particular use of the understanding. The former contains the absolutely necessary rules of thinking, without which no use of the understanding takes place, and it therefore concerns these rules without regard to the difference of the objects to which it may be directed. The logic of the particular use of the understanding contains the rules for correctly thinking about a certain kind of objects. The former can be called elementary logic, the latter, however, the organon of this or that science…*" (Kant 1998 : 194). No delving into depth and nuances of Kant's thought now, I will note only that his explanation of *the logic of the general use of the understanding* or, simply, general logic is the earlier analogue of the Tammelo's views[3]. It is essential to take into account, however, that, according to Kant, general logic does not exhaust science of logic because there is *the logic of the particular use of the understanding* associated with *thinking about a certain kind of objects*.

Secondly, although logic is an effective tool of legal reasoning, in fact it does not depend on these reasoning; such logic is applied to field of law, so to speak, from the outside. Therefore, according to the Tammelo's position, positively assessed by Kelsen, specificity of juristic logic is determined entirely by frames of field of its application: it is no more than a localized application of general logic.

Thirdly, Tammelo insisted that *although logic does not deal with all validity conditions, but directly only with formal validity, its scope extends to the whole realm of knowable*. As he pointed out, *problem of validity is wider than the problem of material or formal truth, because we can speak of validity also in relation to other values than the value of the true (e.g., in relation to the good, the right, and the beautiful)* (Tammelo 1955 : 280). This Tammelo's idea about generality but not uniqueness of formal validity in diverse fields of reasoning with different basic values is very important for my research.

If the "Sketch for a Symbolic Juristic Logic" reflected position of "early Tammelo", the book "Modern Logic in the Service of Law", published in 1978, reflected mature position of the logician, which ripened during about a quarter of a century. However, analysis of this book finds no significant change in the Tammelo's understanding of logic.

"*Legal reasoning certainly purports to be a rational enterprise; however, it definitely is not wholly and solely logical reasoning if logic is conceived as a discipline of thought concerned only with formal aspect of reasoning. Uses of this word 'logic' which*

[3] Tammelo did not accept the Kantian apriorism word for word. Such acceptance would look strange after various developments in symbolic logic, revolutionary transformations of mathematics and natural sciences during the time that has passed since the Kant's works. Henri Poincaré, for instance, developed convincing critique of the apriorism in mathematics, referring to elaboration of different non-Euclidean geometries.

ISSN 1995-6134

embrace principles and methods of all sorts of rational procedures occur mainly among those who are not experts in logic. It is not advisable to follow this historically and etymologically founded but none the less doubtful practice", – stated Tammelo categorically (Tammelo 1978 : 1).

This statement excluded from the scope of interest of so-called *experts in logic* all special principles and methods of rational reasoning, necessarily inherent to field of law. It seems as one more literal repetition of the understanding of juristic logic, which was articulated in the 1955 article. Therefore, in particular, what *is sometimes called "the special logic of common law" can mean only general logic applied in the field of common law*. The insisting on anything other, despite recognition of a certain historical and epistemological substantiation, entails, according to Tammelo, exclusion of any person from the circle of *experts in logic*.

Legal reasoning as a rational enterprise is not limited to formal aspects of legal thought, the logician recognized. *Another essential task of it is the discovery and substantiation of materially sound legal thought-formations. The totality of this later kind of reasoning can be called "zetetic", to introduce for useful function a rarely used word of Greek origin. Hence, legal reasoning can be divided into logical reasoning and zetetic reasoning* (Tammelo 1978 : 2).

What are these "*zetetic*" reasoning, essential in field of law?

Logical reasoning is deductive in the sense that the application of appropriate principles of inference leads to conclusions that follow from the given premisses. This reasoning does not itself guarantee the material soundness of the claimed conclusions, but it contributes to the achievement of it. In a logically valid inference, the conclusion must be also materially sound if its premisses are free from contradictions and materially sound, Tammelo described additionally the exclusive subject of (formal) logic. *In contrast to logical reasoning*, *zetetic reasoning is not deductive*, he pointed out further. *Formally, the conclusions here are only possible, that is, without following from their premisses, they do not contradict them. Thus, for the generalization achieved by inductive methods only a degree of probability can be claimed. In reasoning by analogy, in which conclusions drawn are based on the similarity of relevant factors, only verisimilitude can be claimed for the conclusions… From the formal point of view, the conclusions reached by zetetic reasoning are not cogent, unless a general principle is superadded to instances of such reasoning – one capable of converting them into instances of deductive reasoning,* the logician stated once more (Tammelo 1978 : 3–4).

Tammelo restricted the set of reasoning, which he recognized as exclusive subject of (formal) logic, by deductive ones only. Accordingly, (incomplete) induction, analogy and all other non-demonstrative by nature "*zetetic*" reasoning were excluded from this set. As a result, juristic logic a là Tammelo was narrowed to application of different kinds of deduction in field of law. However, if to recognize that one of the inalienable functions of reasoning in this field is elaboration of different versions of infringements of law usually through "zetetic" inferences, then it will be impossible to avoid the next conclusion: for this function juristic logic in the Tammelo's understanding is useless absolutely.

Hence, any grounded answer to the question about a specifically juristic logic depends, first of all, on one or another understanding of logic. If we define logic once and for all as general, or formal, restricting its subject by general and necessary rules of (deductive) reasoning, then juristic logic is possible only as application of general logic in field of law. In other words, this ***trivial approach*** to understand juristic logic is connected only with localization of the special field of application of general logic. However, in this case the questions arise about a science that investigates forms, norms, standards of rational reasoning, which are valid not only in regard to the value of formal truth but special values of law as well; about a science that explicates correct structures and rules of *"zetetic"* reasoning, without which legal activity may be completely provable but in multitude important situations useless absolutely...

Nontrivial approach to understanding of juristic logic

The trivial approach to juristic logic is possible but not accepted by all. There are known some opposite positions, for instance, of the Austrian Eugene Ehrlich or the American Oliver Wendell Holmes (Jr.). These positions were analyzed in my previous articles (see, e.g., (Tiaglo 2015)). Now I will consider one essential generalization proposed by a famous German philosopher of the 20th century Martin Heidegger.

In the Heidegger's lectures, given in 1928 at the University of Marburg and later published as the book "The Metaphysical Foundations of Logic", one finds the next reasoning.

"*All real thinking has its theme, and thus relates*

ISSN 1995-6134

itself to a definite object, i.e., to a definite being which in each case confronts us, a physical thing, a geometric object, a historical event, a 'linguistic phenomenon.' These objects (of nature, of space, of history) belong to different domains… The thought determination, i.e., the concept formation, will differ in different domains. Scientific investigation of this thinking is in each case correspondingly different: the logic of thinking in physics, the logic of mathematical thinking, of philological, historical, theological, and even more so, philosophical thinking. The logic of these disciplines is related to a subject-matter. It is a ***material logic***," – Heidegger pointed out. In addition, he noted that *thinking taken as thinking about something, with any subject-matter, is formal thought, in contradiction to material, content-related thought… General logic, as knowledge of formal thinking, is thus* ***formal logic*** (Heidegger 1984 : 2–4).

It results from this fragment, firstly, that due to principally different domains, or fields, of reasoning one must recognize existence of some set of different material logics along with formal logic[4]. All these material logics are specifically content-related. In my supposition, a specifically juridical logic does exist as one of this set.

Secondly, it is necessary to distinguish practice of the concept formation in any of special fields of reasoning from the scientific investigation concerning this practice. These interconnected but different and not always existing together kinds of logical activity would be naturally called logic ***in re*** and corresponding logic ***post rem***.

If accept these distinctions, it seems natural to derive the conclusion about a specifically juridical logic along with specifically mathematical one, philosophical one, etc. This juridical logic is special not trivially – not just as the literal application of formal, or general, logic in field of law; in a ***nontrivial approach*** juristic logic is one of the material logics, and it is to be in order to complement general logic for the sake of all-encompassing reasoning in this field. This logic appears dually – as juristic logic ***in re*** or juristic logic ***post rem***.

The first conclusion mentioned above is in line with some basic ideas of the Stephen Toulmin's 1958 book "The Use of Argument". It is pointed out here, among other things, that *from the time of Aristotle logicians have found the mathematical model enticing... Unfortunately an idealised logic, such as the mathematical model leads us to, cannot keep in serious contact with its practical application.* Therefore, along with this *idealised logic*, some *working logic* conformed to jurisprudence rather than mathematics has to be introduced and expediently used (Toulmin 1958 : 10, 147).

According to Toulmin, *validity is an intra-field, not an inter-field notion. Arguments within any field can be judged by standards appropriate within that field, and some will fall short; but it must be expected that the standards will be field-dependent, and that the merits to be demanded of an argument in one field will be found to be absent (in the nature of things) from entirely meritorious arguments in another* (Toulmin 1958 : 255).

As one can see, standards of valid reasoning really depend on the field, in which these reasoning take place, i.e., they are field-dependent or, more accurately, ***content-of-field-dependent***. Respectively, in field of law there exists some ***intra-field-of-law***, or ***juristic*** ***validity***, which presupposes a number of special standards of legal reasoning. Finally, specificity of the *working juridical logic* is determined not only by frames of its field of application but also by the special standards, by the juridical validity, most deeply – by basic values of law.

Now it seems possible to try to define juristic logic in accordance with the nontrivial approach. If based on a simplest school understanding of general logic as science of forms and laws of valid reasoning, then the next definition seems relevant: the juristic logic is science of forms and laws of ***valid in field of law*** reasoning in ***field of law***. Of course, this attempt is open for both further critical improvement and pedagogic explanation.

A few remarks about juristic validity

In today civilized world reasoning and decisions in field of law must be constructed or evaluated, first of all, in relation to the values of a human being and human rights as well as of legality, which serves as an instrument to ensure them. That is why, for instance, in paragraph 3 of article 17 of the Criminal Procedure Code of Ukraine is stated: "*Suspicion, charges may not be based on evidence obtained illegally*" (Kryminal'nyj Protsesual'nyj

[4] The Heidegger's recognition of *the material logic* seems similar to the earlier Kant's assumption about *the logic of the particular use of the understanding*. Of course, both this thinkers did not belong to the circle of the *experts in logic*, but perhaps this is what allowed them to saw at the situation more widely and discerned non-reducibility of logic to formal logic? One other "no-expert in logic", who reached similar conclusion, was V.I. Vernadsky: he wrote about *special logic of natural science* in the mid-30s of last century (Vernadsky 1988 : 198–203).

Kodeks Ukrainy 2012). Evidence valid in relation to formal or material truth but gained through any violation of current legislation are illegal, legally invalid and, therefore, inadmissible. Any court decision based on them must be cancelled or changed.

The law of identity is widely recognized as a basic criterion of formal validity of reasoning. Accordingly, formal logic prohibits ***argumentum ad hominem*** as a violation of this law absolutely. Nevertheless, paragraph 2 of article 96 of the Criminal Procedure Code of Ukraine states that *in order to prove unreliability of witness's testimonies, a party may produce testimonies, documents as confirmation of witness's reputation, in particular, with regard to his conviction for knowingly misleading testimonies, deceit, fraud or any other acts, which confirm dishonesty of the witness* (Kryminal'nyj Protsesual'nyj Kodeks Ukrainy 2012). And this is not a surprise. Really, well-known Canadian expert in informal logic Douglas Walton stated that *reasoning from the personal credibility of a witness, to a conclusion to increase or decrease the credibility one attaches to the proposition asserted by the witness, can be a reasonable argument in some instances. It is reasonable if such a conclusion is arrived at within the context of a larger body of evidence in a case… the fallacy is committed when the impact of the ad hominem is out of proportion to its true weight and relevance as part of a larger body of evidence in a case*, he added (Walton 1998 : 280–281). Therefore, in world field of law argumentum ad hominem under some conditions is admissible.

Other similar examples, not being explained taking into account only formal and material validities or, respectively, formal truth and material truth are well-known (see, e.g., (Tiaglo 2015 : 220–221)). They persuades that there exist some special norms and standards of valid reasoning in field of law, which are a result of productive overlapping of formal validity, material validity, and validity in relation to law, i.e., a specifically juristic validity. In such legal "interference" the formal and material components are not a priority and may even be completely suppressed as in cases of some inadmissible evidence – correct formally and true but obtained in violation of law. More generally, one can say that in field of law relevant ***pragmatic validity*** prevails over syntactic and semantic validities. Investigation of this pragmatic validity, its interference with two other kinds of validity in field of law is a subject of a specifically juristic logic ***post rem***.

Nontrivial juristic logic and informal logic

A new branch emerged in logic – informal logic – at the beginning of the 20th century second half. Assessing its significance well-known Canadian researchers Ralph Johnson and Anthony Blair wrote, among other, the following.

We want to emphasize that informal logic is in no way incompatible with procedures, the application of criteria, or rigour. It is a question of ***which*** *criteria, and here informal logic is informal because it rejects the logicist view that logical form (****a là*** *Russel) holds the key to understanding the structure of all arguments; and also the view that validity is an appropriate standard to demand of all argu*ments.

Another way of making this point is to say that informal logic is allied with the movement to make logic more empirical, less ***a prioristic****…* (Johnson and Blair 2000 : 102).

It seems quite clear that this assessment rejects uniqueness and universal priority of formal validity but not validity itself. To grasp other possible – informal – components of validity, relevant norms and standards, procedures and criteria of reasoning it is necessary to take into account diverse empirical data, specific content of different fields of reasoning. In this relation, the idea of material logic at all and of the nontrivial juristic logic in particular looks like some manifestation of informal logic, more generally – *of the total movement to make logic more empirical*.

Conclusions

The question about existence of a specifically juristic logic is, first of all, question of understanding of logic. If one defines logic entirely as general, or formal, then juristic logic is possible only when it is understood as application of general logic in field of law. This trivial approach to juristic logic remains common among some traditionally minded *experts in logic* and jurists (I. Tammelo, H. Kelsen, etc.).

The trivial approach to juristic logic is not accepted by all. It seems quite natural because this approach leaves open the questions about necessarily inherent to field of law "*zetetic*" reasoning as well as about content-of-field-depended forms, norms, standards, etc. of valid reasoning, which are outside the subject of general logic. In this situation, some remarks by Kant, Heidegger, or Toulmin help to derive that, along with general logic, special material logics exist. They are determined not only by frames of fields of their application but also by essential content of these diverse fields. One of these material logics is a specifically

ISSN 1995-6134

juristic logic: such approach to understand juristic logic is nontrivial.

Rejecting the idea of apriorism, one should recognize the dual existence of juristic logic. First, ***in re***, it is a way of valid reasoning in field of law. Second, ***post rem***, it is the scientific investigation aimed to explicate and systematically present valid forms, norms, standards, etc. of legal reasoning. These kinds of logical activity are interrelated but different and not always exist together.

Nontrivial juristic logic ***in re*** implements some special forms, norms, standards, etc. of valid reasoning, which are a result of productive overlapping of formal validity, material validity, and a specifically juristic validity. In such legal "interference" the formal and material components are not a priority and may even be completely suppressed as in cases of some inadmissible evidence – correct formally and true but obtained in violation of law. More generally, one can say that in field of law pragmatic validity prevails over syntactic and semantic validities. Investigation of the pragmatic validity, its interference with two other kinds of validity in field of law is a subject of a specifically juristic logic ***post rem***.

The idea of material logic at all and of the nontrivial juristic logic in particular looks like a manifestation of informal logic, of the nowadays *total movement to make logic more empirical*.

REFERENCES

Blackshield, A. (2012). Tammelo, Ilmar (1917–1982). In : *Australian Dictionary of Biography,* (18). URL: http://adb.anu.edu.au/biography/tammelo-ilmar-15682.

Kryminal'nyj Protsesual'nyj Kodeks Ukrainy: Zakon Ukrainy (13.04.2012 No 4651–6) [The Criminal Procedure Code of Ukraine: Law of Ukraine on April 13, 2012. # 4651–VI]. *Holos Ukrainy – Voice of Ukraine*, (90-91) (in Ukrain.).

Heidegger, M. (1984). *The Metaphysical Foundations of Logic*. Bloomington: Indiana University Press.

Johnson, R. H., & Blair, J. A. (2000). Informal Logic: An Overview. *Informal Logic,* 20(2). P. 93–107.

Kant, Immanuel. (1992). *Lectures on Logic* / Ed. and trans. by J. Michael Young. Cambridge: Cambridge University Press.

Kant, Immanuel. (1998). *Critique of Pure Reason* / Ed. and trans. by Paul Guyer and Allen W. Wood. Cambridge: Cambridge University Press.

Kelsen, H. (1979). *Allgemeine Theorie der Normen*. Wien: Manz Verlag.

Tammelo, I. (1955). Sketch for a Symbolic Juristic Logic. *Journal of Legal Education*, 8(3). P. 277–306.

Tammelo, I. (1978). *Modern Logic in the Service of Law*. Wien, New York : Springer-Verlag.

Tiaglo, A. V. (2008). Neformal'naya logika kak manifestatsiya novoi logiko-filosofskoi paradigmy [Informal Logic as Manifestation of New Logic and Philosophic Paradigm]. In: *Istoriko-logicheskie issledovaniya. Sbornik nauchnyh statei.* Kyiv: Kievskij Universitet. P. 164–169 (in Russ.).

Tiaglo, O. V. (2015). Do ponyattya yuridicyhnoi logiki [On the Concept of Legal Logic]. *Bulletin of Kharkiv National University of Internal Affair*s, 3(70). 241–247 (in Ukr.).

Titov, V. D. (2005). O specifike opredelenij v yurisprudencii [On the Specificity of Definitions in Jurisprudence]. *Problems of Philosophy of Law*, 3(1–2). 45–50 (in Russ.).

Toulmin, S. E. (1988). *The Uses of Argument*. Cambridge: Cambridge University Press.

Vernadsky, V. I. (1988). *Filosofskie mysli naturalsta* [*Philosophical Thoughts of a Naturalist*]. Moscow: Nauka (in Russ.).

Walton, D. (1998). *Ad Hominem Arguments*. Tuscaloosa, Alabama: The University of Alabama Press.

(ARTICLE INFO)

Published in:
Форум права: Suppl. pp. t10–t15.

Related identifiers:
10.5281/zenodo.4082815
http://forumprava.pp.ua/files/010-015-2020-Suppl-FP-Tiaglo_4.pdf

Received: 14.09.2020
Accepted: 09.10.2020
Published: 12.10.2020

Cite as:

Tiaglo, O. V. (2020). Is There a Specifically Juristic Logic? *Forum Prava,* 65(Suppl.). t10–t15. DOI: http://doi.org/10.5281/zenodo.4082815.