

Published by the decision of the Scientific Council  
of Khachatur Abovian  
Armenian State Pedagogical University



Department of Philosophy and Logic  
named after Academician Georg Brutian



# W I S D O M

Special Issue 1(1), 2021  
PHILOSOPHY OF LAW



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Citation Index service*

YEREVAN – 2021

LAW AND LOGIC: E. BULYGIN'S DEDUCTIVE PATTERN  
OF JUDICIAL REASONING

## Abstract

In the twentieth century, the debate over the possibilities and limits of logic in law became particularly acute with the emergence of judicial realism, a philosophical and legal trend that denied the deductive nature of judicial decision-making. This compromised the theory of the judicial syllogism, assuming that a judicial decision could be deduced as a logical consequence from the premises - norms and facts, and generally provoked a sceptical attitude towards logic in law. The subject of the article is the deductive model of the justification of judicial decisions proposed by the outstanding legal philosopher Eugenio Bulygin. The aim of the article is to show Bulygin's contribution to the improvement of the deductive model of judicial reasoning. The main innovations Bulygin brought to the deductive model of judicial reasoning are: 1) justifying, based on logical analysis and open texture of language theory, the analytical character of the court interpretative sentences; 2) distinguishing the individual and the generic subsumptions, etc. At the same time, the authors conclude that Bulygin's improved deductive theory is not free from criticism, as the Argentine jurist does not succeed in complete eliminating doubts about the logical deducibility of at least some categories of decisions from general rules.

*Keywords:* legal reasoning, application of the law, creation of law, E. Bulygin, logic in law, judicial syllogism, legal realism, subsumption, judicial decision.

## Introduction

The problem of the role of logic in law has a long history - lawyers have looked to it for a firm basis for their conclusions and legal disputes, such as the Protagoras-Evatlus litigation, and it has been a rich source of inspiration for logicians (Armgardt, Canivez, & Chassagnard-Pinet, 2015). In the twentieth century, the debate about the possibilities and limits of logic in law became particularly acute with the emergence of judicial realism, a legal, philosophical trend that denied the deductive nature of judicial decision-making. This compromised the theory of the judicial syllogism, which assumed that a judicial decision could be deduced as a logical inference from its premises - norms and facts - and generally provoked a sceptical attitude towards the possibili-

ties of logic in law. At the same time, attempts to develop a methodology for judicial reasoning based, for example, on the "weighing" of values (human rights, legal principles) (Alexy, 2007) are not free from the costs of judicial voluntarism and have not become an acceptable alternative to the traditional deductive model. While the deductive model of law enforcement allows detecting defects in legal qualification and normative justification of the decision, the judge's methods of working with values (including "balancing", "weighing" methods) do not have an algorithm accepted in the doctrine, which makes it impossible to critically assess the validity of such decisions either.

The attempt to modernize the deductive model of judicial reasoning, having taken into account critical arguments of legal realists, was

undertaken by the outstanding representative of legal positivism in the philosophy of law, Eugenio Bulygin (1931-2021), an Argentinean logician and legal scholar of Russian origin, who wrote numerous legal, logical and logico-legal studies<sup>1</sup>. The scholar's answer to the question, which he put in the title of his article, "What Can One Expect from Logic in the Law?" is far from the position of "logical theology", which sees logic as an instrument for solving legal problems: "Logic cannot explain why and how certain facts come about, just as it cannot solve ethical, political or, indeed, legal problems, but it can clarify the issues involved in such problems and in their resolution. This is not everything, but considerably more than just something" (Bulygin, 2008, p. 153). At the same time, his version of normative reasoning for judicial decisions is based on the conviction, unshaken by legal realism, that "the reconstruction of judicial justificatory reasoning can be achieved within the limits of deductive logic" (Alchourrón & Bulygin, 2015b, p. 271). Besides the high scholarly authority of Bulygin, we have practical reasons to trust his judgment: from 1986 to 2001, he was a judge at Argentina's National Court of Appeal, and his deductive model of judicial reasoning, as represented in particular in one of his major works on the subject, "Limits of Logic and Legal Reasoning" (Alchourrón & Bulygin, 2015b), clearly reflects his own experience as a judge.

In 2021, philosophers of the law were preparing to mark E. Bulygin's 90<sup>th</sup> birthday, but he passed away in May of this year, just short of his jubilee. We dedicate this article to his memory.

#### Deductive (Syllogistic) Model of Law Application: Genealogy and Main Tenets

The doctrine of the "transformation" of gen-

eral rules of law into judicial decisions that determine the rights and obligations of parties to a legal conflict is traditionally referred to as the doctrine of the application of the law, referring to it as "among the most important in the entire system of law" (Savigny, 1847, p. 258). Its central problem is the problem of justification of the decision, and for such justification, it is usual, primarily in the continental legal doctrine, to use the deductive (syllogistic) model of reasoning, or the "theory of judicial syllogism" (Bulygin, 2016, p. 74).

The basic premises of the syllogistic theory of law application were explicitly formulated by doctrine in the early 19<sup>th</sup> century. The basis of the syllogistic model was the presumption of "Unity" (consistency) and "Completeness" of the legal system - the "whole" which "is destined for the solution of every problem arising in the province of law" (Savigny, 1867, p. 211) and it was generally assumed that for each legal problem there was only one correct solution (Bulygin, 2016, p. 74). This presumption did not rule out the existence of contradictions and gaps in the normative system but conditioned the demand for the restoration of "Unity" and "Completeness" addressed to doctrine and judges: "If Unity is wanting", wrote F. C. von Savigny (1867), "we have a *contradiction* to remove - If Completeness, we have a *gap* to fill up" (p. 212), stressing that "the requirement of completeness has just as absolute a claim of right as that of unity has" (p. 234). The possibility of this "restoration" was linked to the discovery of legal principles in the legal system, whereby it is possible to "deduce... the internal connection... which subsist between all juridical notions and rules" (Savigny, 1831, p. 39). Genetically dating back to medieval scholasticism and jurisprudence of the Glossatorian school (Berman, 1983, pp. 148-151), the thesis of unity and completeness of the legal system acquired a new impulse during the European codification era, initially linked with the natural law school, and subsequently with the development of classical legal positivism. The

<sup>1</sup> Some of these works, in particular "Normative Systems" (1971), which represents one of the first experiences of applying logic analysis to normative, especially legal systems (Bulygin, 2013, p. 45), were co-authored with Carlos Eduardo Alchourrón (1931-1996), an Argentine logician and legal scholar.

genealogy of this idea illustrates the “extraordinary vitality of the Postulate of Completeness” of law as a rational ideal of jurisprudence, noted by C. E. Alchourrón and E. Bulygin (1971, p. 178).

The institutional basis of the deductive model of law application was the principle of separation of powers, in particular, the separation of the *law creation* function carried out by the legislative (representative) power and the *law application* function entrusted to the judiciary. This was followed by the most important ethical principle of the judge’s treatment of the text of the law, to regard its provisions with respect and the prohibition on “fill” the law with its own meaning: when “the interpreter [of the law] undertakes to improve... its actual contents, he puts himself above the legislator and consequently misconceives the limits to his own calling; it is no longer the interpretation which he practices but the actual development of law. Such a confusion of boundaries between essentially different activities is a sufficient ground... for wholly rejecting this sort of interpretation, and, according to the true conception of the office of judge, for wholly denying his liberty to adopt it” (Savigny, 1867, p. 261). Likewise it was forbidden to replace the provisions of law by its own moral considerations, having regard to the “intrinsic value of the result” of the interpretation which is “most questionable” since in consequence of it “the interpreter will, as easily as possible, overstep the limits of his occupation and intrude upon that of the legislator” (Savigny, 1867, p. 181). Accordingly, the use of the syllogistic model in law application, “by the certainty, resulting from a strict scientific method”, has been seen as excluding “all arbitrary discretion” and avoiding two extremes: *on the one hand*, limiting the judge to “the mechanical application of a given text, which he is not allowed to interpret” and, on the other, a situation where “the judge should have to find the law for every case” (Savigny, 1867, pp. 150-151).

It has long been agreed by logicians and lawyers that the application of the law, culminating

in a judgment, is “wholly and exclusively one of ratiocination, or syllogism” (Mill, 1872, p. 547). For a long time, logicians and jurists alike agreed. Thus, from the point of view of G. Shershenevich (2016), “any judicial decision will reveal its logical nature” (p. 606). The dispositive part of the court decision appears as the conclusion from two premises: the major one, which is the rule of law interpreted by the court, and the minor one - the set of facts ascertained by the court. The judge’s discretion in the choice of the norm and its interpretation, as well as in the determination of the proof of the facts, does not allow the conclusion (decision) of the judge to be considered as “a simple mechanical matter” (Shershenevich, 2016, p. 619). Because of the logical relation between the grounds and the conclusion, not only the dispositive part (the judgment in the narrow sense) but also the opinion containing the justification of the decision was recognised as the constitutive part of the judgment with legal force (Savigny, 1847, p. 358).

#### E. Bulygin’s Deductive Model of Law Application: Responses to Critical Arguments of Legal Realism

At the turn of the nineteenth and twentieth centuries, the syllogistic model of judicial reasoning was criticised by the free law school and later by American legal realism. The main object of the realist attack on the deductive model of law application was the subsumption model as incapable of adequately reflecting the real process of *how* judges make decisions.

Sharing the deductive theory of the application of the law, Bulygin and Alchourrón modify it significantly, expanding its content to include the problems posed by legal realists in their critique of the deductive model. Believing that “realist movements have generally formed a salutary corrective to the formalist excesses of legal dogmatics” (Alchourrón & Bulygin, 1971, p. 53), Bulygin (2015a), however, considers it nec-

essary to distinguish between two questions - the question of the normative justification of the decision, which, in his view, is purely logical, and the psychological question of the judge's motivation in making a decision, the answer to which involves investigating the causal link between the psychological motivations for the decision and the decision itself (pp. 47-49). Thus, the distinction between the logical question of normative decision justification and the psychological question of the judge's causal motivation in decision making allows Bulygin, on the one hand, to isolate in some part the problem of normative decision justification from the realists' criticism and, on the other, to recognize the significance of investigating the problems raised by them.

Two key theses of the realist critique of the syllogistic model of law application - on semantic uncertainty of the content of norms, as well as on uncertainty of facts - are not considered by Bulygin as arguments against the deductive nature of argumentation in law<sup>2</sup>. He incorporates these theses into the theory of legal application that he develops, treating the situation of the uncertainty of facts as a "gap of knowledge" about facts, and the situation of semantic uncertainty or vagueness of predicates as a "gap of recognition" (H. L. A. Hart's "case of penumbra") (Hart, 2012, pp. 24-136; Alchourrón & Bulygin, 1971, p. 33) that creates difficulties in the exercise of individual and/or generic subsumption. Believing that the term "subsumption" is used ambiguously, Bulygin suggests distinguishing between individual and generic subsumption. Unlike the case of classical subsumption, which he defines as "individual subsumption", where the judge needs to determine whether the individual object

has the property designated by the predicate in question, generic subsumption involves determining what logical relationship exists between two predicates (Alchourrón & Bulygin, 2015b, pp. 256-257), for example between the predicates "contracts signed on Sunday" and "sacrilegious" (Alchourrón & Bulygin, 2015b, p. 255). If the "gap of knowledge" can be corrected by means of legal presumptions (Alchourrón & Bulygin, 1971, p. 32, 2015b, p. 256), the way to deal with the "gap of recognition" will be for the judge to establish new semantic rules that determine the meaning of the relevant predicates or to use existing semantic rules.

However, Alchourrón and Bulygin (2015b) concede that the choice of the relevant semantic rules may be based on ethical evaluations (p. 262). Nevertheless, the volitional act of the judge's choice to overcome the uncertainty of predicates is not considered by scholars as an argument against the deductive nature of legal reasoning, although the judge's activity is not always cognitive in nature (Alchourrón & Bulygin, 1971, p. 147). We can conclude that Bulygin and Alchourrón soften the cognitive thesis of classical syllogistic theory by agreeing with H. Kelsen and realists that "deciding is an act of will and as such is not determined by logic" and that "what is entailed by the premises of a sound argument are the contents of a (possible) act of deciding". This means that "this act of deciding, once performed, is said to be justifiable by the premisses of the argument" (Alchourrón & Bulygin, 2015b, p. 252). In other words, if the judge has made a decision, "sentence stating, for example, that 'contracts signed on Sunday are sacrilegious' expresses not a value judgment but an analytic proposition" (Alchourrón & Bulygin, 2015b, p. 262).

The third thesis of the realists - on the determining role of the judge's subjective evaluations in the decision-making process - is given by Bulygin by means of three arguments, each of which refers to three cases in which the judge may use such evaluations: 1) the evaluation of

<sup>2</sup> Alchourrón and Bulygin (1971) emphasise that the importance of situations of uncertainty in the law should not be exaggerated, especially to the extent that this is typical of realists (pp. 33-34). To clarify the thesis on the relative certainty of legal language, Bulygin (2015c) in particular uses the argument of the infinite regress of acts of interpretation, through which he demonstrates that language that does not meet the minimum conditions of unambiguous linguistic expression "is useless as a tool for communication" (p. 309).

the evidence of a given fact, which is necessary for individual subsumption; 2) the evaluation of the interpretation of rules, which occurs in both individual and generic subsumption; 3) the application of evaluative predicates to specific situations.

1. The judge's evaluation of the evidence is called *epistemic* by Alchourrón and Bulygin (2015b), suggesting that it is "of the same kind as the evaluation of evidence carried out in the empirical sciences" and in that sense is not ethical. Evidence is evaluated in terms of whether or not it contributes to confirming the truth of empirical sentences. "Thus, the evaluation of evidence is the problem of determining whether an empirical sentence has been duly proven" (pp. 261-262).
2. The judge's evaluation of the interpretation of the rules, scholars believe, is given in the form of interpretive sentences which do not express value judgements but are analytical propositions. However, Alchourrón and Bulygin (2015b) acknowledge that a judge's choice of interpretation may be psychologically conditioned by a value attitude that includes an ethical evaluation of the consequences of a particular decision. Furthermore, he also acknowledges the significance of ethical evaluation, which "requires understanding the values implicit in the rules" (p. 263). However, the interpretive sentence itself is an application of existing semantic rules or setting new ones (p. 262).
3. The problem of the use of evaluative predicates is addressed by Alchourrón and Bulygin (2015b) by analogy with the distinction between norms and normative sentences, involving their prescriptive and descriptive (secondary) uses, respectively. Evaluative terms, they suggest, can also be used descriptively in sentences that do not express evaluation (approval or disapproval) but are descriptions of the fact that the subject meets the evaluative standards or criteria of a particular community or social group. Such sentences express de-

scriptive propositions about the facts, i.e., in other words, the judge does not make an evaluation but only applies the standards of evaluation established in the community or social group to which he or she belongs (pp. 262-263).

Alchourrón and Bulygin (2015b) thus negate the realist's thesis on the role of the judges' subjective evaluations in the reasoning of the judgment: reduced to empirical, interpretative sentences or evaluative propositions, which are often necessary to determine the premises of inference, they cannot shake the conclusion that "the reasoning - that is, the step that leads from the premises to the conclusion - ... can be reconstructed as, a deductive inference" (p. 253). At the same time, responding to the critical arguments of the realists, Bulygin explicates a more complex structure of the reasoning part of the judgment as compared to the classical deductive model: along with the *general normative sentences* which constitute the normative basis of the judgment and the *empirical sentences* used to describe the facts, it also contains sentences which are necessary to determine or clarify the premises of the inference and which he calls "*definitions* in a broad sense" (Bulygin, 2015b, p. 77). They include interpretative sentences that define the scope of a concept and its content and also descriptive, evaluative sentences that capture the actual social standards of evaluation. "When a judge decides on the meaning of expressions such as 'affluent tenant' or 'usury interest'", explains Bulygin (2015b), "he is not creating norms but defining concepts" (p. 87). That is, in other words, he introduces a "meaning postulate" (Alchourrón & Bulygin, 1971, p. 61). At the same time, the decision itself, i.e. its dispositive part, which Bulygin (2015b) regards as an individual norm *derived* from general rules and descriptions of facts, has a performative function (p. 77), causing the effects of the rights and duties determined by this norm. However, in accordance with Bulygin's conception of norm creation, discussed below, such a derivation of a

norm will not be its creation, as it is derived from the existing normative system.

Sharing the rational ideal of normative completeness and regarding it as “a prerequisite of the activity pursued by jurists, if their work is to deserve the name of science” (Alchourrón & Bulygin, 1971, p. 166), Bulygin treats the notion of *normative justification* of a decision as a special type of rational explanation - the justification of the deontic qualification of an action (Alchourrón & Bulygin, 1971, p. 169), believing that philosophy of law has not paid due attention to this issue as simple and obvious (Bulygin, 2015b, p. 75). He also removes the functions of creation and application of law separation doctrine from the political-ideological context of classical liberalism and reformulates the thesis that the judge only applies, not creates law: the requirement of the rational justification of the decision means that the grounds for the decision must not be created by the judge himself (Alchourrón & Bulygin, 1971, pp. 178-179). Accordingly, a judge being “bound” by the law metaphor means that the judge has a duty to justify explicitly the decision by means of general rules (Bulygin, 2015a, p. 45).

#### Law Application and the Problem of Judicial Law Creation

E. Bulygin presented his vision of the problem of judicial law-creating and the legal significance of the various parts of a judicial decision in his article “Judicial Decisions and the Creation of Law” (1966), in which he polemicalises with Hans Kelsen’s pure theory of law.

The Argentinean lawyer criticises H. Kelsen’s notion of the relativity of the distinction between law creation and law application. The Austrian lawyer believed that law creation is always law application (because in order to create a new norm, it is necessary to apply the relevant empowering norm), while law application, except in the case of purely factual execution of an individual norm, is always law creation because it

involves a certain act of will and always has a creative nature (Kelsen, 1970, pp. 233-236). Accordingly, a judicial decision is interpreted as an individual norm created by a judge (Kelsen, 1970, pp. 242-245).

Bulygin believes that interpreting a whole judgment as an individual norm is a simplification, and it is more precise to consider it as an inference, in which the opinion (grounding part) plays the role of a premise and the dispositive part - of a conclusion. The Argentinean lawyer, as already noted, distinguishes three types of premises:

1. “*general normative sentences* that constitute the *normative ground* of the decision”;
2. “*definitions* in a broad sense, including as well sentences that determine the extension of a concept and sentences concerning meaning postulates” and
3. “*empirical sentences* used for the *description of facts*”. The decision is, in turn, an individual norm (Bulygin, 2015b, pp. 76-77, 1995, pp. 24-26).

3.1. *The concept of norm creation.* To address the issue of judicial law creation, Bulygin (2015b) defines the creation of norms as follows: “in order for one to consider a norm formulated by a normative authority to have been created by this authority, its content cannot be identical to the content of some other norm belonging to the same legal order, nor can it be a logical (deducible) consequence of other norms” (p. 79). Bulygin (2015b) rejects the use of the existence of an act of will on the part of the relevant authority as a criterion for the *creation* of a legal norm because any formulation<sup>3</sup> of a norm involves an act of will and the adoption of such a criterion “would give excessive reach to the concept of norm creation” (p. 79).

In our view, Bulygin’s concept of norm crea-

<sup>3</sup> The English translation of Bulygin’s (2015b) article uses the expression “issuance of a norm” in the relevant place (p. 79). At the same time, the original Spanish text (Bulygin, 1991, p. 360) contains the expression “formulación de una norma” which, in our opinion, would be more accurately translated as “formulation of a norm”.

tion faces two problems.

1. First of all, it should be noted that it is built entirely on Bulygin's own original definition of norm creation, i.e. it can be said that it is based on a kind of circle of evidence. A different understanding of norm creation (for example, identifying it with a binding expression of a will containing a prescription) (for example, Kelsen, 1970, pp. 3-10) also entails different conclusions about lawmaking by the courts. The discussion between Bulygin and Kelsen is therefore largely terminological in nature.
2. The only argument Bulygin cites to justify the merits of his definition of norm creation (which assumes that the norm formulated is not identical to any other norm in the legal system) is that the concept would otherwise be overly extensive. In other words, the fallacy of the theory of individual judicial norm creation is proved by the inconsistency of judicial decisions with the criteria of norm creation, but these criteria are a priori established by Bulygin himself. However, the opposite seems rather true: Bulygin's requirement excessively narrows the notion of norm creation, even beyond the problem of the norm-creating nature of judicial decisions. Quite often, especially in Continental legal systems, identical content norms can be found in different normative acts. This phenomenon occurs in particular in the following situations:
  - a. the law reproduces and details the provisions of the written constitution;
  - b. the by-law reproduces and details the provisions of the law;
  - c. one law contains a general rule, and the other contains a special rule, but it is a particular case of the general rule.

The listed cases of one legal act norms being reproduced in other legal acts reflect a certain legal-technical idea - the desire of the legislator to make a legal act coherent, consistent and relatively complete in regulating its subject matter. It is also important that in the case of complete or

partial repeal of one of the legal acts containing the relevant norm, the other will remain in force.

The possibility of the existence of several rules having the same content in a normative system is well known to E. Bulygin since it was considered by him in a number of works, in particular, in cooperative articles with C. E. Alchourrón "Expressive conception of norms" and "On the concept of a legal order" (Alchourrón & Bulygin, 2015a, pp. 146-170, 2015c, pp. 124-135). We assume two possible explanations for what the legal scholar meant in these cases.

The first possibility is that E. Bulygin when introducing the concept of norm creation, meant only individual norms and not general ones. However, there is no any distinction in the text of "Judicial Decisions and the Creation of Law", but the definition of norm creation as such. Moreover, the different definitions of the creation of general and individual norms would seem to require further justification.

The second possible explanation lies in the opposition between normative formulation and normative content, which can be found in other works by E. Bulygin. Thus, if we proceed from the expressive concept of norms, the normative formulation will represent a certain speech act, and normative content is the logical content of such an act, changing the existing normative system as a set of norms and their consequences (adding a new element to it) (Alchourrón & Bulygin, 2015a, pp. 151-157). The legislator's introduction of a new norm-formulation will not have been accompanied by a change in the normative system if the relevant normative content has already been introduced into the normative system before (compare: Alchourrón & Bulygin, 2015c, pp. 128-132). Similarly, "when the legislator becomes aware that there are two or more redundant formulations - that is, one and the same norm-content is expressed, for example, by different paragraphs of a statute - then he may be willing to derogate the redundant formulations without eliminating the norm-content. In this case, what he wants to do is to 'efface' the re-



dundant formulations, leaving only one of them. No rejection of the norm-content is required to achieve this aim" (Alchourrón & Bulygin, 2015a, p. 156)<sup>4</sup>.

For these reasons, we believe that E. Bulygin's adoption of such a narrow definition of the concept of norm creation reflects his consistent logical-legal position, but the refusal to accept the establishment of "redundant" norm-formulations as "law creation" following from it does not seem consistent with the word usage that has been developed in legal scholarship.

3.2. *Norms created by the courts.* The first type of norms that Bulygin has tested against his definition of lawmaking is the set of individual norms in the dispositive parts of judicial decisions. Although individual rules are not derived directly from general norms, they are derived from general norms and descriptions of facts. For example, the individual norm "Diaz is to spend 12 years in prison" is not deductible from the norm "he who murders another is to be punished by imprisonment for 8 to 25 years", but the individual norm "Diaz is to be punished by imprisonment of 8 to 25 years" follows directly from the said norm together with the description of the fact "Diaz murdered Gonzalez". The fact that other conclusions can be drawn in the same way from the penal provision cited (for example, imprisonment for 20 years or 8 years, etc.) is, from Bulygin's (2015b) point of view, irrelevant (pp. 79-80).

The latter assertion, however, is questionable.

(A). Bulygin does not provide a logical justification for the thesis that different solutions can be deduced from a general criminal law norm that contains a relatively certain sanction. Apparently, he interprets "to be punishable by imprisonment for 8 to 25 years" as a predicate that in-

cludes "to be punishable by imprisonment for 8 years", "to be punishable by imprisonment for 14 years", etc. The derivation of any particular punishment for Diaz is then simply a logically weaker inference than the conclusion "Diaz is to be punished by imprisonment of 8 to 25 years", as, for example, from the premises "All murderers are criminals" and "Diaz is a murderer" would follow the statement "Diaz is a criminal" (modus Barbara of classical logic). However, in fact, this conclusion is more appropriately compared to the following:

(1) *All law students study European languages.*

(2) *John is a law student.*

Conclusion: *John is learning the German language.*

It would seem that the concept of a European language is more general in relation to that of the German language, just as the concept of imprisonment for 8 to 25 years includes any punishment from the relevant time frame. The error in both cases is the need to choose - John is not learning all European languages, and Diaz cannot be sentenced to imprisonment for 8 to 25 years.

In order for the result of this choice to be the logical conclusion of an inference, additional premises are needed to create a complex inference or a sequence of inferences.

In the first case, some specific language must be chosen, and in the second, some specific punishment must be given.

Correct inference in the example of language learning:

(1) *All law students learn some European language.*

(2) *John is a law student.*

Intermediate conclusion: *John is learning some European language.*

(3) *Students learn the European language of their choice.*

(4) *John chose German.*

(5) *German is a European language.*

Final conclusion: *John is learning German.*

<sup>4</sup> Compare: "A normative system is redundant with regard to a given norm if the norm has been formulated more than once - that is, if there are two or more formulations expressing the same norm - or if a derived norm, which by definition is already a part of the system, is explicitly promulgated. The elimination of a redundant norm-formulation leaves the system unchanged" (Alchourrón & Bulygin, 2015c, pp. 128-129).

As you can see from this example, three additional premises (premises 3-5) are required for the conclusion you are looking for.

The correct logical form in the example with the judicial syllogism:

(1) *Anyone who commits murder shall be punished with some penalty of imprisonment from a range of 8 to 25 years.*

(2) *Diaz committed murder.*

Intermediate conclusion: *Diaz should be punished with some penalty of imprisonment from a range of 8 to 25 years.*

(3) *Whoever commits murder is to be punished by whatever punishment the court chooses.*

(4) *The court chooses the punishment within the statutory interval.*

(5) *The punishment of 12 years' imprisonment ranges from 8 to 25 years.*

(6) *The court chose a 12-year prison sentence for Diaz.*

Final conclusion: *Diaz is to be punished by 12 years' imprisonment.*

Thus, no punishment in Diaz's case without additional premise (premises 3-6) logically follows from the criminal law norm and the circumstances of the case established by the court, which means that the court's adoption of the individual rule "Diaz is to spend 12 years in prison" falls within the Bulygin's definition of norm creation.

(B). Even if one does not question the logical deducibility of the different decisions in the criminal law, a situation in which the decisions "Diaz is to be punished by 8 years' imprisonment", "Diaz is to be punished by 14 years' imprisonment" and "Diaz is to be punished by 25 years' imprisonment" are equally deducible from the same norm (and the fact of the murder) contradicts to the intuitive understanding of logical consequence and raises questions about the adequacy of the logic applied, recalling the famous

Alf Ross paradox<sup>5</sup>.

The second type of norm is quite rare. It appears in the situations of gaps in the law when general legal norm does not regulate the disputed situation. In such a case, a general legal norm contained in the opinion of a court decision, for example, which involves extending by analogy another norm to a disputed situation, is actually created by the court, as it does not coincide with any other already existing norm (Bulygin, 2015b, pp. 80-81). The question of whether these rules are legal (in case they do not become de facto general norms as judicial precedents) is, according to the Argentine lawyer, a purely semantic one (Bulygin, 2015b, pp. 85-86).

### Conclusion

The theory of law application by E. Bulygin is aimed at mitigating the extremes of judicial formalism and realism, the main provisions of which the Argentinean jurist considers quite compatible. By rejecting individual judicial norm creating, Bulygin takes into account the criticisms of opponents of the traditional syllogistic theory of judicial decision and improves it, based on a clear distinction between the logic and psychology of law application. On the basis of logical analysis and the theory of open texture (relative indeterminacy) of language, Bulygin seeks to justify the analytical nature of the court's interpretative sentences and the relatively low significance of the judge's own evaluations. However, the improved syllogistic theory cannot be said to be completely immune from criticism, as the Argentinean jurist fails to completely eliminate doubts about the logical deducibility of at least some categories of decisions, in particular, decisions on the imposition of criminal penalties.

<sup>5</sup> This paradox is formulated by Alf Ross (1944, pp. 38-43) and consists in the following: the logic of norms implies in particular that from a norm A follows A or B ( $!A \rightarrow !(A \vee B)$ ), which can be illustrated by an example: "Slip the letter into the letter-box, then slip the letter into the letter-box or burn it". The conclusion is obviously absurd.

Bulygin's original conclusions include a distinctive, albeit controversial, understanding of normativity and a distinction between individual and generic subsumption.

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