

Legal Presumptions in the Context of Contemporary Criminal Justice: Formulation of a Paradigm

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Abstract. The concept of ‘presumption’ – despite being often present in the legal environment – still lacks an approach which is uniformly accepted. Worku Y. Wodage argues that ‘the controversy regarding the operation and effect of “presumption” (. . .) has not yet been conclusively resolved despite efforts of scholars.’¹

One has a situation where one notion, used to potentially denote a number of different legal categories, causes various problems. In this Article the concept of ‘presumption’ is examined from the position of exact sciences and laws of cognition, and it is argued that only a part of the various elements of the legal technique united under a title of ‘presumptions’ can be recognized as proper presumptions.

Keywords: presumption; Criminal Justice; stochastic approach; probability; logic

1. INTRODUCTION

It is important to state at the outset that the criminal process is associated with the issues of evidence and burden of proof. Presumptions are an integral part of the process of averment. A presumption, as a given legal category, was actively used in the ancient Roman law. Many presumptions thereafter have been incorporated into the national legal systems of different countries. For example, nowadays most legal systems recognize as presumptions the knowledge of the law, the fact of death and parenthood. The fact that presumptions have gained broad international recognition only proves the extent of pervasion of this legal instrument. Nevertheless, it gives no explanation as to why it is so valued and widely used in different countries irrespective of the legal traditions and cultural or political differences.

In search for the truth, presumptions should be used only in individual, exceptional cases. If ‘presumption’ is what is ‘more likely than not’, then in the process of averment, which centers on the idea of the search for the truth, presumptions should be used in very rare cases. They should only be used when it is necessary to overcome some of the uncertainty that cannot be overcome by other standard methods and without destroying the equilibrium of data having evidentiary importance.² Alternatively, legal systems of different countries do not stagnate and, taking into account the moral, cultural and political attitudes prevailing in the society at any given period of time, as well as changing priority values, they constantly assume a different content. But if the content of legal rules, and thus, the law itself change over time, how can one explain the fact that changes in life as such do not affect the content of certain legal rules, including those provisioning presumptions? Laws

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¹ Woodage (2010) 258.

² Yablon (2003) 227.

created by humans live a life similar to that of a human being, i.e. they are born, live and die (Latin *leges humanae nascuntur, vivunt et moriuntur*).

Presumptions are justified in cases where there is no firm knowledge. However, in cases where such knowledge exists or where it can be achieved by using unprejudiced data, the ancient wisdom says that it is not ideal to rely on presumptions, or roughly speaking, such reliance is at least irresponsible.³ If the existing rules are not the best 'guides' in order to help us to get closer to the truth in the cognitive process or when they are clearly irrational, estranging the process of cognition of the truth, making it complicated and misleading, such rules, as common sense implies, should be waived.⁴ The law should not allow anything that is contrary to the truth (Latin *contra veritatem lex nunquam aliquid permittit*).

Of course, where there is no imperative to use presumptions, their use or introduction into the legal system might be explained by the robustness of the legal system, a tribute to customs, traditions etc. One of the key values of the law is the preservation of stable relations in society. Frequent or constant alternation of rules creates the situation of unpredictability and instability. However, the stability of legal rules cannot become an end in itself. Also it is evident in a changing environment that it is difficult to expect to keep the regulator of the public relations – the law – unchanged. Times are changing and laws also change (Latin *tempora mutantur et leges mutantur in illis*).

This article analyses the role of logical reasoning techniques in formulating presumptions. It examines the origin of presumptions derived by inductive methods and attempts to uncover whether the identical term used for constructs of juridical techniques of deductive origin can be considered proper presumptions. The insights revealed by the article will be examined in the context of civil law (using Lithuania as an exemplar country) and common law (using USA as an exemplar country) traditions. It will be demonstrated that in terms of formal logic there should not be any fundamental differences between these legal systems regarding the matter of constructs of juridical techniques.

2. PRESUMPTION AS A LEGAL CATEGORY

Presumption is one of the methods of the cognition of the objective reality. It is often used when there is a need to act, draw conclusions about certain facts under scant conditions, or when the level of cognition (knowledge) is limited, i.e. when there is a need to overcome a particular uncertainty.⁵

Over time mankind has developed certain patterns of behavior, with certain human behavior conditioning a specific result. The attainment of the same result while performing one action or another has become an unsurprising common phenomenon known as multifold. Later it became a common occurrence, i.e. when performing a certain action, a particular result was expected. The same that usually resulted from the action or, in other words, it was alleged or assumed (Latin *praesumptiones hominis seu facti*) that a specific action will lead to the desired result. As society develops, moral values are also formed. New knowledge is acquired and accumulated. Sooner or later this is used in different fields of everyday life, including the law.

³ Petroski (2008) 388.

⁴ McBaine (1938) 519–20.

⁵ Mendonca (1998) 399–400.

Presumption is a peculiar product of reasoning or thinking. In other words, it is a result of public consciousness that has acquired the role of a special regulator of public relations. It is one of the methods of legal techniques applied in real life.

When the word ‘presumption’ is used in everyday language, it is considered that something may be (it exists), but not necessarily is. In other words, something might be or might happen, but it does not necessarily occur.⁶

The long-term processes of naturalistic observation sooner or later allows us to conceive what is happening, distinguish dominating features, and provide us with an opportunity not only for different interpretations, but also for generalization that often takes the meaning of a presumption, such as:

– if a bird spends most of its life in the water it is presumed that a membrane covers its toes;

– if a person wrote a letter, bought an envelope, put the letter into the envelope, wrote the right postal address of the person to whom the letter is addressed, stuck a postmark on the envelope and dropped the envelope into the post-box, it is presumed that the addressee will get this letter.

In order to form a legal presumption it is necessary that several factors coincide at the same time: it should be possible to draw the most probable conclusion or form an idea from the observed facts, events, phenomena or their individual properties, the importance and significance of which, in regulating public relations, is acknowledged by the majority of society’s members; and it should happen at an advantageous historical moment and in a favorable legal environment that allows to give such a conclusion or idea a formalized content and find a place in the already existing system of legal rules. (Otherwise, such an idea entrenched in the public mind, in the best case, acquires the meaning of the widely-known fact. Often the ‘commonly known facts’ in the legal literature are given the meaning of presumption. Although being very close to presumption (Latin *notoria non egent probatione*), it cannot be treated as the latter due to objective reasons. Or, in the worst case, it might become a kind of stereotype fixed in the human consciousness arousing clearly distinctive dogmatic associations such as the following: if it is snow, it is white, if it is a bird, it has wings and can fly and etc.)

Thus, in common sense presumption is nothing else but a prediction (general assumption) based on the laws of logic reflecting some general tendency (of the fact, event etc.).

Literature often expresses the view that the first to use the term ‘presumption’ were ancient Romans. However, it is assumed that presumptions are not the invention of the ancient Roman Empire as they have been used before the Romans. The Romans simply adapted them to the law. One of the classical examples used in the Roman law is a so-called ‘Presumption of Mucian’ (Latin *praesumptio Muciana*). The essence of the presumption formulated by *Quintus Mucius Scaevola* is the following: ‘if a married woman is not able to prove the source of her acquisitions (assets) it is assumed that they have been received from her husband until the opposite is proven’.⁷ Modifications of this presumption can be found even in the modern law. Today, while maintaining the core essence of *praesumptio Muciana*, the modern presumption might sound as follows: if the weak party to the process is not able to prove the source of his/her acquisitions (assets), it is assumed that they have been

⁶ McBaine (1938) 528.

⁷ Mousourakis (2003) 192–93; Suggestioni in tema di ‘*praesumptio Muciana*’ (2005) link 1.

acquired fraudulently and have to be returned to the stronger part of the process. To give an example, a presumption the content of which in essence is the same is consolidated in Clause 72(3) of the Criminal Code of the Republic of Lithuania.⁸

The fact that ancient Romans used presumptions in parallel with personal testimonies quite regularly in their court processes can be explained by the fact that Roman law, in particular, focused on practical activities, their improvement and optimization. In such cases where it turned out to be difficult or even impossible to prove any fact of everyday life, presumptions used to come to the rescue. Although presumptions can be found in the principles of Roman law, solutions arrived at by lawyers and in their publications as well as wording of laws, it is considered that presumption established by the law are deprived of their original essence. This is because the legal change of the inherent nature of the burden of proof deprives the judge of the opportunity to freely assess the significance (meaning) of the fact.

Concepts of presumptions found in literature can be divided into two groups:

- those which describe only an area of their application avoiding specification of features of the presumptions (e.g. a presumption is ‘a legal device which operates in the absence of other proof to require that certain inferences be drawn from the available evidence’);⁹

- those which are formulated by reference to the most important distinguishing features of the presumption (e.g. a presumption is ‘[a] legal assumption that something is a fact based upon another proven fact or set thereof’).¹⁰

The definition of the concepts belonging to the first group is faulty. Indeed, distinctive features of a presumption that might enable the distinguishing of this element of legal technique unambiguously from similar ones (e.g. a legal fiction) remain undefined. In the second group of concepts, regardless of the diversity of definitions, one feature of the presumption is emphasized unanimously – a probabilistic nature, resulting from the content of the concept itself as the term ‘presumption’ originates from the Latin word ‘*praesumptio*’ meaning anticipation,¹¹ i.e. preconceived guess, assumption. For this reason ‘presumption’ is most often described as ‘the assumption based on probability’, i.e. an idea that is taken to be true on the basis of probability.

The attempt to define ‘presumption’ using the term ‘assumption’ is not the best one as other actions or phenomena that are not treated as presumptions are described similarly in the juridical context, such as:

- ‘*version*’ – the assumption concerning a single fact or a group of relevant facts that are important to the case explaining the origins of these facts and their interrelation;

- ‘*suspicion*’ – the assumption based on specific data that a particular person is likely to have committed a criminal offence;

- ‘*hypothesis*’ (Greek *hipothesis*) – a scientifically based assumption used for explanation of certain phenomena, i.e. about the structure of objects, nature of interrelations between objects, possible ways to solve problems and etc.

This description of different phenomena or actions is sufficient only when such categories as ‘version’, ‘suspicion’, ‘hypothesis’, ‘presumption’ are considered in isolation

⁸ Criminal Code of the Republic of Lithuania, approved by the Law No. VIII-1968 dated 26/09/2000 (2012) link 2.

⁹ Black’s Law Dictionary (1990) 1185.

¹⁰ Law Dictionary (2006) 205.

¹¹ Lanham (1991) 118.

from each other, although if considered in conjunction, such characterization leads to more confusion than clarity. Essentially, this is preconditioned by two reasons: first of all, ‘versions’, ‘suspicions’ and ‘hypotheses’, in contrast to presumptions, are provisional categories. Presumptions are not influenced by the factor of time: they continue to exist as they have existed before. Second, the concept ‘version’ reflects not so much a probabilistic assumption, but rather connections. So if it is possible to explain the links between several factors by more than one premise, several versions can be arrived at. ‘Suspicion’ is associated with a specific person, whereas presumption is associated with a group of persons exposing definite qualitative features. ‘Hypothesis’ is a scientifically based assumption. Presumption is, in fact, statistically based on the premise.

Thus, any presumption at the same time is an assumption, but not any assumption might be and is a presumption.

From the stochastic point of view, the presumption can be defined as a function, depending on the specific circumstances which describe the probability of reasonable assumption (presumptive conclusion): $p_i = P(A_i)$, where p_i – presumption (to be precise, presumptive conclusion), $A_i: A_i = \{\omega_{i1}, \dots, \omega_{in}\}$, $i, n \in N$ – factors on the basis of which a specific outcome is presumed (for each separate (i -th) presumption, there is a distinctive totality of (n -dimensional) factors). Then $P: P = \{p_i | i \in N\}$ is a space (set) of legal presumptions, $\Omega: \Omega = \{\omega_{i1}, \omega_{i2}, \dots, \omega_{jk_i}, \dots\}$, $i, k_i \in N$ – finite or numerable space (set) of all elementary factors (events, circumstances), the assessment of which allows to draw conclusions on the possibility to apply presumptions, and $A_i \subset \Omega, \forall i \in N$.

$$1^{st} \text{ Proposition. } p_i \in \left[\frac{1}{2}; 1 \right], \forall i \in N.$$

From the discussed concept of presumption, interrelation of the conditional probability¹² $P(A_i | B_i) \rightarrow 1, \forall i \in N$ (where $B_i \in \Omega$ is a set of factors on the basis of which the circumstance A_i is presumed) and from the observation based on the multiplication theorem on probability¹³, $P(A_i \cap B_i) \cong P(B_i) \Rightarrow p_i \rightarrow 1 > \frac{1}{2}$.

The situation when $p_i = 1, i \in N$ is wrong as well – if the presumption always, with no exception, proves, it is not a presumption already, but a mandatory event,¹⁴ i.e. it loses status of presumption. This is also proven by the relation $p_i = 1 \Rightarrow P(A_i \cap B_i) = 1 \Rightarrow A_i \supseteq B_i$, in other words, there is no need to go ‘from the known – to the unknown’ because the available facts per se and unambiguously imply the conclusion described in such a ‘presumption’. Even from the linguistic point of view the term ‘presumption’ cannot be used to name an unquestionable, clear and undeniable consequence.

Generally speaking, the *1st Proposition* formally describes a feature of ‘sufficient plausibility’ of presumption: one or another assumption about the unknown facts becomes significant only when it is determined (empirically) that under certain circumstances it is usually (with high probability) correct.

¹² The conditional probability $P(A|B)$ of an event A is the probability that the event will occur given the knowledge that an event B (condition B) has already occurred (Conditional Probability (2013) link 3).

¹³ $P(A \cap B) = P(B) \cdot P(A|B) = P(A) \cdot P(B|A)$ (Conditional Probability, Independence and Bayes’ Theorem (2014) link 4).

¹⁴ Mandatory event denotes an event which mandatorily occurs after a set of certain circumstances is realized.

The structure of presumption basically consists of three elements: (a) basic (really known) fact (proposition); (b) putative (suppositional) fact (proposition), i.e. the presumed fact; and (c) a logical link or logical reasoning that allows proceeding from the known to the putative fact (statement).¹⁵ Although presumption is a consequence of certain reasoning, it would be wrong to put a sign of equality between the presumption and the logical conclusion. The logical reasoning is 'the way' that leads to the 'objective' – the logical conclusion. However, the logical conclusion, as well as the presumption, being the logical result of reasoning,¹⁶ differs from the latter by the different consequences it causes (it distributes the burden of proof between the parties in one way or another), and its obligatory character. The presumption which is consolidated in legislation, as opposed to the logical conclusion, is always mandatory¹⁷ and does not lose its power, even if the existence of the presumed fact is denied in a specific case.

Opinions that the presumption, unlike many other closely related categories, is independent of the wishes and preferences of the parties and is the expression of inductive and (or) deductive reasoning in law¹⁸ are found in the literature. In other words, it is asserted that the presumption can be the result not only of inductive reasoning, i.e. presumption arises from the facts that are often repeated, but also of deductive reasoning. This reasoning allows us to draw a conclusion that the presumption can arise not only from the facts that are often repeated, but also from the facts that are only occasionally repeated or occur very rarely (Latin *praesumptio ex eo quod raro at interdum*). Taking into account all the variety of legal constructs presently observed under the concept of 'presumption', it can be stated that the content of the 'presumption' is of dichotomic nature (due to the use of dual form of logical reasoning: inductive and deductive), while its structure is mixed.¹⁹ Depending on a concrete 'presumption' the presumed fact could be really probable, but it may be almost incogitable.²⁰ Taking into account the role in the truth-establishing process, do we have to settle for a fuzzy concept concerning one of the most important elements of juridical technique, namely presumptions?

In our opinion, the answer to the question when an assumption of one or another degree of probability can be regarded as a presumption, and when it acquires a different meaning and content and, therefore, should be considered the element of legal technique other than presumption, can be found analyzing laws of cognition and logic. This is so because the 'presumption', unlike other forms of expression of assumptions, is an epistemological categorization.

¹⁵ Mendonca (1998) 406.

¹⁶ James (1961) 51; 63.

¹⁷ Rice and Cutter (2002) 559.

¹⁸ Manuc (2010) 224.

¹⁹ Some 'presumptions' (for example, irrebuttable 'presumptions') lack an element of logical link or logical reasoning, enabling the transition from the known to the putative fact.

²⁰ Presumptions (2010) link 5.

3. PRAESUMPTIO EX EO QUOD PLERUMQUE

(Presumptions arise from what generally happens)

Most presumptions are categories derived on the ground of inductive reasoning. In the classical sense, a presumption is an anticipation based on the probable knowledge and arising from the facts that are repeated most often (Latin *praesumptio ex eo quod plerumque*). Or, more precisely, presumption is an anticipation, which is based on certain social regularities. The ‘black lungs’ presumption can serve as an example.

After the long observation of persons working in the coal mines of the United States, it was concluded that the persons who have worked in coal mines for 10 years or more die from pneumoconiosis – restrictive lung disease caused by inorganic dust (coal dust) – much more frequently than other people. Therefore, in order to provide additional health guarantees to miners, a presumption of ‘black lungs’²¹ has been developed and legally consolidated as follows:

- if a miner after working in a coal mine for 10 or more years becomes ill with pneumoconiosis, it is considered that the disease is the effect of working in a coal mine, until proven otherwise;
- if a miner working in a coal mine was suffering from respiratory inflammation disease and died, it is considered that he died of the pneumoconiosis, until proven otherwise;
- if a miner suffering from an incurable form of pneumoconiosis dies, it is considered that he died from this disease.²²

We may tentatively identify the ‘black lungs’ presumption as the result of inductive cognition or empirical generalization, which has been obtained after examining miners and estimating that they have a certain characteristic, namely an increased predisposition to restrictive lung disease.

The method of inductive reasoning from the true assumptions allows us to draw only plausible conclusions, which basically require more precise evidence. The uncertainty of the conclusion drawn by the inductive method is determined by the relativity of knowledge gained by experience. Induction is possible due to the regular repetition of occurring events. Due to this repetition, a general conclusion can be arrived at involving all the objects belonging to that group after examining only part of the objects. At the same time, it should be noted that complete induction is possible as well. In the case of complete induction, the general conclusion about all objects of the group is drawn only when all objects of the tested group are examined without exception. Complete induction always leads to the unequivocal conclusion. Thus, from the aspect of the result, it is the same as deduction and differs only in the reasoning process. Conclusions made by the complete induction reasoning method cannot be recognized as presumptions, because they unconditionally imply relations $p_i = 0$ or $p_i = 1$, what, in turn, contradicts the requirements of the *1st Proposition*.

In the case of selective induction, statements of general character, i.e. statements about all objects of the group, are obtained after examination (observation, experiment) of certain cases, estimating a particular feature of separate (not all) objects of the group, and then drawing a generalized conclusion that all objects of the group have that particular feature. If after an examination of the group of objects *S*, it is not concluded that each object is

²¹ Rice & Cutter (2002) 559.

²² US Federal Coal Mine Health Act of 1969 (2010) link 6.

characterized by a particular feature P , induction is not satisfied because the drawn conclusion is the opposite of the argument that all the investigated objects of the group S have feature P .

For example, there is a presumption of 'knowing the procedural rights and duties' widely used in a criminal trial. Once it is established that a party in private criminal process (the suspect, accused, victim, civil plaintiff, civil defendant and their representatives, pledge giver, the person whose property rights are limited, a witness, etc.) is not familiar with the existing procedural rights and (or) duties, the induction process ends and it means that the presumption of knowledge of the procedural rights and obligations is not applied in a given case.

Induction is a reductive way of reasoning. Thus, a conclusion which is drawn on the basis of this method of reasoning is only probable. Furthermore, induction differs from other reductive considerations only by the fact that its conclusion is summative in nature.

The mechanism of formation of presumptions derived by the inductive method involves three stages:²³

(1) distinction of a dominant feature, i.e. the feature characteristic to objects of the investigated group;

(2) establishment of a causality relation between the known and the unknown;

(3) formation of a belief about the existence of the alleged fact, i.e. the fact that such a feature is characteristic to other objects, which although belong to the group under investigation but have not been investigated themselves.

In this way, the logical content of presumptions, which are derived on the basis of induction, can be expressed as follows: 'if the majority of S has the feature P , it is assumed that all S are characterized by P ', i.e. if investigation of a group of S objects reveals that these objects have a common characteristic feature of P , it is concluded that the feature P is typical to objects S . The formalized expression of the inductive reasoning might be as follows:

$$\exists m, X_m : \{x_i \mid i = 1 \div m; x_i \in S, m \in N\}, P = f(X_m) \Rightarrow \exists n : \{n > m \mid n, m \in N\}, P = f(X_n).$$

Examples of inductive reasoning are the following,

– miners who have been working in coal mines for 10 or more years are suffering from restrictive lung diseases caused by coal dust;

– persons who are (have been) brought to criminal liability are *compos mentis* etc.

When there is a certain logical link between facts, the presumption helps to proceed from a certainly known fact to the expected (putative) fact which is taken as true.

Certain immutability is characteristic to presumptions derived by the method of inductive reasoning as they may be considered as right only at a given point of time and only when they are interpreted (understood) in the strictly defined context.²⁴ When time and the context of interpretation of the presumptions change, a person may not accept the presumptions which he has accepted before and has not considered them an obstacle in the search for truth.

However, if presumptions can only be built on the basis of induction (*praesumptio ex eo quod plerumque*), how can constructions of such presumptions as 'innocence',

²³ Manuc (2010) 232.

²⁴ Mendonca (1998) 402.

‘knowledge of legal acts’ be explained? Since it is quite evident that some prosecuted defendants will be convicted of criminal offenses, and it is impossible to find anyone who comprehensively knows the content of the whole legislation.

4. PRAESUMPTIO EST AEQUILIBRIUM (ON EXEMPLUM PRAESUMPTIONEM INNOCENTIAE)

**(Presumption arises from facts that are repeated only occasionally or very seldom,
using presumption of innocence as an example)**

Presumptions of innocence and ‘knowledge of legal act’ are not presumptions, which are constructed entirely on the basis of inductive reasoning (i.e. on what usually is or happens). How are presumptions such as these or others of a similar kind arrived at? We will provide an answer to this question while analyzing the presumption of innocence. All presumptions which are not supported by repetition of certain events, facts or features are formulated on the basis of essentially the same principles.

There is a predominant opinion that presumption of innocence in Europe in its present form first appeared in the Declaration of the Rights of Man and of the Citizen (French *Déclaration des Droits de l’Homme et du Citoyen*) passed in France in 1789, which was incorporated in the French Constitution two years later.²⁵ In the USA a similar legal institution originates from the U.S. Bill of Rights which was ratified in 1791 (the presumption of innocence binds the federal court system under the Fifth Amendment Due Process Clause).²⁶ Presumption of innocence appeared at a legislative level of individual countries even later, e.g. in Hungary in Act No. I of 1973 on Criminal Procedures.²⁷

The presumption of innocence is one of the legal maxims on the basis of which all criminal procedures and their separate components are constructed.

Criminal procedures are always initiated by the prosecution. Therefore, any court hearing a criminal case must answer the question whether the prosecution statements, in accordance to which the accused has been brought to the court, really stand. Failure of the prosecutor to prove the legitimacy of the claim on which the charges have been based in court determines the outcome of the criminal proceedings, i.e. adoption of a court decision favorable to the accused person. An outcome such as this in a criminal proceedings, in particular, is dictated by the laws of elementary logic. Whoever alleges, he must prove (substantiate) the veracity of the facts or statements (Latin *semper necessitas probandi incumbit ei qui agit*). In this case, the party that initiates the criminal process must prove that the accused person has committed the alleged offense and that he/she is really to blame for the committed acts. For example, the European Court of Human Rights has stated that ‘the burden of proof is on the prosecution, and any doubt should benefit the accused. It also follows that it is for the prosecution (...) to adduce evidence sufficient to convict him’.²⁸

If there is no prosecutor usually there is no criminal procedure. When the prosecutor is reluctant to lead the process, no one can be forced to litigate (Latin *nemo iudex sine actore, nemo invitus agere cogatur*). And only if the criminal procedure starts, in order to avoid possible abuse of procedural position, and to balance possibilities and rights of different

²⁵ Pennington (2003) 107.

²⁶ Ingraham (1996) 563.

²⁷ Act No. I of 1973 on Criminal Procedures of Hungary (2014) link 7.

²⁸ *Barberà, Messegué and Jabardo v Spain* (1988) Series A no 146 27.

parties of the process, a rule of conduct in the criminal process *semper necessitas probandi incumbit ei qui agit*²⁹ is reinforced with certain specific elements of juridical technique, such as the presumption of innocence.

Could the presumption of innocence, as well as ‘black lungs’ presumption be regarded as the result of inductive reasoning? For example, could one derive the presumption of innocence from the principal provision of *boni viri* (a good person), under which the majority of people are good, honest, tending to follow the laws and obey their imperatives (even in ancient Roman times, the concept of *boni viri praesumptio*, according to which all people were considered to be honest, until proven the contrary, was not unfamiliar)? *Boni viri* presumption is the result of inductive reasoning because most people are really honest, tend to obey the law and fulfill requirements. Thus, *boni viri* presumption is derived from facts that often recur. However, in the criminal process, not ‘anybody’ (and thus potentially *boni viri*) is declared the suspect, but only a person against whom enough evidence is collected to support the guilt (‘anti-honesty’). Therefore, there is no ground to state that the presumption of innocence is the same *boni viri* presumption only acquiring a slightly different content and that it, like the *boni viri* presumption, could be regarded as the result of inductive reasoning. In this case, a more appropriate rule is *praesumptio ex eo quod raro* (*presumption arises from the facts which rarely occur*). Thus, it can be argued that the origins of presumptions of innocence and ‘black lungs’ are not identical.

Alternatively, can the presumption of innocence be considered a result of deductive reasoning? Deduction is a method of reasoning where the application of logical means leads from a generally correct statement or statements (assumption or assumptions) towards a conclusion or conclusions that are also true (i.e., when the general assumption is correct, an individual constituent assumption is also unconditionally correct. For example, if all attorneys are lawyers and Peter is an attorney, it must be concluded that Peter is a lawyer). It would not be correct to extend the same statement to the presumption of innocence because it is not a common right assumption (the contrary might be proven – convictions are accepted and become effective, so it is not deductive). Second, deduction requires that $p_i \in \{0,1\}$, thus, such an assumption is either not a presumption (when $p_i=0$), or it is an absolute and undeniable presumption (when $p_i=1$), i.e. sameness. To put it differently, the presumption of deductive derivation does not meet the requirements of the *1st Proposition*. Third, these assumptions do not display one of the elements mandatory to the presumption³⁰ – a logical link or logical reasoning proceeding from the known to the putative fact (statement). Therefore conclusions formed by the way of deductive method cannot be recognized as ‘presumptions’ despite being called so.

The use of the presumption of innocence in criminal procedure can be explained by a principle provision *inde datae leges, ne fortior omnia posset*, which has not yet acquired the authority of the universally recognized written principle of criminal procedure. Also by a theory of search for the truth in classical criminal proceedings, according to which in order to discover the truth in a criminal process, first of all, there must be litigants (prosecution and defense) and, secondly, the litigants must be equal. In the criminal procedure, ‘equality’ is understood somewhat differently than it is in private law. This understanding of the term is determined by the specifics of criminal proceedings.

²⁹ In accordance with the unwritten principal provision, the law shall not endow the powerful (the strong) with even more power than one already has, i.e. it shall not turn the strong into the almighty (Latin *inde datae leges, ne fortior omnia posset*).

³⁰ Mendonca (1998) 406.

In the context of criminal proceedings the equality of the procedural rights of the parties of the process (persons involved in the process) should be stressed, but not the procedural equality. This means that both physical and legal persons as well as an investigating officer shall have equal rights, but they have different possibilities to implement these rights. The classical criminal procedure, which is dominated by the adversarial principle, must involve parties that have to be of the same 'weight category'. It implies that it is necessary that the parties are 'equal' as far as possible. Otherwise, the process might transform from fair process, where each of the involved parties are to be given a real opportunity to prove 'their' truth and convince 'the judge' (a person entitled to take a decision) that this party rather than the other one is right, into a kind of a crackdown by which the strong party in the procedural sense,³¹ using legal tools, cracks down on the other (weak) party. For this reason we have to speak not about the formal equality of the parties of classical criminal proceedings, but about the legal one.

In the criminal procedure, one should not be surprised or offended that looking at it from the formal legal positions, the actual totality of the rights exercised by different parties of the process is not identical or uniform. In many cases, the procedural status of the persons implementing a prosecution and persons sustaining the state prosecution does not match with the procedural status of the lawyer, defense counsel and the accused (suspect). This status does not match even during the trial. In the conventional criminal process one of the parties to the process is the state, on behalf of which the criminal prosecution is executed. The other party, regardless of their professional occupation or social status, is a private person. In order to somehow balance the available rights of the state and the private person, the latter is given the opportunity to *favor defensionis*, i.e. an opportunity of the defense priority. The balance is achieved by exploiting capabilities of legal technique – invoking the presumption of innocence and one of the effects of the application of the latter – *in dubio pro reo* rule (all ambiguities and uncertainties that cannot be eliminated using reasonable legal means shall be interpreted in favor of the accused).

The presumption of innocence helps to enable a redistribution of the burden of proof between the parties. It removes the duty of the burden of proof from the weak party of the process and, at the same time, transfers this duty to the other (the strong) party.

If the presumption of innocence was absent in the criminal procedure, there would be no possibility for the priority of defense. In such cases, the criminal process would become normal, standard litigation proceedings. In essence, this is no different from, for example, the civil procedure, where each party to the process is required to prove veracity of the underlying facts and the accuracy of their claims. This is in accordance with the general rule which can be dated back to ancient Roman times, which says that the burden of proof falls to the one who asserts, but not to the one who denies (Latin *onus probandi incumbit ei qui affirmat, non ei qui negat*). Thus, each party of the criminal process would have to prove the facts it relies upon.

Therefore, a civil plaintiff submitting substantive legal demand against the defendant during the trial of the civil process must indicate the subject of the plaintiff's claim), and the factual basis³² (the circumstances on which the plaintiff's claim is based and

³¹ A party that performs the function of prosecution, in the classical criminal process this function is performed by competent state authorities and their officials entrusted to implement this function.

³² Clause 135 of the Civil Procedure Code of the Republic of Lithuania, approved by the Law No. IX-743 dated 28/02/2002 (2012) link 8.

the evidence supporting the facts). The defendant, by stating a counterclaim or by providing replication to the claim – the basis for a counterclaim or objections to the claim – also has to indicate whether he agrees or not with an action brought against him. This way the parties of the civil process define operational limits to the court which is resolving their dispute and distribute the burden of proof amongst themselves at the beginning of the process, without interference of the court. This means that the plaintiff must prove the validity of his claim (the factual basis of the claim), or, in other words, he must prove facts supporting his right. The defendant must, in turn, prove the refusal of the plea (Latin *reus in excipiendo fit actor*), or, in other words, he must prove the facts negating the plaintiff’s right. An exception to this rule occurs in cases when standards of the civil procedural law establish special rules of evidence, including a variety of presumptions, and in no-fault civil liability cases.

The presumption of innocence, by giving priority to the defense, creates a requirement for the person who instigates the prosecution to be more active. However, it does not relieve the burden of proof from the defendant to the full extent in order not to infringe the universal principles of criminal procedure (such as good faith, adversariality and so on).

Thus, the presumption of innocence is based not on the probability of the recurrence of certain facts, but on the balance of powers (possibilities). In other words, the term is used to name the elements of juridical technique, which helps to balance the possibilities of the parties of the process instead of helping to move from the known fact to a hypothetical consideration.

By denoting the presumption of innocence as p_i^I , let’s examine the compliance of its features with the formal model of presumption.

2nd Proposition. $p_i^I \in P, \forall i \in N$.

Let us denote the person B_i suspected of committing the i -th criminal offense, A_i – the same person, against whom the court judgment has already been passed and entered into force, $A_i, B_i \in \Omega$. Let us assume that the presumption of innocence p_i^I is one of the legal presumptions, i.e. $p_i^I \in P, \forall i \in N$. Then, the conception of presumption implies the following feature of the presumption of innocence:

$$P(\bar{A}_i | B_i) \rightarrow 1 \quad \Rightarrow \quad P(A_i | B_i) \rightarrow 0, \forall i \in N, \tag{1}$$

$$P(\bar{A}_i) = 1 - P(A_i)$$

where $P(A_i | B_i)$ in this case signifies conditional probability that the person B_i suspected of committing a criminal offense would be prosecuted and acquire the status of the convicted person A_i .

$$\begin{aligned} \text{Whereas } \bar{A}_i \subset B_i \text{ and } A_i \subset B_i, \forall i \in N, \bar{A}_i = B_i \setminus A_i \Rightarrow P(\bar{A}_i | B_i) &= \frac{P(\bar{A}_i \cap B_i)}{P(B_i)} = \\ &= \frac{P((B_i \setminus A_i) \cap B_i)}{P(B_i)} = \frac{P(B_i \setminus A_i)}{P(B_i)} = 1 - \frac{P(A_i)}{P(B_i)} \Rightarrow P(A_i) \rightarrow 0, \end{aligned}$$

correspondingly $P(\bar{A}_i) \rightarrow 1$. Then $P(\bar{A}_i) = P(\bar{A}_i \cap B_i) = P(B_i) \cdot P(\bar{A}_i | B_i) = P(\bar{A}_i) \cdot P(B_i | \bar{A}_i) \Rightarrow P(B_i | \bar{A}_i) \equiv 1$, i.e. we arrive at a logical contradiction because assuming that the presumption of innocence p_i^I is one of the legal presumptions ($p_i^I \in P, \forall i \in N$) an a priori wrong conclusion is obtained – if the person is innocent, he will inevitably become a suspect.

Therefore, assuming, that the presumption of innocence belongs to the family (legal space) of presumptions,³³ we come across contradictions, in other words, it can be said that the concept of the presumption of innocence lacks the features of the legal presumption.

In order to verify the theoretical insights, let us examine the proportions of persons suspected of criminal offenses (prosecuted persons) and proportions of persons convicted by courts in Lithuania from 2005 to 2012. Official statistics provide the following data:³⁴

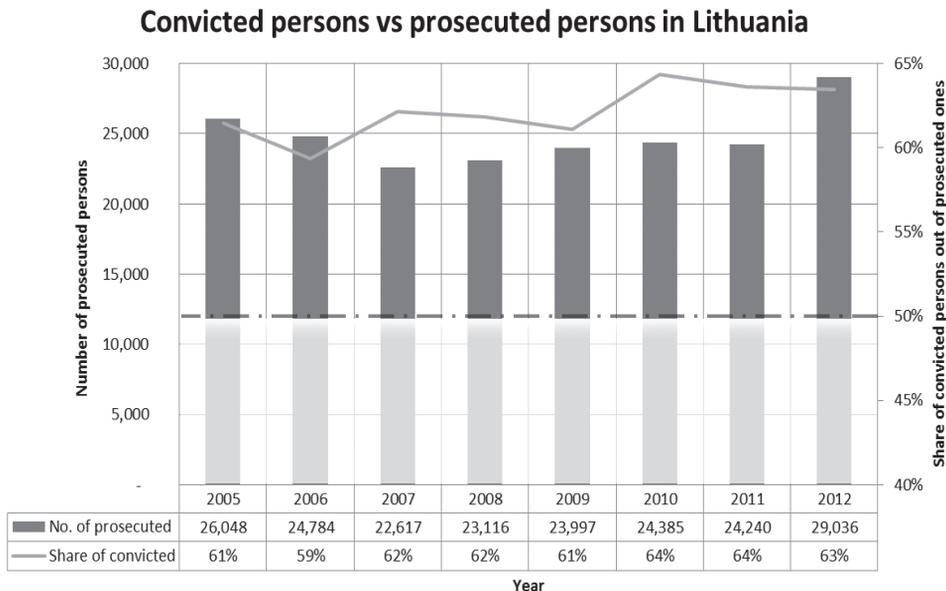


Figure 1. Proportions of convicted and prosecuted persons in Lithuania

Let us note that in the case of the presumption of innocence, the conception of presumption (see the *1st Proposition* and feature of the presumption of innocence (1) given in the *2nd Proposition*) implies that the number of persons convicted is less than 50 percent of all the persons suspected of committing criminal offenses (*Figure 1* shows the lighter shade below 50 percent limit of the line), while in reality the average conviction rate is above 60 percent of all suspects. A similar situation is faced in other countries, for example, in the U.S. the share of convicts (conviction rate) in year 2010 was 93 percent.³⁵

It should be noted that the presumption of innocence differs from real presumptions of inductive nature in its origin. However, the structural differences are minimal. The logical structures of, for example, both the ‘black lungs’ presumption and the presumption of innocence are identical and can be expressed in a formal logical link of implication ‘*if*. . . , *then*’: ‘if there is *S* then *S* has a feature *P*’ (e.g. ‘if *S* is a human being, then *S* has the ability

³³ The term ‘legal space of presumptions’ in this context defines a totality of presumptions (an aggregate of legally significant assumptions to be considered as valid presumptions) with their rules and area of applicability.

³⁴ Data on Suspected and Convicted Persons. Department of Statistics (2013) link 9.

³⁵ United States Attorneys’ Annual Statistical Report (2011) link 10.

to reason (feature P)). In the case of both presumptions, the feature P is (formally) derived from S , namely,

- in the case of the ‘black lungs’ presumption: if a miner (S) worked in the coal mine for 10 or more years, he (S) suffers from a restrictive lung disease caused by coal dust (feature P);
- in the case of the presumption of innocence: if the suspect or prosecuted person (S) is suspected of or accused of committing a criminal offense, he (S) is considered to be innocent (feature P).

5. CONCLUSION

The role of law as the regulator of public relations implies a ‘rigorous’ rhetoric. ‘Rigour’ shows itself in a proper and precise usage of notions in formulation of legal thought, be it a legal act or an academic publication. Accordingly, in this respect the elements of legal technique should be given increased attention preventing diversity of interpretations. This article shows that the conception of presumptions is not yet fully clarified. It was ascertained that only part of the legal categories in question constructed by the method of selective inductive reasoning can be recognized as presumptions. Presumptions based on the reasoning of complete induction or deduction as well as *praesumptio est aequilibrium* (a good example could be the presumption of innocence) cannot be considered as presumptions (the legal construct *praesumptio est aequilibrium* only shares with presumptions a similar logical structure). In other words, the means of balancing procedural rights of the parties cannot be recognized as presumptions since they are not preconditions, but only measures of implementation of the equality principle of the parties to the process.³⁶

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³⁶ Even if a person admits having committed a criminal offense, the process of proof does not stop as law enforcement agencies continue collecting the evidence. Although in such a case there is no need to presume innocence.

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