

Time, Trust and Normative Change. On Certain Sources of Complexity in Judicial Decision-Making

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Abstract. The aim of this paper is to outline a structure of legal knowledge that is involved in resolution of complex legal cases comprising intertemporal issues and constitutional problems. Although the topics of dynamics of legal systems are already well-elaborated in the AI and Law literature, the problem of constitutional admissibility of certain types of changes to the legal systems remains an underexplored issue. The model developed in this paper is designed to fill in this gap. The meta-information concerning admissibility of certain changes to legal systems (with regard to relevant constitutional principles) should become a standard element of any well-developed database of statutory legal knowledge.

Keywords: case-based reasoning, constitutional review, principles, rule-based reasoning, time trust.

1 Introduction

As a matter of course, time is an important factor as regards judicial application of rules. Statutory provisions may be modified or repealed by the legislator and new provisions may enter into force. A special type of legal rules, that is, intertemporal rules are a tool used to resolve potential and actual conflicts between (older and newer) legal rules. If explicit intertemporal rules are absent, the collisions may still be dealt with by means of *lex posterior* argumentative mechanism (the so called implicit derogation). Intertemporal rules may themselves be modified and repealed and there may be conflicts between them, too. This leads to creation of a multi-level framework of rules. The existence of such multi-level framework is a common feature of contemporary legal systems. Provided that the intertemporal legal rules are encompassed in well-drafted and clearly defined provisions, the reasoning with those collision rules and meta-rules does not lead to particularly complex questions of law. The more problematic situations arise, however, when certain intertemporal rules prescribe for retroactivity of object level rules, thereby allowing their application to the states of affairs which obtained before these object rules came into force. Although the application of retroactivity technique is not entirely forbidden in contemporary legal systems (as a matter of fact it is used fairly often as regards procedural matters, including the context of tax proceedings), it should be used rather

carefully due to the risk of potential conflict with important constitutional principles, such as protection of acquired rights and legal certainty.

The context outlined above poses a challenge to AI and Law research on models of legislation and in particular to the dynamics of legal systems. In our opinion, such models should not only be able to indicate which rules are to be applied to certain states of affairs (taking the temporal and dynamic dimensions of legal systems into consideration), but they should also signalize potential constitutional problems stemming, *inter alia*, from the identified retroactivity of certain legal rules. An important qualification is that imposing a task of resolution of these constitutional problems on legal knowledge systems would perhaps be too ambitious in the present state of research. However, there are no fatal obstacles that would preclude the developers of the systems to include the signalization function in their work.

The investigations are based on an actual Polish legal case concerning the so called right of perpetual usufruct. The Section 2 of the paper is devoted to detailed description of this case as well as to the explanation of the legal provisions that are applicable to it. In Section 3 the structure of legal rules applicable to the problem is outlined. Section 4 deals with the constitutional problem that was identified in connection with the *prima facie* answer stemming from the analysis of legal rules alone. The focus is on the concept of trust of the citizen who may rightly believe that the state vested him certain rights that should not be taken away by means of (especially retroactive) normative change. Section 5 discusses selected topics from the related work. Section 6 concludes.

2 The Case of Perpetual Usufruct Annual Payment

Perpetual usufruct is a kind of real property right present in the Polish legal system. It is possible to establish it on real property owned by the State or by municipalities. The economic justification of perpetual usufruct is as follows. Neither the State nor the municipalities are interested in transferring real property to private parties, because this type of property is a very convenient source of income (especially important one for the budgets of municipalities). On the other hand, private parties are interested in investing in real property not owned by them only if it is warranted that they will be able to control it for a sufficiently long period of time in order to obtain revenue from the investment.

The right of perpetual usufruct satisfies both criteria. The right is typically established by means of a contract concluded between a municipality and a private party (referred to as perpetual usufructuary) for the period of 99 years. The scope of rights of the perpetual usufructuary is very similar to the one that is assigned to owner, with two important qualifications. First, the perpetual usufructuary should act in accordance with the contract concluded with the municipality (for instance, he or she may be obligated to construct and maintain certain objects on the land). Second, the perpetual usufructuary is obligated to pay certain fees to the municipality, including the annual fee.

The amount of the annual fee may be updated by both parties. The municipality is obviously interested in increasing the amount of the fee. Typically, the increase of this amount stems from certain economic indicators. The perpetual usufructuary is interested in decreasing this amount. This may take place if he or she incurred expenditures that lead to increase of value of the real property. In such case the amount of the annual fee is decreased in proportion to the amount of the incurred expenditures.

Let us now present a case study concerning the application of the abovementioned rules in a setting that became complex due to legislative changes. The perpetual usufructuary (hereafter referred to under a fictitious name of Mr. Kowalski) filed a motion for update of the annual fee in December 2009, where the update was expected to become effective from the 1st January 2010. Before, the amount of this fee had been updated on the 1st January 2009. He demanded the fee be decreased due to the expenditures incurred by him in 2009. In the course of the proceedings before the municipal authorities, the applicable provisions were changed by means of the Act of 28 July 2011 amending the Real Estate Management Act (REMA)¹. The amending law contained the following intertemporal provision:

[INTERTEMPORAL PROVISION] In cases initiated and not completed before the entry into force of this Act, concerning the update of the fees for perpetual usufruct, the provisions of the Real Estate Management Act, as amended by this Act, shall be applicable.

The amending act modified the crucial Article 77.1 (the first sentence) of the REMA. Here below we present the former and the new version of this provision:

[REMA 77 FORMER] The annual fee for perpetual usufruct of the land may be updated no more frequently than once a year, if the value of the property changes.

[REMA 77 NEW] The annual fee for perpetual usufruct of the land may be updated no more frequently than once every three years, if the value of the property changes.

Hence, the legislative modification concerned the minimal amount of time interval between the updates of the amount of the annual fee. This time interval has been changed from one year to three years. Interestingly, this change was caused by the lobby of the perpetual usufructuaries, who were economically pressed by frequent updates of the annual fees by the municipal authorities. However, the reform precluded also the perpetual usufructuaries from demanding the update more frequently than one time every three years.

The new regulation came into force on 8th October 2011 in the course of the proceedings in Mr. Kowalski's case. Taking into account that the amount of the

¹ The REMA place of publication is the Journal of Laws 2010.102.651 (consolidated text as amended). The amending law's is the Journal of Laws 2011.187.1110.

annual fee had been updated in 2008, the municipal authorities refused to update the fee again on the basis of the motion filed in 2009 (the acceptance of such motion would cause the effective decrease of the annual fee from 2010 on). The authorities did not question any statements of facts, but they contended that due to the legislative change and the content of the INTERTEMPORAL PROVISION, Mr. Kowalski's case should be decided on the basis of the REMA 77 NEW. Due to the obligatory interval of three years, the motion filed by Mr. Kowalski could be effective from the beginning of 2012 on, hence he would be obligated to pay the high amount of the annual fee for the years 2009-2011. The perpetual usufructuary took recourse to the court.

Before the court, he argued that the decision of the municipal authorities violated his constitutional rights stemming from the principle of democratic state governed by the rule of law, especially the principle of protection of trust of citizens in legal stability and the principle of protection of acquired rights. Moreover, he claimed that the principle of equal protection of pecuniary interests was violated. The court did not feel competent to assess this complex issue on its own and filed a motion for preliminary judgment to the Polish Constitutional Tribunal.

3 The Rule-Based Framework for the Case-Study

Before entering into the discussion of constitutional issues involved in the case let us begin with a contention that on the basic level, the case comprises quite basic reasoning patterns using legal rules. This section is devoted to an outline of a semi-formal framework that captures well the problems concerning the application of rules in this cases. The elaboration presented here is comparable to standard accounts present in the literature (see Section 5 for the discussion).

We adopt a perspective on representation of legal rules which is more fine-grained than the most foundational account of rules as normative conditionals [1] :

$$\text{IF } A_1, A_2, A_3, \dots, A_n \text{ THEN } B,$$

because it is our intention to analyze certain possible types of conflicts between rules and the role of meta-level intertemporal rules. In consequence, we adopt the following definition of a legal rule.

Definition 1. Legal Rule. A legal rule is a tuple $\langle A, C, R, \text{LINK}, S, F, E, T \rangle$, where:

- 1) A is the Addressee of the rule, where $A \in \mathbf{A}$, the set of Addresses of any legal rule in question. The Addressee of the legal rule may be indicated by means of an indefinite expression (for instance, "who") or by means of a description (for instance, "municipal authority").
- 2) C is the set is the (possibly empty) set of Conditions of application of a legal rule in question to a case. C is a subset of \mathbf{C} , the set of all conditions of application of legal rules in the legal system in question. The structure of rule

- condition should be given in the form of features ascribable to individuals (in the language of logic, as predicates assigned to variables).
- 3) **R** is the set of legal Results produced by the rule in question. **R** is a subset of **R**, the set of all types of legal results known in legal system in question. As for the types of legal results, we adopt a standard distinction, we adopt a standard distinction between prescriptive rules (accounting for a certain type of behavior as obligatory or permissible) and constitutive rules (or counts-as rules; assigning certain statuses to persons, objects and states of affairs).²
 - 4) **LINK** is a relation between the Conditions and Results of a given rule. Each **LINK** belongs to the set **LINK**: the set of all possible relations between Conditions and Results of any legal rule. In consequence, this relation does not have to be identified with material or defeasible implication; bi-implications and certain other types of relations are to be considered.³
 - 5) **S** is the source parameter of the rule in question. The set of all sources **S** is based on the set of sources of binding law in a given jurisdiction. For instance, the set **S** based on the Polish Constitution would encompass the following elements: <Constitution, Ratified International Treaty, Statute, Regulation, Local Act>.
 - 6) **F** is the force parameter⁴ of a rule in question. It is the time interval from the date of entry of a legal rule into force to the date of its formal derogation. In case of rules in force, this parameter is monadic: only the date of entry into force is indicated. If the version of a given rule is changed, the force parameter encompasses all dates of entry into force and derogations of particular versions of a rule.
 - 7) **E** is the parameter of efficacy of a rule in question. Efficacy is understood here as the time interval designating states of affairs to which the rule in question may be (in principle) applied. Note that the **F** and **E** do not have to indicate the same intervals (although in standard situation they should). A legal rule may be efficacious as regards states of affairs that took place before entering of a rule into force. Also, in certain settings, a rule may still be used to assess certain states of affairs even if it is formally derogated. The Efficacy parameter encompasses data concerning the efficacy of particular versions of a rule.
 - 8) **T** is the parameter of territorial range of applicability of a rule in question. In typical situation it will cover the territory of a given state, but as local regulations are concerned, only the territory of a given province or municipality will be indicated by this parameter.

² It should be noted, however, that this distinction is criticized in recent literature, cf. [2]. As for the distinction between three categories **A**, **C** and **R** it is introduced for the sake of transparency of the representation of legal rules. If standard predicate logic is adopted for representation of legal rules, then each of these categories is ultimately represented by means of atomic formulas. Also, the distinction between these three categories is useful as regards practical needs of legislative technique. For instance it is more convenient

³ See [3] for the discussion of different types of this relation.

⁴ We use the term „force” instead of „validity” for a reason. The concept of legal validity is ambiguous and theoretically controversial. Cf. [4].

The definition described above enables us to discuss reasoning with a fine-grained approach. It also encompasses not only the data about the content of the rule (parameters 1-4) but also certain metadata important for construction of argumentative patterns (parameters 5-8).

Let us present an example of application of this framework to representation of a legal rule (REMA 77). First we represent its FORMER version, that is, before the reform from the year 2011:

A: perpetual usufructuary, municipal authority
 C: [at_least_1_year_from_the_previous_update_of_annual_fee]
 R: [update_of_annual_fee_possible]
 LINK: similar to bi-implication
 S: Statute
 F: 1 January 1998 – present
 E: 1 January 1998 – present
 T: Poland.

Let us now present a version of this rule stemming from the reform. Let us note that some information will be replaced and some will be added to the content of the rule.

A: perpetual usufructuary, municipal authority
 C: [at_least_3_years_from_the_previous_update_of_annual_fee]
 R: [update_of_annual_fee_possible]
 LINK: similar to bi-implication
 S: Statute
 F:

- 1) (FORMER) 1 January 1998 – initiation of NEW force interval
- 2) (NEW) 8 October 2011 – present

E:

- 1) (FORMER) 1 January 1998 – initiation of NEW efficacy interval
- 2) (NEW)[All_cases_initiated_before_8Oct2011_and_not_completed_by_8Oct2011] OR 8 October 2011 - present

T: Poland.

The foregoing presentation is based on the following assumptions that are in accordance with the linguistic conventions accepted in legal communication community.

1. Modifications of legal rules do not change their identity. The rule REMA 77 remains one and the same object although its parameters change. This assumption is in accordance with the very concept of modification of a rule: it is an object (a rule) which is modified (its features are changed).
2. Although a certain version of a rule may be formally eliminated from the legal system by means of derogation, it still may be efficacious and used to assess certain factual situations from the past. Vice versa, new versions of rules may be applied retroactively. The latter phenomenon is made visible through the complex representation of efficacy interval of REMA 77 in the new version.

As rules are applied to reality, let us now define a factual situation.

Definition 2. Factual Situation. A Factual Situation is a set P of persons (p_1, p_2, \dots, p_n), a set O of objects (o_1, o_2, \dots, o_n), a set A of actions (a_1, a_2, \dots, a_n) and a set $PRED$ n -ary predicates defined over sets of persons, objects and actions that represents a given legal case. Moreover, the Time and Territory parameters are ascribable of legal cases. Not all types of entities have to be present in every case.

For instance, a partial description of Mr. Kowalski's case would encompass the following set:

- 1) Persons: Mr. Kowalski; predicate: [perpetual_usufructuary]
- 2) Objects: -.
- 3) Actions: update_of_annual_fee; predicate:
[1_year_from_the_previous_update_of_annual_fee].
Filed a motion [before_8_October_2011_not
completed_before_8_October_2011].

As we do not assume here any kind of deductive character of rules, the rules bring their results about by means of application of argument schemes. The basic account of a rule-based argument scheme is as follows.

Definition 3. Rule-Based Argument Scheme. A Rule Based Argument Scheme is a reasoning pattern comprising the following sentences.

Premise 1. There is a Legal Rule $\langle A, C, R, LINK, S, F, E, T \rangle$.

Premise 2. There is a Factual Situation $\langle P, O, A, PRED, Time, Territory \rangle$.

Premise 3. There is a Subsumption Relation⁵ between the Factual Situation and the Legal Rule, that is, elements of the Factual Situation are qualified either is elements of sets given by the description of a Legal Rule.

Conclusion. The legal result R as prescribed by the Legal Rule should follow.

Definition 4. Subsumption Relation. There is a Subsumption Relation between the ranges of predicates P_m and P_n if and only if $P_m \subset P_n$.

The Subsumption Relation is, therefore, defined by means of set-theoretical relation of inclusion.⁶ It should not be conflated with applicability of rules, for it covers also different types of conceptual relations that stem from constitutive or "counts-as" rules. Let us also note that the existence of the Subsumption Relation does not lead automatically to the acceptance of conclusions that follow from Rule-Based Argument Schemes.

The account of reasoning-with-rules patterns as argument schemes enables us to construct legal rules on the basis of legal provisions or even its parts (like in case of REMA 77 rule) without any necessity to reconstruct "complete" legal rules from different parts of statutory text. The phenomenon of defeasibility of such accounted legal rules is captured by the possibility of asking critical questions to the argument based on rules.

⁵ The Subsumption Relation between the (ranges of) two predicates may be accounted for by means of set-theoretical inclusion.

⁶ See [5] for the detailed discussion of different types of set-theoretical relations between legal predicates.

As regards the application of the Rule-Based Argument Scheme, it is straightforward. Obviously, his case has been initiated before the 8th of October and not completed by this date. Due to this fact, it should be decided on the basis of REMA 77 NEW legal rule, according to which the minimal interval between updates of the amount of annual fee for perpetual usufruct is 3 years. As a consequence of this, in the factual situation given by Mr. Kowalski's case, and contrary to his interest, the update of annual fee should be declared inadmissible before the beginning of 2012.

The rule-based framework presented above is able to represent different problems concerning reasoning with legal rules in a fine-grained manner and consistently with the actual argumentative practice of lawyers. Moreover, the framework is also applicable for representing the process of amending and repealing of statutory provisions. It should be noted that the process of legislation is itself a rule-based process regulated by law. In the example discussed above it was simply asserted that the content (the C parameter) and the efficacy of REMA 77 was changed as a result of amendment of the statute. The rule-based framework presented here is able to represent this process through the introduction of the concept of meta-rules.

Definition 5. Meta-Rule. A Legal Rule is a Meta-Rule if and only if at least one of the legal Results prescribed by it concerns:

- 1) addition, or
 - 2) modification, or
 - 3) repeal
- of any parameter <A, C, R, LINK, S, F, E, T> of any legal rule.

In this contribution it is assumed that Meta-Rule should explicitly refer to other rules. In consequence, intertemporal rules become paradigmatic examples of Meta-Rules.⁷

The change of structure of REMA 77 rule was a result of application of two Meta-Rules: the modifying rule changing the time interval between the updates from one to three years and the rule reconstructed from the INTERTEMPORAL PROVISION, modifying the Efficacy parameter of REMA 77.

⁷ However, the problem of influence of one rules on another ones is much broader than presented in Definition 5. For instance, in case of implicit derogation stemming from *lex posterior* argumentation it is necessary to analyze the semantic content of rules in order to identify any modifications in the legal system in question. These issues are beyond the scope of the present contribution. Also, the problem of hierarchy of legal norms leads to serious complications as regards the discussion of Meta-Rules. In particular, the role of constitutional norms is apparently unclear in this context: do they automatically restrict the scope of application of lower-level rules? The answer to this question depends on the institutional setting concerning resolution of constitutional conflicts in the jurisdiction in question. In Polish legal system the common courts are not allowed to decide such questions on their own, therefore the constitutional layer in the present model is accounted for in separation from the basic multi-level rule-based framework. I am grateful to one of the anonymous reviewers for indicating these problems, which are worth further exploration.

The degree of complexity involved in the structures of legal knowledge described above is significant, although not fatal from the perspective of formal modeling and computational features. However, it would not be satisfactory if a legal knowledge base system simply yielded a legal answer to Mr. Kowalski's case that he is not entitled to the update of the amount of the annual fee for perpetual usufruct. This is because for any lawyer, the presence of important constitutional issues in this case is evident. The next section is devoted to the outline of these issues and for a proposal of their operationalization.

4 Enter Constitutional Problems

It was already pointed out that Mr. Kowalski satisfied all formal and substantial conditions to obtain the update (decrease) of the perpetual usufruct annual fee. However, in the course of the proceedings before the municipal authorities the normative change took place to the detriment of this interest. A question arises, whether the change of REMA 77 rule is acceptable with respect to constitutional standards.

The following exposition has preliminary character and it points out certain problems that should become the subject of interest of AI and Law community rather than formulates more concrete suggestions concerning their elaboration in legal knowledge based systems. However, as it is apparent from the discussion below, it would be difficult to assume that there is a predetermined right answer to questions of this sort; in consequence, the developed legal knowledge systems should focus on signaling potential constitutional problems (for instance, in legislation support systems) and outline their structure rather than indicate potential anticipated solutions. The latter task should be the object of research in more distant future due to too high level of complexity.

The Polish Constitutional Tribunal (the PCT) is the Polish constitutional court authorized to perform judicial review: it may invalidate statutory provisions on the basis of their incompatibility with the Polish Constitution. The PCT is also responsible for development of the Polish constitutional jurisprudence and its decisions form an important part of the landscape of the constitutional law, although they do not have strictly binding character. In particular, the PCT interprets and develops important constitutional principles, many of which are drawn from the very general clause contained in the Art. 2 of the Polish Constitution⁸:

The Republic of Poland is a democratic state of law, realizing the principles of social justice [the State of Law Principle, hereafter the SLP].

Among the sub-principles that were formulated by the PCT as "normatively entailed" by the SLP, the principle of protection of citizens' trust in the state and its

⁸ The Polish Constitution of April 2nd, 1997 was published in the Journal of Laws 1997.78.483 (as amended).

laws (the Trust Principle). The Trust Principle itself implies (according to the PCT) a number of more specific principles, among which the following should be listed:

- 1) the principle of legal certainty,
- 2) the principle of protection of acquired rights and on-going interests,
- 3) the prohibition of retroactivity of law (see the Judgment of the PCT of April 13, 1999 K 36/98 and the Judgment of the PCT of April 10, 2006, SK 30/04).

Hence, each of legal rules introduced to the Polish legal system can be scrutinized with respect to the Principle of Trust and more specific principles that are, according to the PCT, entailed by it. As constitutional principles they should be accounted as goal-norms rather than action norms [6] or as optimization commands rather than definitive commands [7, 8]. The circumstances of any case should be assessed with respect to the criteria that are implied by the Principle of Trust and the procedure of weighing should be performed in order to conclude whether the regulation in question violates the constitutional principles indicated above.

In order to operationalize the Principle of Trust, the introduction of more specific criteria of assessment of cases in the light of this principle is needed. Let us present three instructive passages from the jurisprudence of the PCT that offer very useful clarification of the subprinciples of the Principle of Trust:

[Legal Certainty] “(...) [T]he principle of trust in the state and its laws is based on the requirement of legal certainty, that is, the features of the law that provide legal security for individuals, allowing them to decide on their actions on the basis of full knowledge of the conditions of operation of the state and the legal consequences that may be entailed by the individual” (the Judgment of the PCT of January 20, 2011, Kp 6/09).

[The Protection of Acquired Rights] “(...) [T]he principle of the protection of acquired rights, provides for protection of both public and private rights, acquired either through a decision issued by a state authority or on the basis of law alone, as well as the protection of the so-called maximally developed expectations of rights, that is, the situation in which all essential requirements of being vested with a right are fulfilled by an individual” (the Judgment of the PCT of March 30, 2005, K 19/02).

[The Relative Prohibition of Retroactivity] “(...) [I]t is unacceptable to enact retroactive norms, if the entities, to which these standards apply, could not reasonably have foreseen this kind of legislative decision and if there are no extraordinary circumstances or constitutionally protected values that could justify such decision” (the Judgment of the PCT of February 27, 2002, K 47/01).

In consequence, the Principle of Trust is in fact a bundle of sub-principles that possess quite complicated structure themselves and that are interconnected with each other. Their relative openness makes it possible for the PCT to apply them to different factual situations (assessed legal regulations). On the other hand, it is not possible to indicate any concrete criteria that would serve as a set of sufficient or necessary

conditions or fulfillment or violation of these principles. Hence, their application to any regulation is ultimately grounded in the result of the process of balancing of values [6, 7, 8].

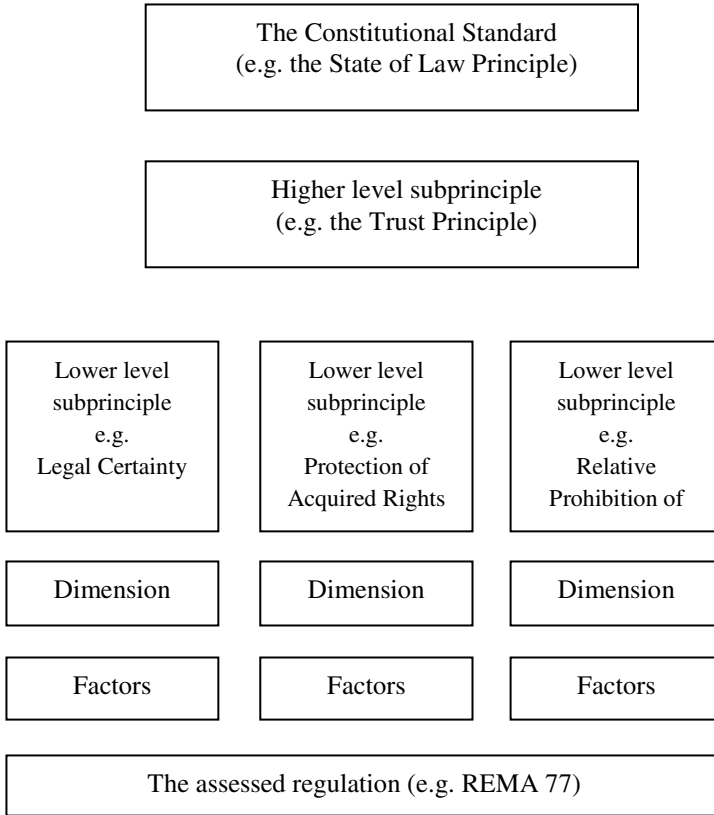


Fig. 1. The multilayered structure of knowledge involved in assessment of constitutionality of regulation

The case-based reasoning techniques such as the use of dimensions and factors [9, 10, 11] to characterize prior cases and then to analogize them to the case at hand can be potentially fruitfully used for the operationalization of reasoning with the sub-principles defined above. Two qualifications are in place here, however. First, due to the fact of lack of presence of formal precedential constraint in the jurisprudence of the PCT, the role of analogous reasoning based on factors will be lesser in comparison to their significance in common law legal cultures. The PCT will refer to its previous decisions for the sake of increasing persuasive power of its argumentation, but it will rather focus on the structure of the case at hand. Second, due to the fact that the PCT

will assess the regulation in question against concrete constitutional standards (that is, against concrete provisions of the Constitution), as a result we will obtain a multilayered argumentative structure encompassing a number of intermediate steps between the constitutional standard and the regulation in question, assessed against the background of the circumstances of the analyzed case. This multilayered structure may be visualized on the following figure.

It is not possible to comment in detail on the possible problems resulting from reasoning with the structures outlined in the figure here above. Briefly, it would encompass the following stages: 1) identifying the (apparently) applicable Constitutional Standard together with the list of its subprinciples; 2) identifying factors abstracted from the factual situation that would support certain decision (such as the reasonable expectation of Mr. Kowalski that he would be entitled to the update of the annual fee); 3) developing dimensions in order to systematize different factors and to show their relative strength; 4) arguing that reaching certain point on a dimension counts as an argument for infringement of certain lower-level subprinciple; 5) arguing that the violations of lower level subprinciples are of such character that they lead to the conclusion that the higher level subprinciple has been violated; 6) arguing that there are (no) overriding constitutional arguments to the contrary, in order to conclude that the Constitutional Standard in question has (not) been violated. Obviously, this analysis cannot lead to any definitive conclusions before the actual PCT judgment is not issued. The degree of complexity involved in this domain of reasoning makes it implausible to assume that a legal knowledge base could accurately foresee the actual decision of the constitutional court.

5 Discussion and Related Work

The framework presented in this paper is a contribution to the theory of hybrid legal knowledge systems encompassing both rule-based and case-based elements, that traces its roots back to the work of Rissland and Skalak [12]. As for the rule-based part, the main focus is on the structure of rules. Instead of reconstructing rules as conditional sentences, a more complex approach is adopted to encompass several different parameters of rules. The topic of parameters of rules is deeply analyzed nowadays in the framework of RuleML research and in application of NLP tools to analysis of legislation [3, 13]. The present contribution encompasses many of the distinctions discussed in this literature and outlines briefly how these different parameters contribute to the argumentative practice in legal domain. The idea of argument schemes developed by Gordon and Walton [14] is employed in this context. The set of parameters used to characterize legal rules is also inspired by the work of Jaap Hage on Reason-Based Logic [15]. Another context that is relevant for the discussion of the problems tackled in this paper is the formal treatment of changes in normative systems, especially as regards the application of defeasible logics [16, 17, 18].

Although the issues of complexity of contemporary legal systems that stem from the legislative changes and intertemporal relations are a subject of intensive research

nowadays, the intention of this paper is to show that this is just a tip of the iceberg. The degree of complexity of legal reasoning grows significantly if the constitutional context is projected on the rule-based framework. As it was argued, the concept of citizens' trust in the state and its law plays a particularly important role in this context, leading to the development of a very complex case-based jurisprudence concerning constitutional (sub)principles. Analysis of these issues requires the use of all case-based knowledge representation techniques, to begin with balancing of values, through development of dimensions and classification of cases with respect to them, to conclude with abstracting factors from factual situations' descriptions. Interestingly, due to the great emphasis on the process of balancing in statutory law culture [7], the considerations begin from the identification of high level principles to end up in identification of relevant factors. This order is reversed when compared to the development of case-based reasoning structures in American theory: there the research on factor and dimensions came first to be complemented by teleological considerations [19, 20].

6 Conclusions and Further Research

Contemporary research on AI and Law makes significant progress as regards modeling of temporal aspects of legal rules, their modification, the scope of their efficacy etc. This research domain is of utmost importance, however, for the sake of completeness of elaborated models and legal knowledge bases, the constitutional context should be taken into account. As it was shown on the basis of the actual case study (the case of Mr. Kowalski), even an elaborated rule-based framework may lead to confusing answers to legal questions, were the constitutional context not present. The Principle of Trust is one of the most important criteria for constitutional assessment of statutory regulations. The future research continuing this project will be devoted to operationalization of case-based reasoning concerning this principle. The obtained results should be integrated with the already existing systems employing temporal defeasible logics.

Acknowledgements. I would like to thank the organizers and participants of the AICOL 2013 – AI Approaches to the Complexity of Legal Systems workshop which took place in July 2013 in Belo Horizonte as one of the events at XXVI World Congress of Philosophy of Law and Social Philosophy where I presented a talk related to the topics discussed in this paper. I am grateful to Fernando Galindo for stimulating questions. I thank Pompeu Casanovas for his encouraging and very supportive attitude, as well as for the discussions on topics related to the frontiers of legal theory and information technology. Also, my thanks are due to three anonymous reviewers whose suggestions led to improvement of certain parts of this papers. All remaining deficiencies are responsibility of the author.

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