# Chapter 9

# **Argument Structures in Legal Interpretation: Balancing and Thresholds**

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**Abstract** This paper is a contribution to the development of a descriptive model of legal interpretation encompassing three areas: formulation of interpretive statements, generation of arguments that support or demote the interpretive statements, and comparison and balancing of arguments supporting incompatible interpretive statements. The focus of the paper is on the third layer. A case study is presented to demonstrate how a court uses a technique referred to as 'threshold conditions', instead of explicit balancing different values. The nature of this technique will be analysed in the framework of the developed model of legal interpretation. Although the purpose of the paper is theoretical, a practical objective of development of an AI-based legal interpretation support system creates an important background for the investigations.

#### 9.1 Introduction

The nature of balancing of values and reasons in legal reasoning has been a subject of analysis in legal theory for at least three decades. However, the most important contexts for the discussion of this topic in the domain of legal argumentation theory are constitutional law and teleological reasoning, while general statutory interpretation has remained a relatively underrepresented field. The purpose of this paper is to make a contribution to this neglected area. Consequently, this paper focuses on the reconstruction of the mechanism of balancing in the context of interpretation of statutory expressions of civil law systems, and Polish tax law was chosen to serve as illustrative material. This reconstruction forms one part of the descriptive model of legal interpretation outlined in Araszkiewicz (2013b) and partially developed previously in Żurek and Araszkiewicz (2013). The model is designed to present the actual

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structure of judicial interpretive argumentation in a precise manner and disregards the normative (postulative) questions of the theory of legal interpretation.

The emphasis on representing actual judicial argumentation instead of idealized reconstruction is motivated by a practical goal that prompted the development of the model, which is the creation of a workable AI-based legal knowledge representation system. The system should be able to analyse the argumentative structures of legal argumentation that are expressed in the actual wording of judicial decisions. The idea to develop an AI system that would include not only a simple representation of statutory rules but also the issues of legal interpretation has been recommended in the AI & Law literature for at least two decades (see Oskamp 1993); however, the construction of genuine legal expert systems appeared problematic for many reasons, including choosing a method for the representation of legal knowledge (Bench-Capon 2012). Extracting legal arguments from the actual wording of judicial decisions has been a frequent subject in contemporary research in Al and law (Ashley and Walker 2013). Focusing on actual rather than idealized judicial argumentation also possesses an important theoretical value in answering the question: what types of arguments are used in judicial reasoning as sufficient justifications of legal decisions? Hence, the purpose of this paper is to demonstrate how the comparison and balancing of different interpretive arguments are handled in actual legal cases in a civil law system. The illustrative material presented in the paper suggests that in legal practice balancing of values is replaced by use of certain types of default rules and that the use of these rules can be seen as sufficient for providing justification for legal decision-making. Apart from a theoretical insight concerning the discussion of argument schemes used in the mentioned context, the present study contributes to the development of AI-based model of legal interpretation. It shows how in certain cases the complicated procedures of balancing of values may be (and in actual practice are) substituted by far more simple, but non-trivial, reasoning patterns.

This study is divided into seven sections. In Sect. 9.2, we present a brief overview of the state of art concerning the discussion of balancing in legal theory. A general, multi-criteria decision-making framework for the analysis of the research problem is outlined in Sect. 9.3. In Sect. 9.4, the concept of statutory interpretation will be made illustrated in a model with an emphasis on the extensional aspect of this process, which is the legal interpretation as a determination for the extension of statutory expressions. Actual cases decided by the Polish Supreme Administrative Court will serve as illustrative material for extracting a mechanism of balancing in the context of competing interpretive arguments in Sect. 9.5. The illustrative material will show that the court applied what is referred to as the threshold technique to resolve the conflict between arguments supporting different interpretive conclusions and did not engage in an explicit balancing of values. Section 9.6 focuses on the discussion of the presented analysis with a particular emphasis on the use of the threshold technique of balancing. The final section includes conclusions and presents recommendations perspectives for further research.

# 9.2 Balancing in Legal Reasoning

Several accounts of legal balancing are presented in this section. The accounts discussed here are well-known proposals, and they provide an important contribution to legal theory by reconstructing the idealized models of weighing different values and reasons in the law. They generally abstract from actual wording of judicial argumentation by imposing elaborated theoretical structures on the represented phenomenon. This is not a disadvantage of these proposals from the point of view of aims adopted by the authors of these models; however, from the practical and theoretical point of view adopted in this paper, their usefulness is limited. The contributions discussed below suggest that balancing of values (and broader: teleological considerations) are crucial as regards resolution of questions of law that are not resolvable on some more basic level. We contend here that there is a large scope of different argumentative structures used for answering of such questions where purely linguistic techniques and full-blown balancing of values create the extreme points of the spectrum.

The author who introduced the topic of balancing to a very broad legal-theoretical audience is Robert Alexy, who presented a theory of constitutional principles as optimization requirements (Alexy 2002, 47). Alexy transformed the famous dworkinian distinction of legal norms into legal rules and legal principles. While legal rules may or may not be applied to a case in such a way that tertium non datur, legal principles may influence the outcome of a given case to a certain degree. Conflicts between legal rules are resolved in abstract by using the traditional criteria to resolve apparent antinomies in a legal system (such as lex posterior or lex superior), while collisions between legal principles have to be resolved by balancing (Alexy 2007). Legal principles should be understood as optimization requirements, ie, legal norms that require certain values to be realized to the greatest extent possible given factual and legal limitations. In his later work, Alexy called for the application of the Weight Formula as a scheme for the resolution of the collisions of legal principles (Alexy 2003, 2007). The principle of proportionality described by Alexy (and adopted in German constitutional jurisprudence, see Alexy 2002, 66), encompasses three important sub-principles: the principle of necessity (the adopted measure must be necessary for realization of the assumed aim), the principle of suitability (the adopted measure must be suitable for realization of the assumed aim), and the principle of proportionality in the strict sense. The latter, also referred to as the Law of Balancing, is the most relevant sub-principle to this study and was formulated in the following manner:

[The Law of Balancing]: "[T]he greater the degree of non-satisfaction of, or detriment to, one principle, the greater the importance of satisfying the other," (Alexy 2002, 102).

Alexy adopts a triadic scale for measuring both the degree of non-satisfaction of the principles and the importance of their satisfaction, which encompasses the following levels: Light, Moderate, and Serious (Alexy 2003, 440). Each of these degrees of intervention or satisfaction may be further classified into three sub-steps.

Once numbers from this scale are assigned to deliberate legal decisions, it is quite simple to determine which of the competing principles (or groups of principles) should prevail in a certain situation. Of course, the assignment of numbers may be controversial and subject to debate.

In summary, Alexy has developed a theory in which balancing is a method for the resolution of collisions between legal principles understood as optimization requirements. The objects compared are degrees of the satisfaction of principles and degrees of importance of the realization of principles. These degrees are represented on a triadic scale and the collisions between or among legal principles are resolved by means of an arithmetical Weight Formula. Alexy's model is a reconstructive idealization because arithmetical formulas are not used in actual judicial argumentation. Interestingly, the choice of a triadic scale was motivated by Alexy's goal to remain faithful to the actualities of legal reasoning (Alexy 2007), but the idealization feature dominates his proposal.

The concept of finding a proportional balance between colliding legal principles (or values; or, more generally speaking, reasons) has become appealing to many legal scholars, who are not only followers of Alexy but are also authors who have developed their own accounts of the role of balancing in legal reasoning.

A relatively recent and very well-developed theoretical model of legal balancing and maximization has been proposed by Giovanni Sartor (2010). Sartor provides a generalized and partially formalized framework for legal balancing and adopts Alexy's approach in choosing constitutional review as a prototypical context for the discussion of this topic (Sartor 2010, 176). He applies a modified terminology that divides legal norms into action-norms and goal-norms instead of rules and principles (due to the notorious lack of clarity in regards to the notion of legal principles). Action-norms assign to certain actions the status of obligatory ones or specify the conditions of validity of legal acts, while goal-norms involve certain objectives (Sartor 2010, 177). Sartor adopts a broad conception of values, which are defined as any valuable state of affairs. He presents counterparts of important decision-theory concepts in the field of legal balancing. For instance, he defines the notion of Paretosuperiority in terms of teleological reasoning. Informally speaking, a choice is Pareto-superior to another choice if the former choice is better than the latter one in regards to with regard to the realization of a certain value and if the former choice is not inferior to the latter with regard to any other value.<sup>2</sup> A given choice is Paretooptimal if no other choice is Pareto-superior to it.

Sartor rightly acknowledges that in legal contexts, particularly in the context of legislative choice, these choices are often not Pareto-comparable; no choice is Pareto-superior with respect to another one. He proposes in his theory that trade-offs between conflicting values may be represented by means of indifference curves

<sup>&</sup>lt;sup>1</sup>It is of course possible to also use other types of scales to compare the relative weight of principles or values. See Bench-Capon (2011, 14) for an outline of the problem and Araszkiewicz (2011) for a brief elaboration of this subject. A triadic scale seems to be a convenient choice because of the for semi-formal modeling of legal balancing. See the proposal of Grabmair and Ashley (2010). <sup>2</sup>For a formal definition, see Sartor (2010, 185).

(Sartor 2010, 193). This idea was present in Alexy's account also (Alexy 2002, 103–104). Although Sartor adopts a quantitative scale for representing the degree of the realization of values, he also acknowledges that certain degrees of realization are qualitatively different. The degree of the realization of value referred to as the *core of value* should be satisfied in any legally acceptable decision. In other words, any legal decision leading to an infringement of the core of value should be assessed as legally wrong (Sartor 2010, 191). Moreover, Sartor presents a thorough, partially formalized analysis of each of the components of the principle of proportionality with particular emphasis on the third balancing component. Following Barak's general suggestion, Sartor develops and presents a scheme of value judgment concerning the balancing of colliding values that affect legislative choice using a marginal analysis (Sartor 2010, 200). He further discusses the different levels of intensity of a judicial review of legislative choices as well as several other topics involving balancing in the context of precedents (2010, 208–210).

Sartor's proposal is presumably one of the most developed accounts of legal balancing involving decision-theory based rationality. The concept of the optimization of the degree of realization of legally relevant values is particularly evident in his discussion of teleological Pareto-superiority. He combines quantitative and qualitative aspects of scales that measure the realization of values, preferring the use of natural numbers. Like Alexy, the illustrative material Sartor chose is the conflict of (mainly: constitutional) values in the context of legislative action. The model proposed by Sartor is highly idealized due to the application of the mathematical decision theory to legal balancing and differential analysis to create a fully-fledged formulation of legal value judgments.

Grabmair and Ashley (2010) are AI and law scholars who advocate a formal framework for reasoning with values in the context of legal case-based reasoning. They adopt certain ideas similar to Alexy's ideas by adopting a triadic scale concerning realization (promotion) or demotion of legally relevant values in particular (Grabmair and Ashley 2010, 69–70). Among the set of definitions formulated by the authors, there is also an account of value judgment, which is a scheme for the comparison of value effects sets (the effects concerning promotion and demotion of value tuples) in different factual situations (Grabmair and Ashley 2010, 70). The authors use the famous California v. Carney<sup>3</sup> case as illustrative material for their analysis (Grabmair and Ashley 2010, 73). They enter into a discussion with Bench-Capon and Prakken (2009, 2010) and criticize their approach for adopting an abstract (fact-independent) ordering of values and for using a static (instead of dynamic) account of the threshold degrees of the realization of a given value. According to Grabmair and Ashley, if there are at least two colliding values, their thresholds are relative to one another. In other words, for each threshold value of the realization of a given value (leading to a certain legal consequence), there is a threshold value of the realization of a conflicting value, which leads to avoiding the previously mentioned legal consequence (Grabmair and Ashley 2010, 75). Hence, the authors strongly emphasize the dependence of the outcome of legal balancing on

<sup>&</sup>lt;sup>3</sup>471 U.S. 386 (1985).

contextual information. The model proposed by Grabmair and Ashley is a moderate idealization because they attempt to join the rigor of a semi-formal framework with a heavy emphasis of its descriptive adequacy in regards to the actualities of judicial argumentation of American courts.

Jaap Hage advocates the theory of qualitative comparison of alternative decisions in the law (Qualitative Comparative Reasoning, Hage 2005, 102 ff.). Notably, Hage's account is broader than the teleological account because he uses the term "reasons" to refer to entities that may plead for or against a certain choice (Hage 2005, 103); however, he asserts that sets of goals are important types of reasons as well. To compare reason sets, Hage uses qualitative ordering operators, such as "stronger," "weaker," or "equal." He also acknowledges the possibility of using quantitative methods in the context of comparing the probabilities of consequences of certain actions, for instance. He formulates a set of conditions for establishing preference relations between sets of alternatives, and he is aware that a comparison of certain (more complicated) sets of alternatives involves additional evaluation and that the category of preference in qualitative comparison may not satisfy all axioms of the classical decision theory. For instance, the relation of preference in this context is only weakly, that is defeasibly, transitive (Hage 2005, 107). Hage devotes considerable attention to the role of the realization of goals in the comparison of different decisions. Eventually, he presents a formalized framework for comparison sets of reasons as an extension of his Reason Based Logic (Hage 2005, Chap. 3) that encompasses many interesting heuristic rules (Hage 2005, 122 ff.).

Hage's proposal is an example of a formalized and qualitative framework for the comparison of (sets of) alternatives. The framework is very general and thus applicable not only to any context of legal reasoning but also to other domains of deliberation. The illustrative materials chosen by the author are case-based reasoning and reasoning with legal proof. Although the author does not discuss the problem of optimization or maximization directly in this context, he does define solutions as right, wrong, or indifferent in terms of the preponderance of pro-reasons over conreasons and the preponderance of con-reasons over pro-reasons and their equality, respectively. In summary, Hage's proposal is a very general framework for legal balancing that may be applicable to any context of legal argumentation. Due to its abstract character, it can be instantiated in different domains of legal discourse. Due to the moderate application of the scales of measurement, the framework is easily applicable to actual legal cases (an example of two analysed cases are discussed in Hage 2005, 114 ff.).

Legal balancing and teleological reasoning have also been topics of interest for argumentation researchers working with the theoretical framework of pragma-dialectical theory (Feteris 2008). The basic approach for the reconstruction of teleological argumentation in legal interpretation is as follows: application of a legal rule (interpreted in certain manner) to a given legal case, may lead to consequences that are desirable or undesirable in the perspective of the goal of a rule (Feteris 2008, 490 ff.). Feteris is aware that in actual judicial argumentation certain choices underlying the application of the presented scheme are often left implicit, and she advocates the method of "rational reconstruction" of legal balancing in teleological

interpretation in order to indicate how the judge uses her or his discretionary powers in the interpretation and application of legal rules.

Feteris' analysis of legal balancing is less general and less formalized than the previously discussed analyses. Its value lies in focusing on the specific context, which is provided by the interpretation of statutory rules. The purpose of Feteris' study explicitly involves reconstruction and rationality. She intends to reveal hidden assumptions that are rarely made explicit in actual legal argumentation. On the other hand, she does not use any concrete measurement scale in her reconstruction; she uses binary concepts for an assessment of the consequences of interpretation (desirable / undesirable).

The amount of literature on the subject of legal balancing is enormous and includes not only thorough elaborations of the reasoning of constitutional principles (for instance: Borowski 2007) but also legal-theoretical accounts that are generally based on the concept of weighing and balancing (Peczenik 2008). The different terminology that is used by the different authors makes the comparison and the application of their concepts difficult; however, the main feature that makes the proposals discussed above less useful for the purposes of this paper is that they all impose a certain well-developed formal (mathematical) or semi-formal structure on the actual judicial argumentation. Moreover, the developed concepts of legal balancing do not deal directly with the problem of statutory interpretation. In addition, the frameworks developed in the context of constitutional review might not be directly applicable to the domain of statutory interpretation. Therefore, for the purposes of this paper, it is worthwhile to look at the process of balancing in legal statutory interpretation from a more general perspective, which enables us to proceed with a descriptive analysis.

# 9.3 Balancing in Legal Interpretation: A General Framework

Legal balancing is naturally, although not necessarily exclusively, seen as an optimization problem. This stems from Alexy's account of legal principles as optimization requirements; however, the analysis of literature quoted in the preceding section suggests that legal balancing does not take place only in the context of application of legal principles. This seems to contradict contrast Alexy's position who argues that while balancing is a mode of the application of principles, legal rules are applied by means of subsumption. It is necessary to note here that according to Alexy's account, the balancing of legal principles leads to the formulation of legal rules (Alexy 2002, 54) and basically all rules (if rationally justifiable) are the results of the balancing of principles. Moreover, the interpretation of statutory expressions may be seen as the process of balancing of values (Alexy's letter published in

<sup>&</sup>lt;sup>4</sup>With an exception of Sieckmann (2009, 151–168).

Bustamante 2005, 323).<sup>5</sup> Even if we agree that it is always possible to reconstruct certain values that have to be balanced in order to obtain the justification of a legal decision, this is not always apparent in actual legal argumentation. Even if legal arguments that are actually used are themselves interpretable as results of balancing certain values, this study focuses on the structure of these arguments as they are actually formulated in the language of judicial opinions. In order to analyse these structures without imposing any elaborate conceptual scheme, we will adopt a very general and neutral perspective here. The theory of multi-criteria decision-making (Ehrgott 2005) is a mathematical framework that is useful for providing a more general account of legal balancing. Each decision-making problem consists of a set of decisions (variables), a set of criteria that are applicable in assessing the decisions, and a notion of assessment (typically optimality) that is applied (Ehrgott 2005, 1). The purpose of this study it to reconstruct the counterparts of each of these three elements in the context of judicial interpretive argumentation.

Jerzy Wróblewski (1992) designed a model for the judicial application of law, which he referred to as a material decision model of the application of law. For Wróblewski, the judicial application of law can be viewed as a sequence of partial decisions that ultimately lead to the final decision of applying a law. These partial decisions are the decision of validity (deciding whether or not a legal norm in question is valid), the decision of proof (connected with establishing the facts of the case), the decision of interpretation (related to the determination of meaning of relevant legal rules), the decision of subsumption (qualification of a given state of affairs as belonging or not belonging to the scope of the application of a legal rule), and the decision regarding legal consequences (choice of legal consequences that stem from the application of a legal rule to a given state of affairs). Making a decision regarding partial problems leads the judge to the ultimate decision concerning the application of law.

Wróblewski's model of the judicial application of law is a good starting point for the analysis of legal balancing in judicial reasoning in continental law systems. It enables us to separate certain stages of judicial reasoning and to indicate what elements are relevant to the decision-making process in each of these stages. For instance, regarding the decision of the interpretation of legal rules, the decision space will be constituted by a set of interpretive alternatives, or different possible interpretations of statutory expressions. The set of criteria that are applied for an assessment of these interpretations is the set of different reasons that may justify the choice of different interpretations. If we follow the classical typology of the canons of legal interpretation, which are accepted by Wróblewski (1992), these reasons

<sup>&</sup>lt;sup>5</sup>I am grateful to Thomas Bustamante for calling my attention to this problem. In this connection, let us also note that the process of balancing colliding values may be represented as a coherence problem in a constraint satisfaction framework (for an introduction to this theory see Thagard 2000; for the discussion of the limits of the theory cf. Hage 2013 and Araszkiewicz 2013a). Araszkiewicz (2010) asserts that the interpretation of a general legal rule may be understood as a process of balancing two competing legal principles in the context of the circumstances of a case; however, clearly, the constraint satisfaction framework is a conceptual scheme that is imposed on actual argumentative structures used by the court. As this papers adopts a descriptive perspective on the problem of legal interpretation, this type of analysis should be avoided.

may be divided into linguistic, systemic, and functional reasons. It is important to note that all of these canons of interpretation are related to different values and that the structure of these values and their mutual interrelations are often complicated. These values often affect the decisions of legal interpretation indirectly; the canons of interpretation are used without explicitly mentioning the value(s) that are realized by utilizing a given canon. There is no fixed theory regarding an optimality of judicial interpretation. Different philosophies of law contribute to this problem in different manners. For instance, according to the economic analysis of law, the chosen interpretation should lead to the maximization of welfare or wealth. In legal practice, a (relatively incomplete) theory of choice between competing criteria favouring different interpretive outcomes may be reconstructed from the so-called directives of preference, which are typically accounted for as collision rules governing the process of resolving conflicts between incompatible interpretive results.

The application of the basic framework of the multi-criteria decision-making theory to the problem of legal interpretation enables us to look at this problem from a very general perspective.

The structure of the interpretive alternatives is generally unclear. Although many scholars devoted much attention to clarifying the structure of interpretive propositions in law, their syntactic and semantic character of these alternatives is still debatable. In Sect. 9.4, a certain proposal of accounting for them will be presented.

Regarding the criteria that are applied for the assessment of different interpretive propositions, the problem of their representation is even more complicated for four reasons. First, as discussed previously, the reasons expressed in the canons of legal interpretation can be viewed as the criteria of assessment and justification of different interpretive alternatives; however, the use of these canons is justified by certain values. Consequently, there is a multi-layered set of criteria of a rather complicated structure. Second, the use of certain interpretive reasons is no longer theoretically neutral. For example, a legal formalist may acknowledge a narrower set of legally relevant reasons than an adherent of dworkinian jurisprudence. Third, the canons of legal interpretation are open to interpretation because there are no "authoritative" formulations of them. Fourth, it is not easy to answer questions concerning scales used for indicating the extent to which a given criterion is fulfilled by different solutions.<sup>6</sup>

As for an examplary notion of optimization, Alexy's concept of optimization expressed in his Law of Balancing has been presented previously; however, the question of whether or not the process of legal balancing is (descriptively) a process of optimization is raised. Do the judges actually strive for an *optimization* of realization of legally relevant values? Is the process of legal reasoning best explained in terms of finding a certain kind of maximal point or best answer? For obvious reasons, it is not possible here to discuss these important questions in detail; however, a case study presented in Sect. 9.5 will enable us to provide preliminary insight regarding the relation between legal balancing and the concept of optimization.

<sup>&</sup>lt;sup>6</sup>In review, the problem with the scales of measurement of the realization of different values was discussed in Araszkiewicz (2011).

Multi-criteria decision-making category	The set of decisions	The set of criteria	The applied notion of optimization
Instantiation of a category in the field of judicial interpretation	The set of interpretive alternatives	Compatibility of interpretative alternatives with canons of legal interpretation with the values that are protected by the canons of legal interpretation	The maximum value of function given by all relevant legal reasons
Problems	The syntactic and semantic characteristics of interpretive alternatives	The relation between canons and values justifying them "Legal" character of certain arguments Openness of the canons to interpretation Measuring scales	Is legal reasoning about maximization or optimization of any function at all?

Table 9.1 Problems of legal interpretation in the framework of multi-criteria decision-making

The analysis of the challenge of balancing in judicial interpretation of statutory law in terms of the general framework of multi-criteria decision-making is summarized in Table 9.1.

The model of statutory interpretation outlined in the next section addresses some of the problems presented in this Table in a satisfactory manner.

# 9.4 A Model of Statutory Interpretation Incorporating Teleological Argumentation

In this section, a model of statutory interpretation, which is outlined in Araszkiewicz (2013b), is presented. The model itself has mainly descriptive purposes. The purpose of the model is to represent actual judicial interpretive argumentation in the context of statutory legal systems. The model's objective is not to criticize the actual judicial reasoning, but to faithfully represent its actual structure and argumentation patterns for the possible implementation in a legal knowledge system in the future. The presentation of the model here is informal.<sup>7</sup>

The model outlined here is designed to represent the extensional aspect of legal interpretation which is determination of extension of statutory terms. This operation takes place in the context of an operative, judicial interpretation of law as well as the abstract, doctrinal interpretation of law. For example, if we deliberate if John should be classified as an object subsumed under the statutory expression "thief" we cannot

<sup>&</sup>lt;sup>7</sup>For a formalized, set-theoretical account, cf. Araszkiewicz (2013b). For a logic-based model of teleological interpretation, cf. Żurek and Araszkiewicz (2013).

state, by simply assertion, that John is a thief to justify this conclusion; in fact we have to use another general linguistic expression such as 'a person who deliberately takes the property of other' and only after classifying John as an object of such intermediate legal concept (for instance, in the process of evidence inquiry) we are able to classify John as a thief. Once the evidentiary reasoning is concluded, the determination of the extension of statutory expressions consists in arguing about extensions of different general terms and expressions. We refer to the propositions concerning extensions of statutory expressions as extensional statements. Here are three examples of extensional statements:

- 1. According to this Act, a forest is also a land that is capable of forest production.
- 2. A legal claim is a subjective right that entitles a person to demand that another person behave in certain way.
- 3. According to the provision P, "5 years of driving experience" means "5 years of driving experience in the municipality where the applicant applied for the licence."

The first extensional statement is taken from the text of a statute, the second from a doctrinal textbook, and the third from case law. They are formulated in different contexts of legal argumentation, but they all have one thing in common: they establish set-theoretical relations between sets of objects belonging to the ranges of predicates used in linguistic expression. This relation may be a relation of inclusion, equality, or another type of extensional relation such as strict superiority, etc. Extensional statements that encompass at least one occurrence of a term that is not extracted from the wording of a normative act is referred to as an Interpretive Statement (IS). The extensional statement (1) presented above is not an IS, but the remaining two statements are.<sup>8</sup>

The formation of IS represents the first layer of the model of legal interpretation; however, an IS should be justified (supported by reasons). Therefore, the second layer of the model consists of the use of argumentation schemes to produce arguments (argument tokens) supporting or attacking a particular IS. Argumentation schemes are abstractions of patterns actually used in argumentation (Walton 2006; Walton 1996). Because the concept of argumentation schemes is well-known in the literature and in legal reasoning, a very brief description of this concept will suffice here. Argumentation schemes are based mainly on content and not on premises and conclusions. Consequently, the arguments are non-deductive and defeasible. By default, an argument based on an argument scheme provides for the justification of a given conclusion. Each argument scheme is accompanied with a set of critical

<sup>&</sup>lt;sup>8</sup> In the following presentation, we will use a simplified notation to express both the content of legal rules and the structure of extensional relations in Interpretive Statements. We will make use of the general scheme [predicate] [object] and also use informal logical connectives such as AND, OR, and BUT NOT. For instance, the IS (3) discussed here would take the following form: [5 years' experience] [driver]=[5 years' experience] [driver] AND [experience in the same municipality] [driver].

questions that are used to scrutinize the actual strength of the argument based on the argument scheme.

Classical canons of legal interpretation can be reconstructed as argumentation schemes. Although this topic has not been fully developed yet, there are already interesting studies to show how the directives of legal interpretation can be understood as argumentation schemes (Macagno et al. 2012).

In order to explain how an argumentation scheme can be developed on the basis of a classical canon of legal interpretation, let us present a scheme for a teleological interpretation of statutory expression. This is an informal (and simplified) description of a formalized, logic-based framework that was presented in Żurek and Araszkiewicz (2013)<sup>9</sup>:

**Normative Premise** Statutory expression E should be interpreted in such a way that is satisfies the rule's goal to at least a minimally acceptable extent.

**Factual Premise** According to the objective of the satisfaction of the rule's goal, a statutory expression E should be interpreted in accordance with [an interpretive statement].

**Conclusion** A statutory expression E should be interpreted in accordance with [an interpretive statement].

According to the argument scheme presented above, accepted Interpretive Statements should satisfy the goal of a rule at least to some minimally acceptable extent (threshold). As Żurek and Araszkiewicz (2013, 164) argued, this type of threshold formation is actually used in the teleological interpretation of the Polish courts.

Consequently, the second layer of the model of legal interpretation involves reasons that support or demote the acceptance of certain Interpretive Statements. These reasons are included in arguments, or in instantiations of argumentation schemes.

As a result, the present model provides precise answers to the questions formulated in the preceding section in which the process of legal interpretation was discussed from the perspective of a general theory of multi-criteria decision-making. The set of decisions (alternatives) is given by competing Interpretive Statements; their structure is well-defined in the present model, and it does not seriously alter the syntactic and semantic structure of the actual interpretive statements as expressed in legal decisions. The set of criteria of assessment is formed by arguments that are instantiations of argumentation schemes built on the canons of legal interpretation. The third layer of the model, which concerns the optimization function (if any) used in legal interpretation needs further development. Because the model should perform mainly descriptive functions, a preliminary version of an account of legal balancing will be extracted from the actual legal cases discussed in the next section.

<sup>&</sup>lt;sup>9</sup>In Zurek and Araszkiewicz (2013), the goals of the conditions of rules and of the rules themselves were discussed separately. Here, we only focus on the goals of rules for simplicity.

# 9.5 Case Study

The purpose of the case study presented is to show the usefulness of the model of interpretation discussed in the preceding section and to develop its third layer concerning the comparison and balancing of interpretive arguments.

The illustrative material is provided by a series of cases decided by Polish administrative courts (with particular emphasis on the case law of the Polish Supreme Administrative Court, hereafter referred to as the PSAC) concerning the application of a rule extracted from the Inheritance and Donation Tax Act of July 28, 1983, as amended<sup>10</sup> (hereafter referred to as the Act). Generally, according to the Act, the acquisition of material goods and monetary rights by means of inter alia, inheritance, or donation<sup>11</sup> is subject to taxation. As in most tax statutes, there are many exceptions to this general rule as well as tax reliefs and exemptions. One of these exemptions is the housing exemption. For the sake of simplicity and because it is sufficient for the purposes of this paper, let us state that the acquisition of a property (a flat or a residential building) is generally exempted from inheritance tax provided that the exempted taxpayer fulfils a set of conditions. It is not necessary to present an exhaustive set of these conditions, but an important condition is that the (exempted) taxpayer does not dispose of (sell or donate, etc.) the inherited property for a prescribed amount of time. The time period relevant to this study is 5 years from the date of acquisition of the property.

The rationale behind the "housing exemption" is quite obvious: the legislator is aware that property is often included in an inheritance to provide younger generations with housing. The acquired property must actually be used as a residence for at least 5 years. This period is prescribed to ensure that the acquired property is not sold or donated to third parties in a short time following the date of acquisition. As a result, if the acquired real property is transferred in a shorter period of time, the exemption is no longer valid, and the taxpayer is obligated to pay the tax.

The Act also provides certain exceptions to the conditions that are generally necessary to obtain the exemption. One of the exceptions to this condition that was enforced from the 22nd of June in 2004 to the 31st of December in 2006 caused a series of complicated cases and diverging opinions. This exception may be explained as follows:

[Exception] The disposal of acquired property does not lead to the termination of the exemption if it is justified by the necessity of a change in living conditions and if the acquisition of another building, the acquisition of permission for building, or the acquisition of a premises takes place no later than 6 months from the date of disposal.

The [Exception] rule obviously contains the implication the two conditions of which must be satisfied in conjunction. Following the simple formalism defined in the preceding section, this rule should be represented in the following way:

<sup>&</sup>lt;sup>10</sup> Journal of Laws of 1983 no. 45, position 207 with amendments.

<sup>&</sup>lt;sup>11</sup>For the sake of readability, only inheritance will be mentioned in further parts of the paper.

[Exception-formalized] IF [justified by the necessity of a change in living conditions] [disposal] AND [no later than 6 months after the date of disposal] [acquisition of new property] THEN [not terminated] [exemption].

Although one might have supposed that the first vague condition (necessity) caused more interpretive problems, it was in fact the second one that led to serious disagreement. More precisely, the expression "no later than" was assessed as ambiguous, which led to the formulation of two incompatible Interpretive Statements:

- IS 1. [acquisition of new property no later than 6 months after the date of disposal]=[acquisition 6 months after the date of disposal] BUT NOT [earlier acquisition].
- IS 2. [acquisition of new property no later than 6 months after the date of disposal]=[acquisition 6 months after the date of disposal] OR [earlier acquisition].

These two Interpretive Statements are contradictory regarding the acquisition of new property before the inherited property is transferred, which also includes the time before the inherited property is acquired. It is obvious that the (exempted) tax-payer is entitled to dispose of the inherited property and to acquire new property without losing his or her tax exemption in a period of 6 months. The interpretive question was whether he or she is entitled to acquire new property earlier and then to transfer the inherited property without causing the termination of the exemption.

As is common in such cases, the courts adopted different interpretive views. Some courts argued that "no later than x months from the point in time y" means "x months from the point in time y, but not earlier" (as in IS 1), and some courts argued that "x months from the point in time y or earlier" (as in IS 2) is the right interpretation. Even the different panels of the PSAC took opposing sides. Below, we reconstruct arguments favouring IS 1 and IS 2, respectively, on the basis of real cases decided by the PSAC. $^{12}$ 

We begin with the reconstruction of the argument supporting IS 1 as it was argued in the judgment of the PSAC o13th of October in 2006, II FSK 1311/05 (hereafter: Judgment 1). The PSAC formulated only one argument in support of its thesis, which, in fact, had the form of argument from wrong consequences of adoption of IS 2. Because IS 1 and IS 2 are contradictory regarding the possibility of retaining the tax exemption in the case of the acquisition of new property before the inherited property is transferred, the rejection of IS 2 requires the acceptance of IS 1.

# **Argument 1 (Negative Consequences)**

Premise 1 (normative). Statutory expressions should be interpreted in a way that avoids negative consequences.

Premise 2 (factual). Adoption of IS 2 leads to negative consequences.

<sup>&</sup>lt;sup>12</sup> It is worth noting that the PSAC acts as the highest court in the hierarchy of administrative courts in Poland, although its judgments do not have formal precedential force in general.

Subpremise 2.1. The adoption of IS 2 ([earlier acquisition]) leads to the result that the acquisition of new property any time earlier than the transfer of inherited property does not terminate tax exemption concerning the acquisition of the latter.

Subpremise 2.1.1. The adoption of IS 2 leads to the result that the acquisition of new property even before the testator is deceased does not terminate the tax exemption concerning the acquisition of inherited property.

Subpremise 2.1.1.1. The acquisition of new property even before the testator is deceased should not have a legal effect on tax exemption concerning the acquisition of property by inheritance.<sup>13</sup>

Conclusion. IS 2 should be rejected.

Due to the fact that IS 1 and IS 2 are contradictory, the rejection of IS 2 leads to the immediate acceptance of IS 1.

As illustrated above, Argument 1 certainly has persuasive power, and the obvious intention of the legislator was to introduce the [Exception] rule to allow taxpayers to sell an inherited property in the event that the property would not provide a suitable living arrangement. In actual situations, due to many economic circumstances, the taxpayers acquired new property slightly before they eventually acquired the inherited one; however, according to IS 2, the purchase of new property before the inheritance takes place can also lead to tax exemption as regards acquisition of property by means of general succession. The PSAC ruled that this consequence is undesirable because these two legal events could be unrelated; it is natural to assume that a later disposal of inherited property has no economic connection with a (much) earlier acquisition of new property.

Let us note that the structure of the argument presented by the PSAC is enthymematic. The legislative goal of the regulation in question is not mentioned at all. Also, the possible reasons supporting the possible contrary decision are not discussed. The PSAC only claims that its argument against IS 2 is based on its alleged negative consequences and pleads for acceptance of IS 1.

The majority of the panels of the PSAC (and also lower administrative courts) adopted an opposing view and argued for IS 2. Let us reconstruct their argumentation on the basis of the judgment of the PSAC on the 7th of January in 2010, II FSK 1159/08 (hereafter: Judgment 2).

The PSAC initiated its argumentative process for favouring IS 2 on the basis of the canon of linguistic interpretation, which was ignored by the panel of PSAC in Judgment 1.

#### **Argument 2 (Linguistic Interpretation)**

Premise 1 (normative). Statutory expressions ought to be interpreted in accordance with the rules of (ordinary) language.

<sup>&</sup>lt;sup>13</sup> The adding of subpremises to arguments based on argumentation schemes provide for justification of the premises.

Premise 2 (factual). The statutory expression "no later than x months from the time y" does not entail "no earlier than y" according to the rules of (ordinary) language.

Subpremise 2.1. IS 2 is in accordance with rules of (ordinary) language.

Conclusion. IS 2 should be adopted.

The conclusion stemming from argument 2 is strengthened by an additional argument based on the concept of legislative intent.

#### **Argument 3 (Legislative Intent)**

Premise 1 (normative). Statutory expressions ought to be interpreted in accordance with the legislative intent.

Premise 2 (factual). If the legislator intended to mean that the acquisition of new property should take place no earlier than the acquisition of inherited property, he would have omitted the expression "no later than."

Subpremise 2.1. The legislator used the expression "no later than," so he did not intend to mean "no earlier."

Conclusion. IS 2 should be adopted.

So far, three arguments were reconstructed. One argument pleads for IS 1, and the other arguments support IS 2. The question of how the relative strength of arguments should be compared is now raised. Fortunately, the PSAC made reference to Judgment 1 and criticized it in Judgment 2. Most of the criticism pointed out that in Judgment 1, the PSAC did not used the linguistic interpretation argument that should have been used by default and that conditions for acceptance of the results stemmed from other types of interpretive arguments, including the argument that negative consequences adopted in Judgment 1 were not fulfilled. A list of the conditions for disregarding the results of the linguistic interpretation in Judgment 2 is as follows:

- Contradiction with fundamental constitutional values,
- Flagrant injustice,
- Absurdity,
- Necessity to remedy a legislative error.

By providing this list of conditions, the PSAC attacked Premise 2 of Argument 1 by implying that the situation in question could not be classified as any of the conditions for the adoption of extra-linguistic types of interpretive arguments. Let us note that the use of this relatively simple argumentative move enabled the PSAC to not engage explicitly in the process of the balancing of values. Although a certain type of balancing has been performed by the court, it was presented in a form of rule-based reasoning and did not involve the application of any measurement scale or even a comparison between competing conclusions.

The competing arguments extracted from the cases discussed above are depicted in the following figure. Solid lines represent the informal relation of compatibility,

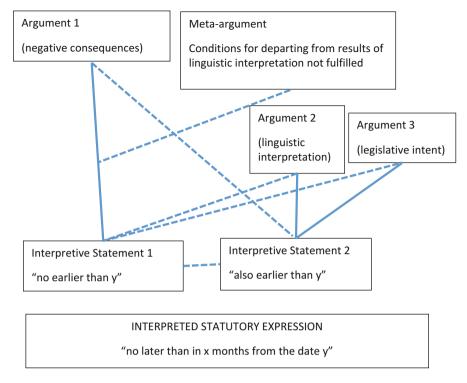


Fig. 9.1 Comparison of arguments in polish tax exemption cases

and dotted lines signify relations of incompatibility. Please note the relation of attack between the meta-argument employed in Judgment 2 and the applicability of the argument regarding negative consequences (Fig. 9.1).

# 9.6 Discussion

The case study discussed in the preceding section reveals the usefulness of the model outlined in Sect. 9.4 for the representation of the structure of interpretive arguments in the context of statutory law. The two layers of the model are the layer of Interpretive Statements and the layer of arguments based on argumentation schemes. The concept of Interpretive Statements as propositional representations of extensions of statutory expressions enables us to identify very clearly what legal issue is at stake in a given legal case. The layer of argumentation schemes illustrates that Interpretive Statements are supported by certain sets of premises.

As discussed previously, the third layer of the model, which concerns the comparison and balance between different arguments and is based on argument schemes, is yet to be developed. Because the model has a descriptive purpose, it should be designed using a bottom-up method with the use of legal cases as illustrative

material. The case study presented in the preceding section provides useful information regarding the representation of the process of comparing competing arguments and assigning priorities to competing interpretive statements. The concepts of threshold and default priorities play central roles in this context. In the case analysed in this paper, a default priority has been assigned to the interpretive statement supported by linguistic interpretation. Moreover, certain threshold conditions were formulated for the assignment of priority to results generated by other types of elements. Because neither of these thresholds were met in Judgment 2, this case has been determined to favour the interpretive statement supported by linguistic interpretation.

The application of thresholds "activating" certain types of interpretation and the default priority assignment to the linguistic interpretation are arguably the result of balancing certain values; however, these considerations remain implicit. The PSAC stated instead in Judgment 2 that the argument based on negative consequences could not be applied because threshold conditions for its application have not been met. This technique enabled the court to not use any type of scales for the comparison of the strength and justification of competing arguments; even a simple ordinal scale was not applied (the PSAC in Judgment 2 implied that Argument 1 had in fact no foundation because threshold conditions have not been met). Notably, the avoidance to discuss any scale of comparison of the strength of the arguments was made possible due to the strict contradiction between the relevant parts of the competing interpretive statements. This reinforced the binary type of reasoning of the court: if one of the competing interpretive statements is to be accepted, the second one should be rejected, tertium non datur.

As a result, the present case study demonstrates that the balancing of values (which does not occur explicitly in the cases) has been represented by a rule-based argumentation framework encompassing default rules. The use of this framework enabled the PSAC to choose a justified interpretation of a statutory expression without addressing the complicated theoretical problems concerning the presence of values behind the statutory expression being analysed.

Żurek and Araszkiewicz (2013) argued that teleological arguments that are used in the statutory interpretation in *jus civile* legal systems often have threshold character: non-satisfaction of certain threshold of realization of a given value enables the reasoned to perform restrictive or extensive interpretation. The case analysed in the preceding section enables us to generalize this statement: the use of thresholds is also used on the meta-level and governs the choice between alternative interpretive statements generated by different types of arguments. Although the balancing of values is obviously present in the background of using thresholds, this does not have to be the case with maximization. The use of the threshold technique shifts the focus to *sufficient* conditions for adoption of a certain argumentative structure but not on maximization. It is contingent whether in certain jurisdiction or line of cases thresholds will be set in such way that they will actually lead to maximization of certain values. On the contrary, they (arguably) create a sufficient, reasonable level of realization of these values. Furthermore, the concept of proportionality is only

implied here and reconstructed from the default preference orderings and the formulation of thresholds that "activate" certain types of arguments.

Interestingly enough, the argument schemes discussed above, and the metaargument in particular, have the degree of justificatory force on their own. In this respect, they are to large extent detached from potentially explicable value-based framework that may be claimed to back them. Let us also note that it is possible to reconstruct different competitive sets of values that could justify the judicial decisions presented in this paper. The threshold-based descriptive model of decision on rival interpretation enables us to avoid overly complicated and potentially inconclusive investigations concerning those reconstructed sets of values and arguments based on them. At the same time it is worth noting that the use of threshold technique is not arbitrary. Let us recall that in Judgment 2 the PSAC disregarded the argumentation presented in Judgment 1 and justified its conclusions.

Regarding inaccuracies of the account presented above, it must be noted that a bias resulting from limited illustrative material may be present here. Another possibly problematic factor is that the transformation of argument schemes into argument tokens are very domain-dependent (see subpremises of Argument 1 and 2 above), so the model presented here should be seen as a tool for the description and reconstruction of actual judicial argumentation and not as a tool for a development of new legal argumentation. The completion of the latter purpose would involve gathering a huge database of common-sense reasoning patterns and combining them with complicated ontologies<sup>14</sup> designed for certain legal subdomains.

# 9.7 Conclusions and Further Research

In this paper, the topic of balancing in the context of statutory interpretation was discussed. Although the topics of balancing and proportionality have a vast amount of literature resources, especially in the context of constitutional review, it has not been discussed systematically in the context of comparing the strength of different types of interpretive arguments. The paper partially contributes to the topic and leads to the following conclusions.

First, the problem of legal interpretation may be generally described by the theory of multi-criteria decision-making. The general framework provided by this theory enables us to identify crucial features of any developed model of legal interpretation without commitments related to more concrete, or domain-dependent, models of legal balancing.

Second, the descriptive model of legal interpretation encompasses three layers: the formulation of Interpretive Statements, the use of argumentation schemes for the production of arguments and the resolution of conflicts between arguments.

Third, the analysis of the case study discussed in this paper using the threelayered model enabled us to present the structure of legal balancing in the context

<sup>&</sup>lt;sup>14</sup>For the topic of legal ontologies in AI and Law, cf. Sartor et al. (eds.) (2011).

of statutory interpretation. Instead of an explicit balancing of legally relevant values and goals, the court used a technique of thresholds that should be met in order to use certain types of arguments (an argument regarding negative consequences in this context). If any of these thresholds are not met, interpretive decisions are resolved by using a default assignment of preference. It is plausible to claim that both argument schemes used in statutory interpretation (which form the second layer of the model) and the rules used for the resolution of conflicts between competing arguments (the third layer of the model developed in this paper) may be viewed as general and defeasible abstractions from the results of balancing background values. As such, they contribute to the economy of judicial reasoning and simplify the structures of knowledge representation used by courts. The use of such approximations is also present in common law judicial reasoning when the direct balancing of values is often substituted in actual judicial wording by collecting factors, or stereotypical fact patterns that tend to strengthen the position of the parties in the dispute.<sup>15</sup> On the other hand, the argument schemes and the threshold meta-arguments discussed are rather abstract rule constructs that tend not to focus on the circumstances of particular cases but on the determination of the meaning of general rules of law. Let us note in this connection that rules as generalizations may be over- or underinclusive with respect to their underlying justification (Schauer 1991, 31 ff.). We would like to point out that this feature applies not only to the rules of law and legal interpretation but also to threshold meta-arguments similar to the one discussed in this paper. Consequently, sometimes the result of the application of thresholds may be assessed as suboptimal from the point of view of the (underlying) balance of values. As a result, certain judicial decisions cannot be explained in terms of the balancing of values because the use of threshold arguments may lead to deviation from the result that would have been obtained were the court engaged in the explicit balancing of values. We contend that there is a huge gap between the application of rules by means of subsumption and the weighing of values that may contribute to the interpretation of rules and that there are layers of the application of arguments based on argument schemes and the application of thresholds, which are not reducible to the weighing of values.<sup>16</sup>

We argue that the model used in this paper may serve as a useful tool for further clarification and descriptive representation of the process of legal interpretation. The model should be tested on a larger corpus of legal cases in order to test the assertions of this paper. A different and potentially fruitful perspective for research is the comparison of the results obtained by the present model and other formalisms, such as the Carneades system developed by Gordon and Walton (2006).

<sup>&</sup>lt;sup>15</sup>The topic of factors has ample literature resources in AI and Law research, cf. Ashley (1990) and Aleven (1997) for important expositions. The topic of substituting value-based arguments by factor-based arguments in Case-Based reasoning was discussed in Araszkiewicz (2011).

<sup>&</sup>lt;sup>16</sup>Another important issue is the possible disagreement concerning the identification of values and the assignment of their relative weight that may accompany agreement concerning the application of certain argument schemes and threshold meta-arguments. This possible disagreement may explain the eagerness of the courts to refrain from the explicit balancing of values.

As for theoretical issues that are connected with the problems mentioned in this contribution, the concept of the burden of argumentation (Gizbert-Studnicki 1990) should be discussed in the context of analysing the threshold conditions for the application of different types of arguments. As noted in the case study, the fact that the threshold conditions were not satisfied was simply asserted and not justified. The concept of the burden of argumentation is useful in classifying statements in the process of legal interpretation into statements that may be simply asserted and statements that (according to the views accepted in judiciary practice) should be supported by argumentation.

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