



The Structure of Arguments from Deontic Authority and How to Successfully Attack Them

Michał Araszkievicz¹  · Marcin Koszowy²

Accepted: 26 October 2023
© The Author(s) 2024

Abstract

Despite increasing interest in studying arguments from deontic authority of the general form “(1) δ is a deontic authority in institution Ω ; (2) according to δ , I should do α , C : therefore, (3) I should do α ”, the state of the art models are not capable of grasping their complexity. The existing sets of critical questions assigned to this argumentation scheme seem to conflate two problems: whether a person is subject to an authority of an institution in the first place and whether the command issued within the context of a particular institution is eventually binding. For this reason, we introduce (1) a set of Basic Critical Questions to scrutinize the former issue, and (2) a set of more detailed questions related to specific features, also referred to as “parameters”, of institutional environments (Intra-Institutional Critical Questions). We identify major elements of institutional environments in which authoritative utterances are made and the crucial parameters of arguments from deontic authority. The selected evidence from the decisions of the Polish Supreme Administrative Court helps us show how these parameters may be used to reconstruct subtypes of this argument scheme, with their associated sets of critical questions. In specific institutional contexts, such detailed schemes are capable of grasping the complexity of appeals to deontic authority and thus should be used rather than general schemes. The reconstruction of argumentation schemes with critical questions shows how particular arguments may successfully be attacked.

Keywords Deontic authority · Argumentation schemes · Critical questions · Institutional environment · Rationales of judicial decisions

✉ Michał Araszkievicz
michal.araszkievicz@uj.edu.pl

¹ Department of Legal Theory, Jagiellonian University, Kraków, Poland

² Laboratory of The New Ethos, Warsaw University of Technology, Warsaw, Poland

1 Introduction

In many social contexts, some (groups of) individuals may be bound by utterances issued by other individuals. Prototypical examples are as follows: an order issued by an officer to soldiers, a command given by the CEO to employees of a corporation, or a judicial decision issued in the course of proceedings. The relation of authority is often perceived as a sole reason to act in accordance with the utterance. However, in some contexts it is worthwhile to subject this relation to critical scrutiny. The point of departure for such investigation is the theory of argumentation schemes, which discusses, *inter alia*, arguments from deontic authority (Walton 1997, pp. 76–78) based on the “power-to-command” (Zenker and Yu 2020, p. 7) or on the “right to execute command” (Wagemans 2011, p. 332). Such arguments are ubiquitous in areas such as administration, governance and, not least, the law. Consider their general form (Koszowy and Walton 2019, p. 303):

Argumentation Scheme for Arguments from Deontic Authority

Premise 1 δ is an administrative authority in institution Ω .

Premise 2 According to δ , I should (or I should not) do α .

Conclusion Therefore, I should (or I should not) do α .

Such reasoning structures differ significantly from argumentation schemes based on epistemic notions, such as “assertion” and “truth”. A typical example is a schematic representation of argument from expert opinion that is about inferring a conclusion of the type “ A may (plausibly) be taken to be true” from premises “ E is an expert in domain D ”; “ E asserts that A is known to be true”; and “ A is within D ” (Walton 1997, p. 210). The assessment procedure for such arguments should consist of asking critical questions about, for example, “whether the judgment put forward by the authority actually falls within the field of competence in which that individual is an expert” (Walton 1997, p. 211), where the epistemic categories are “judgment” and “field of competence”. The case is quite different for arguments from deontic authority. Even if the conclusion of an argument from deontic authority is unreasonable, unsupported by sources, etc., it will be, by default, binding for the addressee anyway, as long as it is based on the utterance made by the authority bearer. Thus, critical questions for testing arguments from deontic authority emphasise different features (Koszowy and Walton 2019, pp. 305–308):

CQ_1 Do I come under the authority of institution Ω ?

CQ_2 Does what δ says apply to my present circumstances C ?

CQ_3 Has what δ says been interpreted correctly?

CQ_4 Is δ genuinely in a position of authority?

CQ_5 Is δ a deontic rather than an epistemic authority?

CQ_6 Does someone claimed to be an authority utter assertives or directives?

CQ_7 Is a given deontic authority in conflict with some other deontic authority?

CQ_8 Are there—in particular circumstances in which the conflict between two or more deontic authorities occurs—any criteria, rules, norms or procedures which would allow us to accept the opinion of one authority and disregard the opinion of another?

These questions can guide a critical questioner towards the main areas in which possible weaknesses of an argument can be found. However, the above list seems not to distinguish adequately between the problem of the very existence of deontic authority relation and the problems that may arise within such a relation. The point of departure for studying arguments from deontic authority is the relation of authority itself. The structure of this relation is as follows: authority is a triadic relation composed of two agents: the “bearer”, and the “subject” of authority (Bocheński 1974) which holds in a “domain” which is understood as a specific set of utterances which constitute one’s area of authority. In the case of epistemic authority, this domain is constituted by a set of assertives, whereas the domain of deontic authority covers a set of directives about what should be done (Koszowy and Walton 2019, pp. 295–296). Here, we stipulate that the deontic authority relation always takes place in a certain institutional environment.¹ For each institutional environment there exist some norms that determine (at least to a degree) who may issue binding utterances, towards whom and in what scope. For instance, consider a situation where the addressee generally comes under the authority of Ω but the type or scope of utterance issued by δ cannot bind the recipient. Let us consider a situation when a police officer in Poland stops a car and, apart from giving a driver a fast driving ticket, also instructs to wear a reflective waistcoat. Although the driver comes generally under the authority of the police, this particular instruction goes beyond the scope of the driving regulations, as in Poland it is not mandatory to be equipped with a reflective waistcoat while driving. We may refer to such contexts as *intra-institutional* ones, as opposed to the *extra-institutional* contexts where it is subject to dispute whether a person generally comes under the authority of an institution or not.

The above distinction between the contexts enables us to consider the following improvements to the list of critical questions proposed in (Koszowy and Walton 2019). First, it is advisable to clarify the structure of the institutional context of utterance at the outset of the analysis. This enables to focus the investigations on the issues of deontic authority only. Second, it is advisable to investigate the preliminary issues, characteristic for extra-institutional contexts in separation from the more detailed problems that arise in intra-institutional ones. These two groups of problems should be matched by two dedicated sets of critical questions. Third, it is worthwhile to make the critical questions, especially involving such general concepts as ‘application of an utterance’ more specific, with regard to the details of a given intra-institutional context. In argumentative practice, in particular institutional contexts the arguments from deontic authority may be successfully attacked on specific grounds, characteristic to a particular institution. In this paper, we propose to address these problems by first, introducing the notion of institutional environment

¹ We will elaborate on the notion of institutional environment in Sect. 2.1

and discussing its main components. Second, we distinguish between the Basic Critical Questions, used to verify whether a given utterance was made within a given institutional environment in the first place, and the Intra-Institutional Critical Questions, applicable only in the scope of a particular institution. Specifically, we introduce five features of institutions, utterances, and arguments appealing to deontic authority: (1) a role assumed by an authority bearer, (2) a role assumed by an authority addressee, (3) the category of binding information, (4) the limits of binding force of an utterance, and (5) the existence of potentially competing authorities within the same institution. These parameters are further employed to design critical questions to assess the key, yet understudied components of arguments from deontic authority. Third, we show how this abstract framework may be used to formulate domain-specific argumentation schemes and critical questions that point to the components of an institutional environment in which arguments from deontic authority are made. Our approach adds procedural aspects to the modeling of argument from deontic authority, because it implies an order of critical questions and shows how these questions may be made concrete in a particular context, reflected in domain-specific argument schemes and their instances.

To demonstrate the applicability of our model, we have chosen examples of publicly available decisions of Polish administrative courts. This illustrative material contains a wide range of subtle examples of deontic authorities engaging in an argumentative discourse. Arguments from deontic authority play a pivotal role in legal discourse, where often a good answer to the question “why should one behave in the manner α ” is simply “because the law requires α ”. This natural association with the legal domain is also evident in associating deontic authority with *de iure* authority (Bocheński 1974; Walton 1997; Wagemans 2011). Reasons based on law are often deemed to have an exclusionary character in the sense that they make other reasons less relevant (Raz 1979). Moreover, law, as a paradigmatic domain for obligations and duties, contains the most sophisticated theories regarding deontic concepts (Hage 2018). Arguably, the very concept of law presupposes deontic authority. The law serves as a convenient illustrative material because the norms determining this institutional environment are typically relatively well-defined and relatively detailed. However, it should be stressed that our theoretical contribution may in principle be applied to analyse any domain where deontic authority is present: companies, military units, religious associations etc.

In some institutional contexts, there is no doubt that the command binds the addressee, and thus no argumentation process is initiated. However, in some other, more complex contexts, it is debatable whether a command is issued properly, even if *prima facie* it appears to be the case. The detailed set of critical questions we propose may be treated as a toolkit for assessing arguments from deontic authority that are typically employed in such contexts. The contribution of this paper—the detailed construction of arguments based on deontic authority and the critical questions attached thereto—should serve as a basis for critical investigation whether or not, in a particular context, an addressee is ultimately bound by an utterance. Given the outlined area of our interest, the following topics, though potentially promising, go beyond the scope of our investigations. First, we do not discuss any aspects of the actual effectiveness of arguments based on deontic authority—the questions

that might reasonably be posed by the psychology of argumentation or sociology of institutions. Second, we acknowledge the fact that an addressee of a binding command may have good (e.g. moral) reasons to disobey it—but these considerations also go beyond the scope of this paper. Third, the potential consequences of disobeying an order are excluded from the scope of investigations, as they are a separate issue. In our paper, we focus specifically on the issue of whether an addressee has been actually bound by an utterance in a given institutional context. Fourth, we do not discuss the ontological underpinnings of the relation of “being bound” or of the nature of norms themselves (Hage 2018).

Our contribution is organised as follows. In Sect. 2, we introduce the notion of institutional environment and its main features, the Basic Argumentation Scheme for Appeals to Deontic Authority and the associated sets of critical questions: the Basic Critical Questions and the Intra-Institutional Critical Questions. These conceptual considerations allow us, in Sect. 3, to show how the major components of arguments based on deontic authority can be identified and specified in the field of judicial reasoning concerning statutory interpretation. Once we have obtained a set of applicable tools, in Sect. 4 we show how our conceptualisation is evidenced in the rationales of judicial opinions. In Sect. 5, we compare our model with representative studies of deontic components of argumentation. Next, in Sect. 6, we outline possible future research directions, including (1) application of the paper’s contribution in the area of annotation schemes development, (2) optimising dialogue protocols, (3) extending the scope of research to ill-defined institutions and to broader contexts and (4) extending the model to capture the problems of interpretation. Finally, in the last section we provide the conclusions.

2 Institutional Environments and Parameters of Arguments from Deontic Authority

2.1 Institution as an Environment for Arguments from Deontic Authority

The aim of this section is to extend and refine the basic conceptual framework for capturing the context of uttering arguments from deontic authority. By “institution” (used interchangeably with “institutional environment”), we refer to (1) categories of agents’ roles that may be in the position of deontic authority or of an addressee of such authority and (2) the relevant domain of the communications made by the agents, where both these components are determined by a set of applicable norms.²

Let us consider the situation of a passenger during a flight. The institutional environment for that context may be defined as follows: (1) the categories of relevant agents’ roles are the flight crew and the passengers and (2) the domain encompasses

² The word “determined” used here should not imply that the set of norms under consideration is complete, coherent, unambiguous, free from vague expressions etc. Consequently, in many real-life institutions it may be at least doubtful who may make a binding utterance towards whom and in what circumstances. By “determination” we mean only that the norms are the source of elements of an institution.

the behaviour of all agents on board, with regard to flight safety. The applicable norms, determining (1) and (2), follow from the relevant sources of law as well as from the regulations of the airline. In order to determine whether a given person might be subject to the deontic authority of another person during the flight, we must first determine whether these persons assume roles recognised in the institution. The same holds for the content of the communication between the agents: it is crucial that their utterances are included in the domain recognised in the institution. Let us now illustrate each of the two components of an exemplary institution.

- (1) *The categories of relevant agents' roles* Let us consider a circumstance where a Supreme Court judge is on a plane in the role of a passenger. Even though this person is vested with a certain scope of deontic authority by legal rules, it is not relevant to the institution of an aircraft flight. Naturally, judges are under an obligation to follow the commands of the flight crew even though these commands might appear doubtful to them in light of their legal expertise. Similarly, a judge is not authorised to give any commands to any other passenger because during the flight he or she does not act in the role of the judge. The judge has the status of a regular passenger like anyone on board, except from the flight crew. All passengers are bound by the rule: "instructions from a crew member are deemed to be given on behalf of the aircraft commander". To sum up, if an agent is not recognised in a given institution as a source of deontic authority or an addressee thereof, they cannot bind any other agent effectively or, conversely, be effectively bound by someone else's utterance.
- (2) *The domain* In the case of rules that passengers must follow on an aircraft, the relevant domain concerns the communication about on-board behaviour that is relevant to security and safety. For instance, the flight crew may demand that passengers put their mobile devices into airplane mode, fasten their seatbelts, remain seated, refrain from bothering other passengers etc. However, the flight crew may not require passengers to stop reading a particular book or to read another one, unless the issue is somehow relevant to the safety of the flight.

The set of norms valid in the institution of an aircraft flight, determining (1) and (2) above, is complex, encompassing the norms of international law, domestic law and the regulations used by particular airlines, or other documents. The applicable rules are specified, for example, by the "Manual on the Legal Aspects of Unruly and Disruptive Passengers" of the International Civil Aviation Organisation (ICAO) (Doc 10117, First Edition, 2019, <https://www.icao.int/MID/Documents> (see example (1) below), which directly refers to areas such as aviation security, facilitation and cabin safety.

Let us now apply the identified institutional elements of the authority relation to the example of (1), which mentions a speech act that obliges air passengers to comply with a certain rule during the flight. The example is taken from ICAO (par. 2.3.1.4):

- (1) ICAO: (...) [*I*]t should be understood that the authority to give instructions ultimately rests with the aircraft commander. However, unless there is contrary evidence, instructions from a crew member are deemed to be given on behalf of the aircraft commander. Instructions are not limited to verbal instructions but may also include those given in writing or through illuminated signs on the aircraft, such as seat belt and non-smoking signs, when they are activated.

The quoted passage indicates the role of agent ultimately vested with deontic authority during the flight, that is, the aircraft commander. It also concerns the role of crew members whose instructions are by default considered to be given on behalf of the commander. The domain of communication, delimiting the scope of the instructions given by the aircraft commander or the crew, concerns “the purpose of protecting the safety of the aircraft or of persons or property therein” (par. 2.3.1.2).

We may also consider an example of an institution where the applicable norms—the sources of deontic authority—are not rooted in the norms of applicable law. Let us assume that a group of teenagers establishes a role-playing games club. The leader of the club is assigned the title of the Prime Game Master (PGM henceforth) and vested with the broadest scope of deontic authority; for instance, the PGM may bindingly decide which game should be played on a given day (*Warhammer, Dungeons & Dragons* or *Middle Earth*). Lower in the hierarchy are Advanced Game Masters and Game Masters. The hierarchy is closed by the group of Players, who participate in the games but do not have influence on the decisions made in the club.

In sum, in order to investigate the binding effect of utterances based on deontic authority, we first need to determine whether these utterances were issued by authority bearers and that their content is included in the relevant domain. However, even if these conditions are satisfied, the conclusion that a given addressee is bound by an utterance, is not guaranteed. The discussed elements of the institution create a set of necessary but not necessarily sufficient conditions for the relation of deontic authority to occur. In the relatively simple aircraft flight example, the question of whether a crew member is vested with deontic authority is typically not subject to debate. However, in more complex institutional settings, similar issues may arise. In order to determine whether an utterance is binding on an agent in a given institution, we need to investigate the elements of the specific situation in a more detailed manner and be prepared to subject the claim concerning the binding character of an utterance to critical scrutiny.

2.2 Parameters of Arguments from Deontic Authority

The notion of institution introduced above refers to the main elements that should be determined in order to consider the bindingness of an utterance made by one agent towards another. As shown in Sect. 2.1, these agents need to assume the roles that are indicated by the norms in a given institution and the utterance must

be within the recognised domain. These issues have preliminary character with respect to any context in which a potentially binding utterance is to be made. In other words, there exist necessary conditions for the relation of deontic authority to occur. If any of the agents do not assume a recognised role or if the content of the utterance does not belong to the recognised domain, the utterance in question cannot have binding character. An utterance may only be binding within a specific institution. If it becomes disputable whether the utterance in question was made within a given institution, an argument may be formulated and subjected to critical evaluation procedure.

These findings lead us to the reconstruction of a basic version of an argumentation scheme for arguments based on deontic authority. Let I be the institution in question. Let us further assume that γ and δ denote the potential authority bearer and the potential authority addressee, respectively. Furthermore, let α denote the utterance made by γ .

Basic Argumentation Scheme for Appeals to Deontic Authority.

Premise 1: An agent γ (an utterer of a directive α) in the role A is vested with deontic authority in institution I .

Premise 2: An agent δ (an addressee of α) in the role B is the addressee of deontic authority in institution I .

Premise 3: γ 's utterance α is included in the domain of discourse D recognised in I .

Conclusion: Therefore, δ should act in accordance with α .

Let us note that our account of the notion of institution enables us to reconstruct the three general critical questions that aim to verify whether the argument was posed in accordance with the information recognised in a given institution. These three questions may be formulated as follows.

Basic Critical Questions for Appeals to Deontic Authority.

CQI Is A assumed by γ actually a role recognised in the institution I ?

CQII Is B assumed by δ actually a role recognised in the institution I ?

CQIII Is the utterance α included in the domain of discourse D recognised in the institution I ?

As can easily be ascertained, a negative answer to any of the critical questions *CQI–CQIII* makes the conclusion of an argument unacceptable. Any such negative answer leads to the conclusion that a given situation is extra-institutional in the sense that at least one of its crucial elements is not recognised in the context of a given institution.

If these basic conditions characteristic of a given institution are fulfilled, the context of a (potentially binding) utterance may be referred to as *intra-institutional* context. However, it is still possible that an authority addressee will eventually not be bound by an utterance made by the authority bearer. In a given

Table 1 Intra-institutional context for performing utterances related to deontic authority

Features	Institution	Specific utterance characterisation
The role of agent vested with deontic authority	The set of roles to which deontic authority is assigned	Indication of the role of the specific subject who made the utterance
The role of an addressee of deontic authority	The set of roles that are the addressees of deontic authority	Indication of the role of the addressee of the utterance
The category of binding utterance	The set of categories of binding utterances	Indication of the category of the utterance
The limits of binding force	The set of any limits (temporal, territorial etc.) related to the binding force of utterances	Indication of any specific limits related to the binding force of the utterance
Potentially competing utterances	The set of roles to which deontic authority is assigned and categories of utterances made by them	Indication of any (other) authority bearer and their utterance

intra-institutional context, many reasons may provide grounds for questioning the binding force of a given utterance. That binding force is then subject to critical investigation in the process of argumentation.

Let us identify the set of these features in abstraction, on a conceptual level. As we have shown, an institutional environment consists of the set of roles characteristic for authority bearers, authority addressees and the domain. Inspired by the frame-based theory of knowledge representation introduced by Minsky (1974) we may look at the components of institutions as features (parameters) which may assume values selected from a predefined range. For instance, if a set of recognised roles for authority bearers in institution *I* encompasses roles *P*, *Q*, and *R*, then if an agent assumes the role *P* as an authority bearer, we may say that the feature “role authority bearer” obtains the value *P*. Similar considerations may be made with regard to the role assumed by the addressee of a (potentially) binding utterance. Note that on the basic level we have investigated what roles are recognised in the institutional environment as such; in the intra-institutional context it has to be verified whether some of the recognised roles have been actually assumed by the relevant actors. The utterance in question should not only belong to the domain recognised in the institutional environment, but in some contexts, to have a binding force, it also have to belong to a specific category. Moreover, even though the utterance in question belongs to a category which makes it binding, there may exist some boundaries to its binding force (for instance, temporal ones). Finally, it has to be verified whether the utterance made by an agent acting in a proper role may be countered by an utterance made by another authority bearer. Therefore, the set of components of a given institution (in abstraction) and the associated parameters of a specific utterance made in an intra-institutional context may be presented in Table 1.

Let us note that the introduced set of features enables us to characterize institutional environments, and utterances made therein, in abstraction. For instance, let us assume that in a given institution, each of the five features may assume one of two values. This immediately leads to 2^5 , that is, 32 possible types of utterances made in this institutional environment. In reality, for pragmatic reasons, perhaps only some of these configurations will occur. Similarly, the set of features may be used to construct hypothetical institutional environments, where, for instance, there exists a role A for authority bearer such that A may bind any addressee within the institution, with any utterance recognised in the domain, without limitations and where no competing authority exists for A . Furthermore, we may think about an absurd, defective institution where any agent may bind any other agent (including themselves) with any utterance they make. Such institution would certainly be dysfunctional. While such limit cases may be reconstructed in abstraction on a conceptual level, in our investigations we are interested in analysing real-life situations, where most often only some utterances made by an agent assuming a role A will be binding on only some addressees, within certain limitations, and some authority bearers will be empowered to counter utterances of another ones.

If an utterance is subject to critical scrutiny, these features characterize an argument based on deontic authority and are the topics of intra-institutional critical questions. Let I , again, denote the institution in question. Let us further assume that γ and δ denote the agents whose roles are recognised in I , where γ is in the role A , which is in principle vested with deontic authority, and δ is in the role B , which in principle is the addressee of deontic authority. Let α denote the utterance made by γ , the utterance belonging to the domain of discourse D recognised in I . Therefore, the list of intra-institutional critical questions may be formulated as follows.

Intra-Institutional Critical Questions for Appeals to Deontic Authority

CQ_1 . Does the agent γ act in the role A ?

CQ_2 . Does the agent δ act in the role B ?

CQ_3 . Does the utterance α made by γ belong to a category K included in the domain of discourse D such that utterances belonging to this category may be binding on agents in the institution I ?

CQ_4 . Are the limits of binding force of the utterance α recognised in the institution I not exceeded?

CQ_5 . Is the agent δ an addressee of any other utterance β made by any agent ψ assuming the role R that could have precedence over the utterance α ?

The five critical questions presented above enable us to identify what we refer to as parameters of argument from deontic authority. These parameters are defined in any institution under consideration, and, when particular arguments are posed, the parameters assume concrete values and thus are instantiated.

The first parameter concerns the roles of agents vested with deontic authority. For instance, let us consider the institution of aircraft flight discussed in Sect. 2.1. The primary role vested with deontic authority is that of an aircraft commander. However, the members of the crew are authorised to give commands to the passengers,

as it is presumed that they act based on the commander's authority. In the case of a role-playing games club, the ultimate deontic authority is vested in the PGM, but, as we have discussed, Advanced Game Masters also have a degree of deontic authority on their own. In more complex social contexts, such as the system of law, the catalogue of relevant roles vested with some degree of deontic authority is much more extensive, and their relations are complicated.

On an abstract level, we may state that the possible roles of deontic authority in a given institution *I* range from a hypothetical agent whose utterances are binding on all agents in this institution to an agent who cannot bind any other agent in the institution with its utterances, within a defined domain. An example of the former type of agent would be the aircraft commander regarding the subject matter of the security and safety of the flight. An example of the latter type of agent is a passenger during the flight: he or she, as such, is not authorized to utter anything that would be binding on any other agent in this institution. In complex social contexts, such as the legal system, it is common for agents assuming roles vested with deontic authority to only be authorised to bind specific types of agents with specific types of utterances.

The second parameter concerns the addressee of utterances of agents vested with deontic authority. Similarly, we may draw a continuum from a hypothetical agent who is bound by all relevant utterances of all other agents in the institution to a hypothetical agent who is not bound by any such utterances. Typically, the position of an addressee of deontic authority will not be characterised by extremes but rather by a middle point on this continuum. For instance, a passenger during the flight is bound by relevant utterances of the flight crew but not by any utterances of other passengers. In turn, a flight attendant is bound by utterances of the aircraft commander but not those of other flight attendants of the same status.

The third parameter concerns the categories of utterances that are recognised in a given domain of discourse. In complex social contexts, it is possible that only some utterances made by agents with deontic authority may bind addressees. We may assume, for instance, that the utterances of the PGM concerning the choice of the role-playing game played today (either *Warhammer* or *Dungeons & Dragons*) is binding on the members of the club, but the players may exercise their own will regarding the race of the character they intend to play (e.g. a human, elf or dwarf). Therefore, the PGM's utterance "You shall impersonate an elf" should not bind the addressee—it would remain a suggestion only.

The fourth parameter concerns any features related to the context of the utterance in question (e.g. temporal ones) that may have a bearing on its binding character. Such features are common in complex institutions and less frequent in simpler ones, such as the institution of aircraft flight. We can illustrate this parameter with an example in the role-playing game club. Let us assume that the PGM may impose the choice of the game on the players only until a certain day of the week (say Saturday)—after that day, the choice of the game to be played becomes the subject of voting by the members of the club.

The fifth parameter concerns the potential conflict of different utterances made by deontic authorities in the same institution. If what these authorities require from the addressee is incompatible, then the conflict must be resolved in some way. Typically, the rules of the institution will define some hierarchy of deontic authorities or a procedure for how such conflicts should be resolved.³ Following our example of the role-playing games club, we may assume that there is a rule according to which each Advanced Game Master may choose the campaign to be played if the game in general has been selected by the PGM. However, a problem may arise if another Advanced Game Master opts for a different campaign. As the Advanced Game Masters have the same degree of deontic authority, the problem of campaign selection would remain undecided until the PGM, who has overriding authority, intervenes and votes for a particular option.

3 Reconstruction of the Specific Argumentation Schemes in the Institution of Judicial-Administrative Proceedings

Let us now apply the developed framework to a specific context, namely, the cases decided by the Polish administrative courts, which provide a rich source of examples of arguments from deontic authority.

The function of administrative courts is to control the activity of the public administration. In particular, administrative courts determine the legality of the decisions issued by public authorities. The proceedings conducted before administrative courts are referred to as judicial-administrative proceedings. In Poland, there are two levels of administrative judiciary bodies: provincial administrative courts⁴, which serve as the first instance courts, and the Supreme Administrative Court (SAC). The SAC hears cassation complaints from the judgments of the provincial administrative courts and is authorised to reverse these judgments and remand the cases. The proceedings before administrative courts are regulated by the Act on the Proceedings before Administrative Courts (hereafter: the APAC) of 30 August 2002.⁵

Importantly, the Polish legal system belongs to the continental legal culture, which means that the *stare decisis* principle obligating courts to follow historical cases when making a ruling on a similar case does not apply. The courts are obligated to apply the Constitution, statutory law and the binding international law

³ In some institutions such hierarchy may be only partially defined or even absent. The problems in such institutions may be resolved, for instance, by arbitrary decisions of some ultimate authority (if it exists) or through the application of reasons other than ones based on deontic authority. The topic of ill-defined institutions is definitely worth investigating, however it remains outside of this paper's scope.

⁴ In Polish: "wojewódzkie sady administracyjne", which may be also translated as "voivodship administrative courts". A "voivodship" is a large territorial division unit in the Republic of Poland.

⁵ In Polish: "Prawo o postępowaniu przed sadami administracyjnymi", consolidated text: Journal of Laws 2023 item 259, as amended.

(including the law of the European Union). Arguments based on cases have a primarily persuasive character.

However, according to certain statutory rules, opinions of the Supreme Administrative Court (SAC) concerning the interpretation of law may be binding on provincial administrative courts or on different panels of the SAC itself.

The first sentence of article 190 of the APAC⁶ states that:

The court to which the case was referred is bound by the interpretation of the law made in this case by the Supreme Administrative Court.

Art. 190 is applicable when the judgment is reversed and the case is remanded to the provincial administrative court. Therefore, only this particular court is bound by the interpretation issued by the SAC. This provision is a standard solution that is common in different types of judicial proceedings, and its role is to enhance the legal certainty and stability of judicial decisions. The interpretations of law issued based on art. 190 do not have a more general binding force. They bind only the panel of the provincial administrative court that hears the remanded case. The decision providing a binding legal interpretation has a prejudicial character.

However, there are also other grounds for deontic authority (binding character) of the SAC's opinions.

Art. 15 provides competence for the SAC to enact specific types of judicial decisions, called resolutions. According to art. 15 sec. 3, the SAC is competent to issue so-called case-specific resolutions:

[The SAC] adopts resolutions resolving legal issues raising serious doubts in a specific administrative court case.

In turn, art. 15 sec. 2 provides for the competence to issue so-called abstract resolutions:

[The SAC] adopts resolutions aimed at clarifying legal provisions, the application of which has caused discrepancies in the jurisprudence of administrative courts

Art. 187 sec. 1 and 2 define the scope of the binding power of the SAC's resolutions.

If, when examining a cassation appeal, a legal issue arises which raises serious doubts, the SAC may postpone the examination of the case and submit the issue to a panel of seven judges of this Court. The resolution of the seven-judge panel of the SAC is binding in a given case.

However, the resolutions of the SAC may have even broader deontic authority due to art. 269:

If any panel of the administrative court hearing the case does not share the position taken in the resolution of the seven judges panel, the entire Chamber

⁶ As all quoted provisions are quoted from the APAC, in the following text we will simply write "art. x" instead of "art. x of the APAC".

or in the resolution of the full panel of the Supreme Administrative Court, it shall submit the resulting legal issue to the appropriate panel.

The provisions mentioned above determine specific relations of deontic authority on which an administrative court may be bound by the interpretation of law issued by the SAC. However, as these relations are different, the structure of argumentation schemes based on deontic authority appropriate for a given relation should also be represented differently. Therefore, it is possible to reconstruct specific argumentation schemes appropriate for the contexts of application of each of these provisions. The reconstruction of such specific argumentation schemes enables us to represent the information that is relevant for a given type of deontic relation in a precise manner. Moreover, the specific sets of critical questions point precisely to the problems that may lead to the defeat of an argument in a context determined by a given basis of deontic authority (here, such basis may be provided by art. 190, art. 269, or art. 187, respectively).

Let us recall that the general structure of the basic version of an argumentation scheme based on deontic authority, as presented in the preceding section, is based on three premises: (1) recognition of the authority bearer role, (2) recognition of the authority addressee role and (3) identification of authority bearer's utterance as included in an appropriate domain of discourse. These premises may be subject to critical evaluation in order to confirm whether an utterance in question is made within the boundaries of a given institution. However, in specific contexts, such as the ones determined by the provisions of the APAC, it is typically out of question that the agents (here: the SAC or a provincial administrative court) assume appropriate roles and that the utterance is made within the domain of discourse determined by the scope of application of the APAC.

Therefore, the natural reconstruction of specific argumentation schemes based on deontic authority should take into account that some of the information made explicit in the general argumentation scheme is presumed in the context of the institution (here: judicial-administrative proceedings) and therefore remains tacit. Hence, it is presumed that the SAC, within the scope of application of the APAC provisions mentioned above, is vested with a certain scope of deontic authority, and the provincial administrative court may be bound by the former court's utterances.

Two issues are crucial in relation to the reconstruction of specific argumentation schemes. First, the formulation of an argument scheme should make it clear what particular subtype of arguments may be represented by it (here: either arguments based on art. 190, art. 269, or on art. 187). Second, the specific critical questions attached to each of these argumentation schemes should point to all potential defeating circumstances relevant for a given argument, and only to such circumstances. Such critical questions are more specific variations of the Intra-Institutional CQs 1–5 presented in the preceding section. They concern the parameters *Agent vested with deontic authority*, *Addressee of deontic authority*, *Category of binding utterance*, *Limits of binding force* and *Potentially competing utterances*, respectively.

In the following, we reconstruct the specific argumentation schemes based on the relations of deontic authority derived from art. 190, art. 269 and art. 187, respectively.

First, let us consider the situation where a provincial administrative court is supposed to be bound by the interpretation of law established by the Supreme Administrative Court based on art. 190.

Argumentation Scheme for Appeals to Deontic Authority (art. 190).

Premise 1: The SAC panel γ issues the judgment ϵ by which it remands the case to provincial administrative court δ .

Premise 2: The SAC panel γ in the judgment ϵ formulates an utterance α which establishes interpretation of law.

Conclusion: Therefore, δ should act in accordance with α .

The meaning of the conclusion in this context is that the provincial administrative court δ should adopt the legal interpretation α as a basis of its decision.

Therefore, the specific questions listed below are variants of the Intra-Institutional CQs 1–5.

CQ₁ Was the interpretation in question established by the Supreme Administrative Court panel γ in the judgment ϵ ?

Comment. With regard to *CQ₁*, it is necessary to determine whether the interpretation in question was established by the SAC in the judgment ϵ by which the SAC remanded the case. Only this particular role is assigned with deontic authority on the basis of art. 190. An utterance merely mentioned (e.g. quoted while discussing the applicable case law) in the rationale but not established in the judgment ϵ will not bind the provincial administrative court based on art. 190 of the APAC.

CQ₂ Is the addressee of the interpretation— δ —a provincial administrative court panel, to which the case was referred?

Comment. The interpretive statements mentioned in art. 190 may be binding only on the specific provincial administrative court panels to which the case was referred. Other courts are not bound by these interpretive statements, although they may of course consider whether they are useful or persuasive.

CQ₃ Is the utterance α actually a statement on the interpretation of law?

Comment. As per art. 190 of the APAC, the provincial administrative court may only be bound by an utterance expressing “interpretation of law” and not by other type of utterance, for instance, concerning the evaluation of factual circumstances. In case of doubt, the third CQ may be made more specific by the two following sub-questions, referring to the two kinds of law that may be subject to interpretation in the context of court administrative proceedings, that is, substantial law or procedural law.

CQ_{3a} Is α an utterance concerning the interpretation of substantial law?

CQ_{3_b} Is α an utterance concerning the interpretation of procedural law?

Asking these two specific sub-questions should clarify whether the utterance α is actually a question concerning the interpretation of law.

CQ_4 Is the utterance α established in the same case which is going to be decided by the provincial administrative court?

Comment. This question concerns the parameter *Limits of binding force*. According to art. 190, the relation of bindingness may occur only if a provincial administrative court re-examines the same case in which the interpretation of law was established by the SAC. The concept of “case” in this context is a technical one, and we will not attempt to discuss it here in detail. The following observation is in order. The factual circumstances should not be subject to such change during the proceedings as to justify the opinion that the case examined by the provincial administrative court cannot be considered the “same case” as the one decided by the SAC.

CQ_5 Does there exist any resolution of the SAC applicable to the case decided by the provincial administrative court?

Comment. A resolution adopted by the SAC has precedence over a judgment vested with deontic authority based on art. 190. Hence, if such resolution is applicable, the court would not be bound by the interpretation of law established based on art. 190.

Let us now present the specific argumentation scheme based on the deontic authority of the SAC’s resolutions defined in art. 269, with the attached set of critical questions.

Argumentation Scheme for Appeals to Deontic Authority—art. 269

Premise 1: The SAC panel γ issues the resolution ϵ .

Premise 2: In its judgment ϵ , the SAC panel γ formulates an utterance α that explains legal provisions or settles a legal issue based on art. 15 of the APAC.

Conclusion: Therefore, the provincial administrative court panel δ or the SAC panel δ should act in accordance with α .

Let us now reconstruct the specific CQs addressing the five parameters distinguished above.

CQ_1 Was the utterance α in question established by the SAC panel γ indicated in art. 269 of the APAC?

Comment. Only the resolutions that were adopted by the panel of seven judges of the SAC or a larger panel are binding on the basis of art. 269 of the APAC.

CQ_2 Did δ , the provincial administrative court panel or the SAC panel apply to the appropriate SAC panel for revision of the resolution ϵ in which the utterance α was made?

Comment. According to art. 269, all administrative court panels (including the SAC’s panels) are bound by a resolution of an appropriate panel of the SAC, unless

such resolution is revised by an appropriate panel of the SAC, upon the motion of the administrative court, which disagrees with the resolution. Therefore, if a particular resolution ϵ became the subject of a motion for revision, a new resolution would be issued, and the latter would have binding force.

*CQ*₃ Is the utterance α in question an example of “explanation of legal provisions” or a “resolution of a legal issue”?

Comment. Only the two categories of utterances mentioned above may be the subject of the SAC’s resolutions and thus be binding on the basis of art. 269.

*CQ*₄ Is the utterance α relevant for the case heard by the administrative court δ ?

Comment. In order to be effectively binding on the addressee of the deontic authority, the resolution in question must be relevant for the case decided by the addressee in the first place. Let us recall that some resolutions of the SAC have an abstract character, which means that they are made in isolation from any case pending before an administrative court; therefore, their scope of applicability requires verification. It must also be verified that a particular resolution has not been revised, as discussed in the comment to *CQ*₂ above.

*CQ*₅ Is a resolution of the SAC based on art. 187 applicable to the case decided by the court δ ?

Comment. This CQ is applicable only if the addressee of a resolution whose deontic authority is derived from art. 269 is a court panel that is also an addressee of a resolution issued on the basis of art. 187 (see below). In such a situation, the latter resolution takes precedence.

Finally, let us consider the specific argumentation scheme based on deontic authority defined in art. 187.

Argumentation Scheme for Appeals to Deontic Authority—art. 187

Premise 1: The SAC’s seven-judge panel γ issues resolution ϵ in connection with the recognition of the cassation complaint by the SAC.

Premise 2: In the judgment ϵ , the SAC panel γ formulates an utterance α , which resolves a legal issue identified in connection with the cassation complaint.

Conclusion: Therefore, δ should act in accordance with α .

Following the method adopted above, let us reconstruct the appropriate specific CQs.

*CQ*₁ Was the resolution ϵ in question established by the SAC’s seven-judge panel γ on the basis of the SAC standard panel motion?

Comment. This panel of the SAC is competent to issue resolutions based on art. 187. A standard panel does not have this power.

*CQ*₂ Is the δ a administrative court panel, which decides in the frame of the same case?

Comment. As per art. 187, the deontic authority of the resolution adopted on this basis is binding on the administrative court panels deciding in a given case. Let us add, however, that such a resolution is also binding on the remaining panels of the administrative court, but on the basis of art. 269.

CQ₃ Does the utterance α in question amount to a “solution of a legal issue” expressed in the resolution ϵ ?

Comment. Only the “solution of a legal issue” expressed in the resolution ϵ may have binding force on the basis of art. 187 of the APAC.

CQ₄ Is the utterance α expressed in the resolution ϵ compatible with the motion for the solution of a legal issue presented to the seven-judge panel of the SAC by the three-judge panel of the SAC hearing the cassation complaint?

Comment. If the seven-judge panel exceeds the scope of the legal issue as defined by the three-judge panel hearing the cassation complaint, the resolution is not binding in the exceeding scope.

As far as the resolution based on art. 187 of the APAC is the ultimate deontic authority in the analysed institution, there is no need to formulate a specific version of CQ5.

4 Extracting Argument Structures from the Rationales of Judicial Opinions

4.1 Preliminary Remarks

The goal of this section is to demonstrate the usefulness of the conceptual framework of the five parameters introduced in Sect. 2 and the specific argumentation schemes reconstructed in Sect. 3 for the analysis of rationales of judicial decisions. We show how our framework can be mapped onto real-life legal examples, enabling precise extraction of information crucial for the task of identifying binding utterances. By studying examples, we show how the arguments from deontic authority as performed in this particular area can be reconstructed and efficiently attacked and what types of attacks remain unsuccessful with regard to particular subtypes of arguments. In Sect. 4.2 we identify how parameters of specific argumentation schemes based on art. 190 are instantiated. Section 4.3 discusses a more complex issue of application of art. 269. Finally, in Sect. 4.4, we present an example concerning deontic authority based on art. 197, which, as discussed above, has precedence over other types of deontic authority in the analysed institution.

In order to emphasise major differences between the linguistic manifestations of each of the parameters in the rationales of judicial decisions, we propose to underline the phrases that are associated with a given parameter in

example texts. To that end, following the discussion of the five parameters to capture dimensions of appeals to deontic authority in Sect. 2.2, we propose to underline key linguistic cues that indicate each of the parameters. We will be using the following symbolism: Agent vested with deontic authority: (double underline), (ii) Addressee of a deontic authority (single underline), (iii) Category of binding information (waved underline); (iv) Binding force limits (dashed underline) and (v) Potentially competing authorities (dotted underline).

In what follows, we underline not only the exact manifestations of these parameters but also selected phrases that are directly related to them.

4.2 Binding Interpretation of Law When a Case is Remanded: Argument Based on Art. 190 of the APAC

In this subsection, we present an excerpt from the rationale of a SAC decision concerning the application of art. 190. To recall, this provision states that if a case is remanded, the provincial administrative court is bound by the interpretation of law established by the SAC in the remanding judgment.

Example (2) contains a part of the rationale of the SAC's judgment, where this court indicates that the interpretation of law established by the SAC in the remanding judgment ceases to be binding if the circumstances of the case change to the effect that it is no longer the "same case" (cf. *CQ*₄ to the specific argumentation scheme 1 discussed in Sect. 3):

- (2) The Supreme Administrative Court: *There is no doubt in case law that a provincial administrative court may depart from the SAC's interpretation of the law when the facts of a case determined as a result of its reconsideration have changed to such an extent that provisions of law other than those explained by the SAC should be applied to the newly determined facts.*

This excerpt indicates instantiations of four parameters of a specific argument scheme: the agent vested with deontic authority (the SAC), the addressee thereof (a provincial administrative court), the category of binding utterance (interpretation of law) and the indication of the limits of its binding force (the phrase beginning with "when the facts ..."). No competing sources of deontic authority were involved in this particular case.

4.3 Binding Force of Resolutions of the Supreme Administrative Court: Argument Based on Art. 269 of the APAC

In this section, we present examples of the application of arguments based on the binding force of the SAC's resolutions, as defined in art. 269.

Consider example (3):

- (3) The Supreme Administrative Court: *Therefore, taking into account Article 269 § 1 of the Act on the Proceedings before the Administrative Courts, the Supreme Administrative Court in this case accepts the views expressed in the above-mentioned resolution, which are also applicable to the facts of this case.*

In the above example, the SAC recognises both itself and, implicitly, the provincial administrative court, bound by the resolution to which it refers. The category of binding utterance is indicated somewhat vaguely (“the views”), but this is a normal practice, as in the systemic context it is obvious what type of utterance may be binding in the resolution (cf. art. 15 of the APAC, discussed in Sect. 3 above). Moreover, the SAC finds that the resolution is applicable to the current fact situation—therefore, the fourth parameter of the argument is also instantiated.

Similarly, in the following example (4), taken from opinion of the SAC, the court identifies the deontic authority of another SAC panel’s resolution. The agent vested with deontic authority here is the SAC panel that adopted resolution II GPS 1/16, and the addressees of the authority are both the SAC panel hearing the case and the provincial administrative court panel. The category of binding information is not indicated explicitly, but its content is given instead. Therefore, we underline it as related to parameter 3. The SAC also defines the consequences of the provincial administrative court’s lack of compliance with the binding resolution.

- (4) The Supreme Administrative Court: *The above is confirmed by the position expressed by the Supreme Administrative Court in the resolution of a panel of seven judges of 16 May 2016 in the case ref. no. II GPS 1/16, stating in point 2 of its operative part that a person organising games on slot machines outside a gaming casino, regardless of whether he holds a licence or permit – since 14 July 2011 also a notification or the required registration of a gaming machine or device – is subject to the financial penalty referred to in Article 89(1)(2) of the Gaming Law. The adjudicating panel is bound by the resolution pursuant to Art. 269 § 1 of the Act. The Supreme Administrative Court: *In light of the above resolution, it should be stated that the view of the Court of First Instance that there are no grounds for imposing a penalty on the company under Art. 89.2.2 of the Gaming Act is incorrect.**

4.4 Deontic Authority of a Resolution Solving a Legal Issue Identified During the Recognition of a Cassation Complaint: Art. 187 of the APAC

The remaining specific argumentation scheme whose instantiations we are presenting is based on art. 187. Recall that such deontic authority occurs when a

seven-judge panel of the SAC, acting on the basis of a motion of an SAC panel deciding the case, issues a resolution solving a serious legal issue identified during the recognition of a cassation complaint:

- (5) a. The Supreme Administrative Court: *Pursuant to Article 187 § 2 of the APAC, a resolution of a panel of seven judges of the Supreme Administrative Court is binding in a given case.*
- b. The Supreme Administrative Court: *Moreover, the phrase “binding in a given case” contained in this provision means that such a resolution is binding in all further proceedings until their final conclusion.*

In example (5), the cues for another parameter to grasp deontic authority can be found, namely, (iv) the limits of binding force, possibly along with the procedural possibility of defeating them (“binding in a given case” in (5-a); and “in all further proceedings until its final conclusion” in (5-b)). It consists of formulating an opportunity to challenge an argument from deontic authority. For instance, it may point to the ways to challenge an argument based on an authority of the law (e.g. pointing out that either the facts or the wording of the legislation have changed).

Example (6) is taken from the judgment of the SAC of 5 January 2018, FSK 326/15, which is centred around a binding utterance resolving “a legal issue raising serious doubts”:

- (6) The Supreme Administrative Court: *The Supreme Administrative Court, when examining the cassation appeal in the present case, considered that there was a legal issue raising serious doubts in the case and, by order of 27 September 2016, submitted the following question to a panel of seven judges of the Supreme Administrative Court for determination [...] The Supreme Administrative Court: Breaking the binding force of a resolution issued in a case in connection with which the resolution was adopted is not even possible under Art. 269 § 1 of the Administrative Court Procedure. In this case, due to the content of Article 187 § 2 p.p.s.a., the resolution is absolutely binding as a prejudicial.*

The SAC panel deciding the case identifies itself as bound by deontic authority, as it recalls that a legal issue raising serious doubts was identified and that such a resolution was made by a panel of seven judges of the SAC (here: the role vested with deontic authority). The SAC continues to comment that the resolution of the SAC based on art. 187 could not be revised in accordance with the procedure defined in art. 269. Finally, the resolution based on art. 187 is explicitly referred to as “absolutely binding” in the sense that no deontic authority could override it in the given intra-institutional context.

5 Discussion: Deontic Aspects of Argumentation Schemes and Critical Questions

In this section, we briefly discuss some significant connections between our model of arguments from deontic authority and the studies in argumentation theory that are either directly or indirectly related to capturing deontic components of argumentation. Among them, particular solutions proposed in Sects. 2, 3 and 4 can be viewed as particular extensions of the state of the art in the study of arguments from deontic authority.

The vast majority of critical questions for assessing arguments from authority are designed to evaluate arguments based on expert opinion (Walton 1997; Walton et al. 2008). When comparing this research strand to the state of the art in critically questioning arguments from authority, studies on their deontic aspects appear to be scant and patchy. There are some initial attempts to provide schemes and CQs for deontic authority rather than a fully fledged and methodologically robust take. Such initial attempts at providing argumentation scholarship with argumentation schemes and CQs for arguments from deontic authority include the works of Budzynska (2010), Parsons et al. (2014), Koszowy and Walton (2019) and, most recently, by Zenker and Yu (2020).

Argumentation schemes and CQs for appeals to deontic authority have been directly discussed in Koszowy and Walton (2019), who proposed an argumentation scheme along with the basic CQs (for details see Sect. 1). As Zenker and Yu point out, the full list of CQs in Koszowy and Walton (2019) lacks structure (Zenker and Yu 2020, p. 6). The features of the institutional environment for arguments from deontic authority proposed in this paper (see Sect. 2.1) along with the set of parameters for capturing components of this type of argument (see Sect. 2.2) can be interpreted as one possible way of introducing order to the list of CQs.

The position proposed in this paper also relates to employing insights on authority types present in legal theory to enrich the existing repertoire of methods for representing appeals to authority in argumentation theory, such as the conceptualisations proposed in (Araszkievicz and Koszowy 2016). In that work, four distinctions between authority types (formal—informal; deontic—non-deontic; conditional—unconditional; and institutional—non-institutional authority) have been employed to study arguments from authority. In the model proposed in this paper, we broaden the notion of an institution (institutional environment) to be able to grasp contextual elements of an institutional environment, such as (1) the categories of agents' roles that may be in a position of deontic authority or of an addressee of such authority, (2) the domain of discourse in which those agents communicate and the types of problems that are subject to solution in this domain, determined by the set of norms applicable in this domain (see Sect. 2.1). These components create a context for an utterance vested with deontic authority and for proposing arguments appealing to it. We distinguish the basic questions *CQI–CQIII*, which enable the verification of whether a given utterance or argument is posed in the frame of a given institution in the first place. The more specific *CQ₁–CQ₅* may be asked if it has already been verified that a situation has occurred within the scope of a given institution.

Let us recall that two critical questions formulated by (Koszowy and Walton 2019), namely, the ones concerning application and interpretation of an utterance, have not been explicitly incorporated in the lists of critical questions proposed here. As far as the issues of application are concerned, we tried to capture it in a more thorough manner, by introducing specific, intra-institutional argumentation schemes, delimiting the scope of inquiry in a given context, and by formulating two separate critical questions, CQ3 (the category of binding information) and CQ4 (the limits of binding force of an utterance). These solutions seem to capture the reality of intra-institutional disputes more precisely than the general notion of “application”. When it comes to the problems of interpretation of an utterance, we left it outside of the scope of investigations due to a very high degree of complexity of these issues, including the notion of interpretation itself. Notably, the issues of interpretation remain one of the most debated problems in legal philosophy (Dickson 2010; Wróblewski 1992). Therefore, in this paper we focused on determining whether an addressee is bound by an utterance α and not on how α should be interpreted, which is a different subject of inquiry.

Our work on the institutional environment (see Sect. 2.1) may also be associated with the discussion about deontic conversational backgrounds in (Rocci 2008, pp. 178–179). As those backgrounds are defined in terms of the agent’s goals and duties in particular circumstances, our notion of institutional setting for arguments from deontic authority may constitute a general conceptual framework to capture such elements of the conversational background. For example, the context of the sentence “To be elected in the Italian Senate, you must be at least 35 years old” (Rocci 2008, p. 179) can be made plain by pointing to who is bound by which rules in which institution, in line with the method we presented in Sect. 2.1. Rocci also presents and discusses “a map of deontic modality” which employs a narrower notion of institution than the one used in this paper; as consequence, he introduces different categories of deontic modalities, other than institutional ones, in his sense (Rocci 2017). Arguably, these different deontic modalities are captured by our notion of institutional environments and could lead to an extensive classification of institutional environments.

Another distinction that might be useful for capturing important aspects of arguments from deontic authority is Lewiński’s proposal to distinguish “arguments from” and “arguments to” authority (Lewiński 2022). There is no direct mapping of these two argument types onto our basic and specific argumentation schemes for appeals to deontic authority. However, certain links may be drawn between “qualities” of an expert indicated by Lewiński in the context of arguments to authority, and the features of institutional environment, constituting the role of authority bearer, as discussed in our paper. Arguments to authority are crucially associated with the institutional context discussed in Sect. 2.1, in particular with the norms that determine who, and in what role, is an authority bearer in a given institutional environment. In this context, an argument to authority of the form “(1) Person E has qualities (1, 2, ... n); (2) This is what being an expert is; therefore, (3) Person E is an expert” (Lewiński 2022, p. 10) may be interpreted as a reasoning pattern to capture the key features that make an entity an authority bearer. However, a more detailed

investigation of the relationship between Lewiński's account and ours would necessitate a separate study.

6 Future Work

6.1 Towards Annotation Schemes for the Purpose of Argument Mining

One of the areas in which our approach may be applied is the annotation of judicial decisions, considering the parameters of deontic authority introduced in this paper. Employing this approach to create annotated corpora of judicial decisions with the tags related to those parameters, in line with the most recent work on legal corpora for argument mining (Savelka and Ashley 2016; Poudyal et al. 2020), would provide argumentation scholarship with statistical information about what deontic authority structures are most frequent in different types of legal texts. The theory of legal argumentation could be significantly informed by the deeper statistical insights from the resulting data. Such research could enable argumentation scholars to obtain large-scale annotated data repositories that make it possible to compare typical arguments from the authority of law in various legal contexts in different countries. Finally, our insights on the linguistic features of arguments from deontic authority may be of use in elaborating on annotation guidelines to capture linguistic markers for deontic authority in different discourse domains, providing a detailed subset of argumentation schemes that might be part of a more comprehensive approach to annotating argumentation schemes in the style proposed in (Visser et al. 2021).

6.2 Critical Questions as Means for Optimising Dialogue Protocols

The task of determining specific Intra-institutional Critical Questions has been justified by the fact that these CQs are domain dependent, and that they are not readily applicable in other institutions. Thus, once we know the structure of an institution, we can more efficiently proceed with attacking a certain argument. The design of such specific CQs informs the optimisation of dialogue protocols. A possible future line of inquiry could involve exploring the existing state of the art in the study of dialogue protocols in argumentation theory, for example, in Walton and Krabbe (1995), Koszowy and Walton (2017), Kacprzak and Yaskorska (2014), Yaskorska-Shah (2021). To optimise dialogue protocols, future research could seek to identify applications of our questioning framework discussed in Sects. 3 and 4 to the existing systematic models of CQs, such as those proposed in Wagemans (2011) and in Walton and Macagno (2015). For instance, the model presented in Wagemans (2011), which systematically combines the pragma-dialectical approach to argumentation schemes (Hitchcock and Wagemans 2011), and the Waltonian perspective on those schemes (Walton 1997) could be enriched by our method to determine specific CQs. Another direction which may be considered for the sake of optimisation of dialogue protocols is a possible integration of our, relatively local, approach, with a more general model recently elaborated in Yu and Zenker (2020) and applied to the topic

of arguments from authority in Zenker and Yu (2023). Their proposal, grounded in the general Toulmin model of argument, enables a complete evaluation of an argumentation scheme instance. Undoubtedly, the completeness of CQ sets is a desired feature of dialogue protocols. A potentially fruitful line of inquiry consists in mapping from a general account of critical questions as advanced by Zenker and Yu to the Intra-institutional CQs obtained in accordance with the method presented in this paper.

6.3 Extending the Scope of Research to Ill-Defined Institutions and to Broader Contexts

In this paper, we analyzed a relatively well-defined institutional environment (the law) and we focused on intra-institutional contexts. However, our approach may also be applied to less well-defined institutions and to the situations where one and the same addressee is subject to authority of different institutions. In institutional environments that are less well-defined than legal institutions, we expect that the Intra-institutional Critical Questions may sometimes fail to provide clear answers. As a consequence, our approach may be used to indicate, in a precise manner, the elements of an institution that are not well-defined. This information may be used by relevant actors to refine the institutional setting. In the context of particular argumentative dispute, such an information may indicate that a conclusion needs justification on the basis of arguments other than arguments from deontic authority—because it is problematic to ascertain whether the relation of deontic authority actually holds, in all its relevant parameters.

Another future research thread may concern the analysis of appeals to deontic authority where more than one institution is involved. In such cross-institutional contexts, a person may be an addressee of utterances that are binding on them with regard to the relevant institutional environments, but these utterances may not be compatible with each other. For instance, if a person is at the same time a soldier and a clergyman, they may become an addressee of an order of a military commander and a directive from a superior in a religious institution, that cannot be satisfied simultaneously. In such situation it may be necessary to consider the relative preference of utterances generated in different institutions. However, it is expected that in many cases it will not be possible to establish such a preference relation, and the problem will need a solution on a different basis than an appeal to deontic authority. Note that this is a different situation than the existence of competing authorities within one institutional environment. Let us recall the case of controversy between the Supreme Court and the Constitutional Tribunal in Poland, discussed in Araszkiwicz and Koszowy (2016), which is an example of an intra-institutional controversy with no clear answer based on an appeal to deontic authority.

There exist also such situations where conclusions based on deontic authority are incompatible with conclusions supported by other reasons (for instance, by appeals to consequences, to the knowledge of the world etc.). Such situations create another subject for future investigations, leading to theorizing about the

general problems concerning the overall strength of all arguments applicable in a dispute (Zenker et al. 2020).

6.4 Extending the Model to Capture the Problems of Interpretation

In this paper we focused on the question whether an addressee is bound by an utterance α , but we do not discuss the problems of interpretation of α . Extending the model to capture the latter issues is another promising and practically relevant line of inquiry. Inclusion of the interpretative issues would add another layer to the model, because after determining whether an addressee is bound by α it might still remain debatable how α should be understood. Specifically, in modeling legal contexts, it creates a possibility to refer to the ongoing debate on the notion and directives of legal interpretation (Dickson 2010; Wróblewski 1992), where recently the theory of argumentation schemes has been fruitfully applied (Walton et al. 2021).

7 Conclusion

The paper contributes to the scholarship by showing how the structure of an institutional environment can be mapped to the structure of arguments from deontic authority. By distinguishing between two subsets of critical questions we pointed to two stages of evaluating arguments from deontic authority. This extended evaluation procedure enables us to show how arguments from deontic authority may be successfully attacked, either in extra-, or in intra-institutional contexts. The Basic Critical Questions are aimed at determining whether or not an utterance was made in an intra-institutional context in the first place. If the answers to the Basic Critical Questions are positive, then we can proceed to the second stage of a critical assessment of an argument by asking Intra-institutional Critical Questions. The ordering of the Intra-institutional Critical Questions provides a justified step-by-step assessment of an argument, along the set of distinguished parameters. The paper also shows, using the example of the context of judicial reasoning, how the basic scheme of argument from deontic authority may be specified, in the form of specific argumentation schemes referring to particular elements of a given institutional environment. These specific argumentation schemes go along with specific (concretized) sets of Intra-institutional Critical Questions. This approach enables a much more precise and explicit evaluation of arguments based on deontic authority than the one enabled by a general account. In order to corroborate the model by evidence, we indicate the mentions of particular elements of specific arguments from deontic authority in the excerpts from judgments of Polish administrative courts. The complex character of the appeals to deontic authority in that domain, along with the well-defined character of the institutional environment for such arguments, create a promising point of departure for the application of the developed model in other domains, including less well-defined ones.

Acknowledgements The work of Marcin Koszowy was supported in part by the Polish National Science Centre under Grant 2020/39/1/HS1/02861 and in part by the VolkswagenStiftung under Grant 98 542.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Araszkievicz, M., Koszowy, M. 2016. Deontic authority in legal argumentation: A case study. In *Argumentation and reasoned action: Proceedings of the 1st European Conference on Argumentation*, 1–19, College Publications.
- Bocheński, J. 1974. *Was ist Autorität? Einführung in die Logik der Autorität*. Freiburg im Breisgau: Herder.
- Budzynska, K. 2010. Argument analysis: Components of interpersonal argumentation. In *Frontiers in Artificial Intelligence and Applications*, vol. 216, 135–146. Amsterdam: IOS Press.
- Dickson, J. 2010. Interpretation and coherence in legal reasoning. In *The Stanford Encyclopedia of Philosophy*, ed. Zalta E.N.
- Hage, J. 2018. *Foundations and building blocks of law*. The Hague: Eleven.
- Hitchcock, D., and J. Wagemans. 2011. The pragma-dialectical account of argument schemes. In E.T. Feteris, B. Garssen and F. Snoeck Henkemans (Eds.), *Keeping in touch with Pragma-Dialectics: In honor of Frans H. van Eemeren* (pp. 185–206). Amsterdam: Benjamins.
- Kacprzak, M., and O. Yaskorska. 2014. Dialogue protocols for formal fallacies. *Argumentation* 28: 349–369. <https://doi.org/10.1007/s10503-014-9324-4>.
- Koszowy, M., and D. Walton. 2017. Profiles of dialogue for repairing faults in arguments from expert opinion. *Logic and Logical Philosophy* 26 (1): 79–113. <https://doi.org/10.12775/LLP.2016.014>.
- Koszowy, M., and D. Walton. 2019. Epistemic and deontic authority in the argumentum Ad Verecundiam. *Pragmatics and Society* 10 (2): 151–179. <https://doi.org/10.1075/ps.16051.kos>.
- Lewiński, M. 2022. Challenging authority with argumentation: The pragmatics of arguments from and to authority. *Languages* 7: 1–18. <https://doi.org/10.3390/languages7030207>.
- Minsky, M. 1974. *The psychology of computer vision*, 211–277. A Framework for Representing Knowledge. New York: McGrawHill.
- Parsons, S., K. Atkinson, Z. Li, P. McBurney, E. Sklar, M. Singh, K. Haigh, K. Levitt, and J. Rowe. 2014. Argument schemes for reasoning about trust. *Argument & Computation* 5 (2–3): 160–190. <https://doi.org/10.1080/19462166.2014.913075>.
- Poudyal, P., Savelka, J., Ieven, A., Moens, M., Goncalves, T., Quaresma, P. 2020. ECHR: Legal corpus for argument mining. In *Proceedings of the 7th Workshop on Argument Mining, Barcelona, Spain (Online), December 13, 2020* pp 67–75.
- Raz, J. 1979. *The Authority of Law: Essays on Law and Morality*, 2nd ed. Oxford: Oxford University Press.
- Rocci, A. 2008. Modality and its conversational backgrounds in the reconstruction of argumentation. *Argumentation* 22: 165–189. <https://doi.org/10.1007/s10503-007-9065-8>.
- Rocci, A. 2017. *Modality in Argumentation*. New York: Springer.
- Savelka, J., Ashley, K. 2016. ECHR: Legal corpus for argument mining. In *Proceedings of the 3rd Workshop on Argument Mining, Berlin, Germany, August 7–12, 2016*, 50–59.
- Visser, J., Lawrence, J., Reed, C., Wagemans, J., Walton, D. 2021. Annotating argument schemes. *Argumentation* 35: 101–139.

- Wagemans, J. 2011. The assessment of argumentation from expert opinion. *Argumentation* 25 (3): 329–339.
- Walton, D. 1997. *Appeal to expert opinion: Arguments from authority*. Pennsylvania: Penn State Press.
- Walton, D., and E.C.W. Krabbe. 1995. *Commitment in dialogue: Basic concepts of interpersonal reasoning*. New York: State University of New York Press.
- Walton, D., and F. Macagno. 2015. A classification system for argumentation schemes. *Argument & Computation* 6 (3): 219–245. <https://doi.org/10.1080/19462166.2015.1123772>.
- Walton, D., C. Reed, and F. Macagno. 2008. *Argumentation Schemes*. Cambridge, New York, etc.: Cambridge University Press.
- Walton, D., F. Macagno, and G. Sartor. 2021. *Statutory Interpretation: Pragmatics and Argumentation*. Cambridge: Cambridge University Press.
- Wróblewski, J. 1992. *The Judicial Application of Law*. New York: Springer.
- Yaskorska-Shah, O. 2021. Managing the complexity of dialogues in context: A data-driven discovery method for dialectical reply structures. *Argumentation*. <https://doi.org/10.1007/s10503-020-09543-x>.
- Yu, S., and F. Zenker. 2020. Schemes, critical questions, and complete argument evaluation. *Argumentation*. <https://doi.org/10.1007/s10503-020-09512-4>.
- Zenker, F., and Yu. S. 2020. A new typology for arguments from authority. *Proceedings of the Ontario Society for the Study of Argumentation Conference 12*: 1–16.
- Zenker, F., and S. Yu. 2023. Authority argument schemes, types, and critical questions. *Argumentation* 37: 25–51.
- Zenker, F., Debowska-Kozłowska, K., Godden, D., Selinger, M., Wells, S. 2020. Five approaches to argument strength: Probabilistic, dialectical, structural, empirical, and computational. In *Reason to dissent. Proceedings of the 3rd European Conference on Argumentation*, 653–674.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.