I. Introduction

The nature of formal principles is one of the most contentious aspects of Robert Alexy’s principles theory. The controversies range from the concept and structure of formal principles to their role and relation to substantive principles in balancing to the doctrinal construction of legislative discretion. “The theory of formal principles,” as Alexy himself concedes, “has led, in the last decades, to more questions than answers.”

Recently, Alexy put forward an epistemic model to solve some problems of his theory of formal principles. In this paper, I will first recapitulate the main tenets of Alexy’s theory and then point out two unsettled issues arising from its recent development. One relates to the connection between epistemic uncertainty and formal principles; the other is concerned with whether formal principles can affect the weight of substantive principles in balancing.

In order to deal with these issues, I will recast Alexy’s theory in terms of normative reasons for action and argue that formal principles are a distinctive type of second-order reasons. Based on this reconstruction, formal principles, which require one to defer to the decisions of some authority, can be regarded as a useful device for...
II. The Concept of a Formal Principle

According to the standard definition of Alexy’s principles theory, principles are *optimization requirements*, which demand “that something be realized to the greatest extent possible given the legal and factual possibilities.” In addition to being determined by rules, the legal possibilities for realizing a principle are determined essentially by competing principles. The characteristic form of applying principles is balancing: principles can and must be balanced against one another.

Formal principles, *qua* principles, are also optimization requirements. Alexy’s distinction between substantive and formal principles lies in the object of optimization. The optimization objects of substantive principles are certain contents, that is, material values such as life, freedom of speech, or protection of the environment. By contrast, “the optimization objects of formal principles are legal decisions regardless of their content. Formal principles require that the authority of duly issued and socially efficacious norms is optimized.”

A representative instance of formal principles is the principle of democracy, which states that “the democratic legislature shall take decisions which are significant for society as a whole.” It should be noted that the optimization of a formal principle has two aspects. To take the principle of democracy, for example: it requires not only that the decisions of the democratic legislature be observed to the maximum degree

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4 Ibid., 48.
5 Alexy, Formal Principles (n. 1), 516.
6 Alexy, A Theory of Constitutional Rights (n. 3), 82.
possible, but also that “the democratically legislature should take as many important decisions for a society as possible.”\(^7\) Therefore, as for formal principles, what is to be optimized is not only deference to, but also the scope of a legal authority.

A disputed issue in Alexy’s theory of formal principles is whether a formal principle can be balanced against a substantive principle. Alexy distinguishes three models, each of which gives a different account of the relation between formal and substantive principles in balancing.

The first is the pure substantive-formal model, in which a formal principle alone can be balanced against or even outweigh a substantive principle. Alexy has employed this model to reconstruct the reasoning behind the Radbruch formula that “extreme injustice is no law.” In his reconstruction, this formula reflects the result of balancing the formal principle of legal certainty against the substantive principle of justice. The principle of legal certainty prevails over that of justice in all cases of injustice except for cases of extreme injustice; conversely, under the circumstances of extreme injustice, the latter takes precedence over the former.\(^8\)

The second is the mixed substantive-formal model or the combination model. In this model, a formal principle can be balanced against a colliding substantive principle only when it is combined with at least one other substantive principle.\(^9\) In *A Theory of Constitutional Rights*, Alexy seems to endorse the combination model, where he calls it “the Law of Combination:”

“[T]he formal principle of the decision-taking competence of the legislature on its own does not suffice to override a substantive constitutional rights principle…. Procedural formal principles can override

\(^7\) *Alexy*, Formal Principles (n. 1), 516; *Alexy*, A Theory of Constitutional Rights (n. 3), 417.


\(^9\) *Alexy*, Formal Principles (n. 1), 517–518.
Alexy has drawn on the combination model to argue for the strong *prima facie* character of rules. It is possible for a judge—for example, in a *contra legem* decision—to deviate from a statutory rule by incorporating a new exception into it. This can be justified, however, only if the competing substantive principle against applying the rule outweighs the substantive principle underlying the rule together with formal principles, such as the principle of legal certainty or democracy. The support of formal principles makes it more difficult to trump a rule by a counter-principle, thereby strengthening the binding force of a rule.

In the combination model, formal principles do not play an independent role as they do in the pure substantive-formal model because they can tip the balance only in collaboration with a substantive principle. Hence, a formal principle, as Borowski points out, “can only add weight to one side of a competition of principles; it cannot stand independently on one side of a competition.”

However, Alexy thinks that both the pure substantive-formal and the combination model have serious defects when they are applied to the relationship between constitutional rights—the paradigmatic substantive principles in Alexy’s theory—and the formal principle of democracy. On the one hand, the first model would permit a democratically legitimated legislature to infringe constitutional rights without any substantive reason. On the other hand, the second model would justify a disproportional infringement of a constitutional right if the substantive principle

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10 Alexy, A Theory of Constitutional Rights (n. 3), 423.
11 Ibid., 48, 58.
underlying the legislative interference, though in its own right not weighty enough to
defeat the constitutional rights principle, could override the latter with the help of the
formal principle. In Alexy’s view, both consequences are unacceptable because they
undermine the binding of ordinary parliamentary legislation to the constitution.13

III. The Epistemic Model

In order to remedy the defects of the pure and mixed substantive-formal model, Alexy
proposes a third way, which he calls “the epistemic model.” The cornerstone of the
epistemic model is the weight formula, which is put forward by Alexy to capture the
structure of the law of balancing: “The greater the degree of non-satisfaction of, or
detriment to, one principle, the greater must be the importance of satisfying the
other.”14

The weight formula runs as follows:

\[
W_{i,j} = \frac{I_i \cdot W_i \cdot R_i}{I_j \cdot W_j \cdot R_j}
\]

\(W_{i,j}\) stands for the concrete weight of a principle \(P_i\) relative to a colliding principle \(P_j\),
and is defined as the quotient of, first, the product of the intensity of the interference
with \(P_i\) \((I_i)\) times the abstract weight of \(P_i\) \((W_i)\) times the degree of reliability of the
empirical and normative assumptions concerning what the measure in question means
for the non-realization of \(P_i\) \((R_i)\), and, second, the product of the corresponding values
with respect to \(P_j\) \((I_j, W_j, R_j)\).15

14 Alexy, A Theory of Constitutional Rights (n. 3), 102.
15 Alexy, Formal Principles (n. 1), 513. See also Robert Alexy, The Weight Formula, in: Jerzy Stelmach
I assume that readers are familiar with Alexy’s weight formula, and therefore I will not go into further details about it. For the present purposes, we only need to notice the variable \( R \) (\( R_i \) and \( R_j \)), which represents the reliability of the empirical and normative assumptions in the reasoning of balancing.\(^{16}\) Unlike the \textit{ontic} factors \( I \) and \( W \), which refer to the substantive weight of the competing principles, \( R \) is an \textit{epistemic} factor that refers to our knowledge of or beliefs about the relevant facts. Like the satisfaction or importance of principles, the reliability of the empirical or normative assumptions is a matter of degree. As with the assignment of values to \( I_i \) and \( I_j \) or to \( W_i \) and \( W_j \), Alexy proposes a triadic scale that assigns to the epistemic factor \( R \) the values “reliable or certain” (\( r \)), “plausible” (\( p \)), and “not evidently false” (\( s \)), which are also expressed by the numbers \( 2^0 \), \( 2^{-1} \), and \( 2^{-2} \), that is, 1, 1/2, and 1/4.\(^{17}\)

In Alexy’s phrase, the product of the values of the two substantive variables (\( I_i \cdot W_i \) or \( I_j \cdot W_j \)) are called “the substantive values,” and the values of the epistemic variables \( R_i \) and \( R_j \) can be called “the epistemic values.” If the epistemic values are 1, the substantive values remain unaffected. However, if the epistemic values are lower than 1, the impact of the substantive values is weakened accordingly.\(^{18}\) Since the concrete weight of a principle is determined by the product of the substantive and epistemic values, the effect of the epistemic factor \( R \) can be formulated as follows: other things being equal, the weight of a principle is lowered with the decrease in the reliability of the assumptions concerning its realization. A decrease in the degree of reliability is nothing other than an increase in the degree of uncertainty, so we might also say: other things being equal, the weight of a principle is lowered with the

\(^{16}\) Since the assumptions concerning the realization of principles include empirical and normative ones, Alexy recently defines \( R \) as a function of the empirical and the normative reliability: \( R_i = R_{ie} \cdot R_{in} \), and calls this formula “the reliability equation,” \textit{Alexy}, Formal Principles (n. 1), 514. On the introduction of a specific variable representing the normative reliability, see also \textit{Matthias Klatt & Moritz Meister}, The Constitutional Structure of Proportionality, Oxford 2012, 132.

\(^{17}\) \textit{Alexy}, Formal Principles (n. 1), 515. The triadic values assigned to the substantive variables are “light” \( (2^0) \), “moderate” \( (2^{-1}) \), and “serious” \( (2^{-2}) \), see also \textit{Alexy}, The Weight Formula (n. 15), 21–23.

\(^{18}\) \textit{Alexy}, Formal Principles (n. 1), 515.
increase in the uncertainty of the assumptions concerning its realization.

The epistemic uncertainty is of great significance for Alexy’s theory of formal principles. In the epistemic model, formal principles do not directly participate in the balancing described by the weight formula. According to Alexy, the objects of the balancing inside the weight formula, which he calls “first-order balancing,” are limited to substantive principles. Although the epistemic model allows that a formal principle can be balanced against a substantive principle, this balancing, which Alexy calls “second-order balancing,” takes place at the meta-level, where it is concerned with justifying the inclusion of the epistemic variables ($R_i$ and $R_j$) and determining their values.\footnote{Ibid., 520–521.}

The crux of second-order balancing is that constitutional rights principles, as optimization requirements, require not only substantive but also epistemic optimization:

“The realization of constitutional rights increases when they can only be limited on the grounds of premises the truth of which is assured. If premises below the level of certainty were nevertheless admitted, the realization of constitutional rights would increase where the premise most favourable for the right were chosen.”\footnote{Ibid., 520.}

To put it another way, the epistemic optimization of constitutional rights requires, first and foremost, that the degree of the certainty of the premises underlying an interference with constitutional rights be as high as possible. In fact, the epistemic optimization is required not only by constitutional rights but also by other substantive principles.
However, the epistemic optimization of constitutional rights is only one side of the equation. The formal principle of democracy requires that the competence of the democratically legitimated legislature, including the competence to take decisions under conditions of uncertainty, be optimized. In other words, it demands that the legislature should be permitted to ground its interference with constitutional rights in uncertain premises.\textsuperscript{21} In Alexy’s view, the second-order balancing of a substantive principle with a formal principle is unavoidable because “constitutional rights as epistemic optimization requirements collide with the formal principle of the democratically legitimated legislature.”\textsuperscript{22}

This collision, as with the collision of principles in general, is resolved by establishing a conditional relation of precedence between the formal principle and the substantive (constitutional rights) principle.\textsuperscript{23} In the epistemic model, Alexy regards the three stages of the epistemic values as the conditions of such a precedence relation. If the epistemic value of an empirical or normative assumption is “reliable” or “certain” (r), the constitutional rights principle prevails over the formal principle. In this case, the substantive value on the side of the constitutional right is by no means influenced by the formal principle. However, if the epistemic value is “plausible” (p) or even “not evidently false” (e), the formal principle takes precedence over the constitutional rights principle. Under such circumstances, since the degree of the certainty of the underlying assumption is lower than 1, the result of second-order balancing, as stated above, is that the impact of the substantive values is reduced by the formal or procedural considerations, as required by the formal principle.\textsuperscript{24}

To sum up, in Alexy’s epistemic model, a formal principle, such as the principle

\textsuperscript{21} Alexy, A Theory of Constitutional Rights (n. 3), 416–417.
\textsuperscript{22} Alexy, Formal Principles (n. 1), 521.
\textsuperscript{23} Alexy calls this “the Law of Competing Principles.” See Alexy, A Theory of Constitutional Rights (n. 3), 50–54.
\textsuperscript{24} Alexy, Formal Principles (n. 1), 521–522.
of democracy, only comes into play in second-order balancing. Its function is to provide a justification for permitting the legislature to ground its interference with constitutional rights in uncertain premises, and its effect is to reduce the impact of the substantive weight of the principles in first-order balancing.

IV. Some Problems in Alexy’s Theory of Formal Principles

Alexy’s epistemic model is mainly, even exclusively, intended to characterize the relationship between constitutional rights and democracy in terms of the principles theory. His principal aim is to provide a theoretic construction of the epistemic discretion of the legislature. Some authors, such as Borowski, as well as Klatt and Meister, have doubted that formal principles (or the role they play in assigning the epistemic values) are able to establish the epistemic discretion. Whether Alexy’s turn to the epistemic model can meet this criticism, however, is not my main concern. Rather, this paper is interested in the question of whether the basic idea of his epistemic model can serve as an adequate foundation for a general theory of formal principles.

In my view, there are at least two problems still unresolved by Alexy’s recent theory of formal principles. The first is concerned with the connection between epistemic uncertainties and formal principles. Weighing and balancing under conditions of uncertainty is a common phenomenon in legal and general practical reasoning. By incorporating the epistemic variables into the weight formula, Alexy has taken account of the epistemic uncertainty in first-order balancing. In this way, he goes further in claiming that “the formal principles are represented in first-order

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26 For Alexy’s reply to Borowski’s and Klatt’s criticism, see Alexy, Formal Principles (n. 1), 522–524.
balancing according to this formula."27

However, taking account of the epistemic uncertainty in balancing is one thing; why deference should be shown to an authority and who has authority to take decisions in a situation of uncertainty is another. The latter is the focus of formal principles, 28 but the weight formula is silent on this issue. As a formal structure of balancing, it does not tell us who has the decision-taking competence on matters of epistemic uncertainty, nor does it tell us to whose judgment we should defer in the face of epistemic uncertainty.

In fact, the weight formula is neutral with respect to the division of the decision-taking competences; it is even compatible with non-deference to any authority. Anyone who has to strike a balance under conditions of uncertainty can rely on his own empirical or normative assumptions and employ the complete weight formula to reach his decision without surrendering his judgment to an epistemic or practical authority. The epistemic variables in the weight formula do not tell us why we should defer to the judgments of an authority in cases of uncertainty either.

Hence, the epistemic variables in the weight formula are not necessarily connected with formal principles. Alexy’s view on the relation between epistemic uncertainties and formal principles is too simple when he says that formal principles are represented in first-order balancing by inserting the epistemic factor \( R \) into the weight formula. On the contrary, the epistemic factor by itself cannot represent or explain the role and function of formal principles.29 In order to argue for the need for formal principles in cases of epistemic uncertainty, some other considerations are required.

27 Ibid., 522.
28 Alexy, A Theory of Constitutional Rights (n. 3), 424; see also Klatt & Meister, The Constitutional Structure of Proportionality (n. 16), 141.
29 A similar criticism can be found in Borowski, Formelle Prinzipien und Gewichtsformel (n. 2), 177.
The second problem is concerned with the effect of formal principles on the weight of substantive principles. In the epistemic model, if a formal principle takes priority over a substantive principle in second-order balancing, then the epistemic value on the side of the substantive principle is lower than 1, and, accordingly, the weight of the substantive values at the same side will be reduced.\(^{30}\) In this way, a formal principle functions as an *attenuator*, that is, a consideration that makes the weight of a substantive principle weaker.

In the combination model, the weight-affecting function of formal principles is constructed in a different way. In this model, a formal principle can directly participate in first-order balancing in collaboration with a substantive principle. Through an additive accumulation in the weight formula,\(^{31}\) the formal principle can strengthen the collaborative substantive principle by adding the weight to its side. On this account, a formal principle functions as an *intensifier*, that is, a consideration that makes the weight of a substantive principle greater.\(^ {32}\)

The original aim of the combination model is to reconstruct the relative authoritative character of legislative decisions.\(^{33}\) This assumes that a legislative decision, such as a statutory rule, can be reconstructed as the result of a balancing of substantive principles, and its authority is established by a formal principle requiring the balancing decision of the legislature to be respected.\(^{34}\) Owing to the intensifying effect of the formal principle, the substantive principle underlying the decision, which

\(^{30}\) Alexy, Formal Principles (n. 1), 522.

\(^{31}\) For the cumulative operation in the weight formula, see Alexy, The Weight Formula (n. 15), 26–27.

\(^{32}\) “Intensifier” and “attenuator” are terms borrowed from Jonathan Dancy, Ethics without Principles, Oxford 2004, 42.


states the goal the legislator intends to achieve by laying down the decision, will acquire a greater weight than it would have if it had not the support of the formal principle. Thus, it becomes more difficult to trump the legislative balancing decision—that is, to override the substantive and formal principles counting in favor of this decision—by the countervailing substantive principles. In such a way, the authoritative dimension of legislative decisions is reinforced by the formal principle.\(^{35}\)

Now we can see an interesting contrast between the epistemic and the combination model. In the former, the participation of formal principles attenuates the weight of the colliding principle; in the latter, it intensifies the weight of the collaborative principle. As intensifiers, formal principles contribute to establishing the authority of certain legal decisions. The authoritative decisions, as Alexy maintains, are precisely the distinctive optimization objects of formal principles.

However, if Alexy has abandoned the combination model, how can his theory account for the authoritative character of legislative balancing decisions without resort to the weight-intensifying effect of formal principles? If formal principles as attenuators reduce the weight of a competing substantive principle, how can the epistemic model circumvent the same criticism of the combination model that it will transform a disproportional infringement of constitutional rights into a proportional one? These questions remain unresolved in Alexy’s recent theory of formal principles.

In short, Alexy’s view on formal principles is plausible when he says that formal principles, which demand deference to some legal authority, come into play only when epistemic uncertainties about the relationship between substantive principles arise. Nevertheless, as has been pointed out, it is not clear why one should defer to an authority when one is faced with epistemic uncertainty about first-order balancing;

\(^{35}\) For a more detailed discussion, see Borowski, Formelle Prinzipien und Gewichtsformel (n. 2), 188–194.
neither is it clear in what way formal principles affect the assessment of the weight of substantive principles so that they can reinforce the authoritative character of certain legal decisions. In order to deal with these problems, I will draw on some insights from Stephen Perry’s conception of second-order reasons to make some refinements to Alexy’s theory of formal principles.36

V. Principles, Reasons, and Uncertainty about Balancing

My starting point is Alexy’s view of principles as normative reasons. According to Alexy, rules and principles are reasons for norms—that is, propositions or facts about what ought to be done—thereby being normative reasons for action.37 In other words, they are considerations explaining or justifying why a person ought to do something.

Alexy contends that rules and principles are different kinds of reasons: whereas the former are normally definitive reasons, the latter are always prima facie or, more accurately, pro tanto reasons.38 Principles are pro tanto reasons in that they have a dimension of weight or strength. A principle by itself cannot warrant that an action for which it is a reason ought to be done, for it might be outweighed by another reason. As a pro tanto reason, a principle needs to be weighed against other reasons in order to determine what ought to be done in a given type of situation.39

Yet it is not very precise to say that principles are normative reasons for action.

38 Alexy, A Theory of Constitutional Rights (n. 3), 57–59.
As stated at the outset, Alexy defines principles as optimization requirements. The object of optimization is a goal that should be realized to the greatest extent possible. The goals prescribed by substantive principles are certain values or interests, such as the freedom of expression or the protection of the environment. However, a goal by itself does not indicate for which action it is a reason. For instance, the value of freedom of speech or the interest in the protection of the environment does not point out what action one ought to perform or to refrain from in order to promote the value or the interest in question. The necessary information is offered by certain facts, such as the fact that deregulation of hate speech promotes the value of the freedom of expression or that granting a license for a polluting industry leads to environmental destruction. These facts, instead of the goals on their own, are reasons for performing or refraining from a certain action.\(^{40}\)

Hence, if a principle requires a goal to be optimized, the fact that $\phi$-ing contributes to the realization of the goal is a *pro tanto* reason to $\phi$. Conversely, if $\phi$-ing detracts from the goal, it is a *pro tanto* reason against $\phi$-ing. Both are reasons provided by the principle. Moreover, we might say, the more an action contributes to (or detracts from) the goal (this corresponds to the variable $I$ in the weight formula) or the more important the goal is (this corresponds to the variable $W$), the stronger is the reason for (or against) this action.\(^{41}\)

Normative reasons provided by substantive principles are facts which show that performing or refraining from an action leads to some valuable or desirable consequence.\(^{42}\) Reasons based on goals, values, or principles are *pro tanto* reasons,

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\(^{40}\) On goals, principles and reasons, see *Hage & Peczenik, Law, Morals and Defeasibility* (n. 37), 307–308.

\(^{41}\) *Hage & Peczenik, Law, Morals and Defeasibility* (n. 37), 308.

and the conflict between pro tanto reasons is resolved by assessing their relative weight or strength. In such a situation, one has to decide what ought to be done on the balance of reasons, and what one ought to do is the action that one has a decisive reason—that is, a reason that is stronger than any other reason against this action—to do.

So far, I have only elaborated on how substantive principles give normative reasons. Before turning to the more complex issue about what kind of reasons formal principles are, we should recall that formal principles, as Alexy argues, come into play only when epistemic uncertainty about the balance of substantive principles arises. Alexy even holds that the existence of formal principles leads to a divergence between the ontic and the epistemic, namely, a gap between what the balance of reasons really requires and a person’s, especially an authority’s, judgement about what the balance of reasons requires. 43 In order to grasp what this gap is, it is helpful to look at Perry’s distinction between the objective balance of reasons and the subjective determination of what ought to be done.

Although reasons are understood as facts, an agent, when deciding what ought to be done on the balance of reasons, does not always possess true information about all relevant facts that figure in his process of reasoning. Rather, at the time of deliberation, he often has to rely on his beliefs about those facts in order to reach a practical decision, even if his beliefs might be mistaken or afterwards proven to be false. Since we do not always know whether the reasons relevant to our decisions exist, our practical reasoning depends mostly on our beliefs rather than on facts. 44

In Perry’s terminology, the balance of reasons understood as facts will be referred to as the objective balance of reasons. It is carried out by an agent who

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43 Alexy, A Theory of Constitutional Rights (n. 3), 422.
44 Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 925–926.
reasons correctly and possesses true information about all of the normatively relevant facts in a particular situation, which include not only facts that serve as normative reasons, but also background conditions that will turn a certain fact into a normative reason. For example, the fact that carrying an umbrella will fulfill my desire to avoid getting wet is a reason to do it, and this fact is a reason to carry an umbrella only under the circumstances of a rainy day, which are the background conditions of this reason.

By contrast, a person’s subjective determination is his practical judgement based on incomplete or erroneous information. To quote Perry:

“A given person’s process of reasoning about what ought to be done in a particular situation, where it is now possible that the person might not possess all relevant information and that he or she might make mistakes, will be referred to as that person’s subjective (practical) determination of what ought to be done.”

A person’s subjective determination can be understood as his balancing decision—namely, his subjective judgement of what the objective balance of reasons requires—on the grounds of his beliefs about the normatively relevant facts. If these beliefs are all true and he reasons correctly in the process of balancing, his subjective determination will coincide with the objective balance of reasons. If some of his beliefs are false, his subjective determination might be contrary to the objective balance of reasons.

However, as emphasized above, our legal and practical reasoning often take

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46 On the distinction between reasons and their background conditions, see Wang & Wang, Rules as Reason-Giving Facts (n. 42), 202–203.
47 For the sake of convenience I will use the word “person” or “agent” to refer to both persons and institutions, such as the legislature or the court.
48 Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 922.
place under conditions of uncertainty. The characteristic of a person’s subjective
determination is that he is often uncertain about the truth of his beliefs or assumptions
about the relevant facts and thus he cannot definitively know what the objective
balance of reasons requires. This uncertainty may due to the incomplete or erroneous
information about whether and to what degree an action will contribute to the
realization of a goal; it may also result from the possible inaccuracy of his beliefs
about the background conditions.49 Both kinds of uncertainty have to do with the
person’s subjective assessment of the relative strength of the relevant reasons in a
particular situation.

As Perry says:

“Our subjective determination of what ought to be done takes into direct account, and our practical
conclusions are partially determined by, the fact and extent of our uncertainty about the truth of
propositions which state that the facts which could figure in the objective balance of reasons obtain (or
do not obtain).”50

Due to the epistemic uncertainty, the information available to an agent’s subjective
practical determination is often probabilistic. It is quite common that an agent relies
on the probability of a proposition (or his beliefs on the probability) to reason about
what to do, even though the uncertainty about the truth of the proposition may
undermine the strength of the relevant reasons in a particular situation.

To take an ordinary example to illustrate it: in deliberating on whether to carry an
umbrella today, I strike a balance between two reasons—the fact that carrying an

49 Alexy distinguishes between empirical and normative uncertainty. Whereas the former is concerned
with the uncertainty about empirical premises, the latter arises when it is unclear about the substantive
weight of principles. See Alexy, A Theory of Constitutional Rights (n. 3), 414–415. In my view, the two
kinds of uncertainty are closely intertwined and cannot be separated from each other, but I will not
pursue this issue here.

50 Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 924–925.
umbrella will avoid me getting wet and the fact that carrying an umbrella will cause inconvenience. If I definitively knew that it was going to rain today, the former reason would prevail; on the contrary, if I knew that it was not going to rain today, then the latter reason would be decisive. Now, suppose the fact of the matter is that I do not know whether it will rain today. I just believe that there is a relatively low chance of rain because I hear that the weather forecast is that there is a 20% chance of rain today. I have to take this uncertainty into account in determining what I ought to do.

The strategy in the face of this uncertainty, so Perry argues, is “to act as though I have a reason to carry an umbrella, although I will probably discount its weight to reflect the perceived likelihood that it will not rain.”51 In other words, the reason for carrying an umbrella might be treated as having a lower weight than I would judge it if I knew that it was indeed going to rain. Consequently, the reason for carrying an umbrella will be more easily outweighed by the inconvenience of carrying an umbrella than it would be in the objective balance of reasons.

Thus, a divergence exists between the ontic and the epistemic just because our subjective determination is not always in accordance with the objective balance of reasons. However, in cases involving epistemic uncertainty, since at the time of deliberation we do not know what the objective balance of reasons requires, we cannot ex ante ascertain whether the divergence exists either. We can at most say that there might be a divergence because our subjective judgement of what the balance of reasons requires might be mistaken. On this account, the divergence and the uncertainty are two sides of the same coin: the possibility of a divergence between the ontic and the epistemic is nothing more than the fallibility of our beliefs on which our judgements about the balance of reasons are based.

Contrary to Alexy’s view, the possibility of the divergence is not due to the effect
of formal principles but results from taking epistemic uncertainty into consideration in our practical reasoning. Although the phenomenon of epistemic uncertainty, as stated in the previous section, does not necessarily lead to the need for formal principles, in the following section, I will argue that formal principles, which require us to defer to authoritative decisions, can be a useful device for dealing with uncertainty about balancing. This will explain why formal principles take effect only when epistemic uncertainty arises.

VI. Formal Principles as Second-Order Reasons

Suppose someone deciding what to do on the balance of reasons reaches the practical conclusion that he ought to φ in a particular situation. This decision also constitutes a conclusive reason for him to φ. Following Raz’s terminology, reasons for or against an action will be referred to as first-order reasons. In this sense, decisions, rules—given that they are reasons for the actions they require—and reasons provided by substantive principles are all first-order reasons.52

In our practical reasoning, there are not only first-order reasons but also second-order reasons. A second order reason, as Raz defines it, is a reason to act for a reason or to refrain from acting for a reason. Raz calls the former “positive second-order reason” and the latter “negative second-order reason” or “exclusionary reason.”53

Now we can see what kind of reasons formal principles are. A formal principle

52 It should be noted that rules, in Raz’s view, are both first-order reasons and exclusionary reasons for disregarding certain conflicting reasons. See Joseph Raz, Practical Reason and Norms, Oxford 1999, 58–59. But I will put aside this issue here. For an elaboration on the exclusionary character of rules in terms of Alexy’s principles theory, see Wang, Are Rules Exclusionary Reasons in Legal Reasoning? (n. 34), 39–44.

requires an agent to defer to an authority’s decision about what ought to be done whenever the agent does not definitively know what the objective balance of reasons requires. In other words, it requires the agent in the face of epistemic uncertainty to take authoritative directives instead of his own practical judgements as his conclusive reasons for certain actions (or decisions). An authority’s decision about what one ought to do, like the agent's own subjective practical determination, represents its judgement about the balance of reasons and is also a first-order reason for the action that one ought to do. 54 Thus, a formal principle can be regarded as a special kind of second-order reason: it is both a reason to act on the decision of some authority and a reason not to act on one’s own judgement of what the objective balance of reasons requires.

It should be noted that formal principles as negative second-order reasons are somewhat different from Razian exclusionary reasons, which are reasons not to act on a reason that figures in the objective balance of reasons. Formal principles do not silence or replace first-order reasons provided by substantive principles, nor can they preempt the balancing of first-order pro tanto reasons. Rather, formal principles are what Perry terms “subjective exclusionary reasons,” which are reasons to disregard one’s subjective assessment of the balance of reasons. 55 Understood in such a way, the point of formal principles is to determine whose judgment about what the objective balance of reasons requires should prevail in a given type of situation, 56 but they cannot alter the objective balance of reasons.

Characterizing formal principles as a special type of second-order reasons has not yet touched on the question of why we should defer to the decisions of some

54 This is because, according to Raz, authoritative directives are meant to be based on and to reflect reasons which apply to the agent in the circumstances in question, see Joseph Raz, The Morality of Freedom, Oxford 1986, 47.
55 Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 928–929.
56 A similar view is Sieckmann’s model of competing conceptions of law. See Sieckmann, Recht als normatives System (n. 33), 200–204.
authority when we are faced with epistemic uncertainty. An answer to this question, as Perry suggests, is that reliance on subjective second-order reasons is normally a rational strategy for dealing with uncertainty about balancing.

In Perry’s view on practical authority, if an agent realizes that he himself might not know what the objective balance of reasons requires in a given situation, but knows that his own judgement about the balance of reasons, compared to another person’s judgement, is relatively untrustworthy, then it is rational for him to make his subjective determination of what ought to be done by deferring to that other person’s judgment about what the objective balance of reasons requires.57 In other words, accepting formal principles as reasons to act on an authority’s directives is only sensible when the authority’s judgement is more reliable than the agent’s own. In such a case, deference to the authority is a rational strategy in that agents are likely better to comply with the objective balance of reasons by acting on the directives instead of on their own judgements.58

The reliability of an authoritative judgement is based on some formal features which an authority needs to possess. For example, the authority is wiser or has more expert knowledge, is in a superior position to solve the coordination problem, is less likely to be influenced by irrelevant considerations, such as bias or emotional factors, or its organization and decision-making procedure is more efficient or competent to achieve a correct or acceptable result, and so on.59 All these features are “non-substantive” or “formal” in the sense that they do not turn on the merits of actions required by authoritative directives but on the capability and qualification of an authority.

57 Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 929–930.
58 This is the main thrust of the normal justification thesis, which is the core argument of Raz’s service conception of authority, see Raz, The Morality of Freedom (n. 54), 53–57.
59 Ibid., 75.
In this regard, the considerations of formal principles are not concerned with the content of authoritative directives and thus provide a *content-independent justification* for following the directives. By contrast, first-order reasons based on substantive principles are content-dependent because they are facts which show that an action is desirable or valuable in some respect.\(^6^0\)

This leads us to another problem. In Alexy’s epistemic model, formal principles can be weighed against substantive principles at the level of second-order balancing. How can formal principles as second-order reasons, however, be balanced against reasons based on substantive principles if they are reasons of different orders? The answer I suggest is that substantive principles provide not only first-order but also second-order reasons, and the latter can indeed be balanced against formal principles.

Recall that Alexy argues that substantive principles, such as those of constitutional rights, require not only substantive optimization but also epistemic optimization. Their epistemically optimal realization is that the truth of the premises underlying an interference with substantive principles is ascertained. In other words, it requires that one’s judgement about the balance of reasons should rely on true information rather than uncertain assumptions about the relevant facts. Thus, as epistemic optimization requirements, substantive principles generate both reasons to act on the objective balance of reasons and reasons not to act on a person’s—whether or not the person is an authority—practical judgment based on uncertain assumptions. Such reasons, just as formal principles, are second-order reasons.

Since one’s subjective determination might be contrary to what the objective balance of reasons requires, second-order reasons based on substantive principles may

\(^6^0\) On the notion of content-independent justification, see *Joseph Raz*, Between Authority and Interpretation: On the Theory of Law and Practical Reason, Oxford 2009, 210–213. It should be noted that the content-independence of formal principles does not mean that they are independent of any value. Rather, formal principles are concerned with the goodness of abiding by the decisions of some authority, such as the consideration that following authoritative directives promotes the value of democracy or legal certainty.
conflict with formal principles, for example, a conflict between a positive second-order reason to act on an authority’s decision and a negative second-order reason not to act on it. As Raz says, the resolution of the conflicts between second-order reasons, as with that of first-order conflicts, depends on the strength of the conflicting reasons involved.\(^{61}\) This is exactly what Alexy calls second-order balancing, and what is at issue here is to decide whether and to what extent one should defer to an authority’s judgement.

At first glance, second-order balancing seems superfluous. Drawing on formal principles is just a rational strategy to deal with epistemic uncertainty. As Alexy says, “[t]he moment uncertainty disappears they go out of action again.”\(^{62}\) Hence, if one knows what the objective balance of reasons requires, then, of course, one ought to act in accordance with the objective balance of reasons. On the contrary, if one does not know what the objective balance of reasons requires, but knows that there exists an authority whose practical judgment is more dependable than one’s own, then one should defer to the authority’s judgment about what ought to be done. Nonetheless, second-order balancing is still indispensable in the determination of the limits of deference. Before turning to this issue, let us at first have a look at how formal principles can affect the weight of the relevant first-order reasons in one’s subjective practical determination.

As has been indicated, whenever one’s subjective practical determination—no matter whether it is an authority’s or a subject’s decision—is grounded in some uncertain assumptions about the normatively significant facts, the strength of the relevant reasons assessed in one’s practical reasoning will be discounted to reflect the

\(^{61}\) Raz, Practical Reason and Norms (n. 52), 47. Perhaps we might say that a substantive principle has not only a first-order weight but also a second-order weight relative to the colliding formal principle, but I will leave the matter open of whether the second-order weight is identical to its first-order weight.

\(^{62}\) Alexy, A Theory of Constitutional Rights (n. 3), 424.
perceived likelihood of the assumptions. In Alexy’s epistemic model, the strength-reducing effect of epistemic uncertainty is also reflected in his claim that “if epistemic values are lower than 1, the impact of substantive values is reduced accordingly.”63

Actually, this attenuating effect is due to the epistemic uncertainty of the underlying assumptions rather than the power of formal principles. Epistemic uncertainty is conceptually or ontologically prior to formal principles. Even if there are no formal principles, one still has to make one’s subjective determination of what ought to be done under conditions of uncertainty. As the previous example of carrying an umbrella has shown, the agent does not defer to another’s judgment in deciding what to do, but all the same, the weight of the putative reasons in his practical reasoning will be reduced by the lowered epistemic quality of the assumptions underlying his own practical decision.

Since the epistemic quality of information possessed by an authority might be different from that possessed by an ordinary agent, the latter’s judgement about the strength of the relevant reasons may diverge from the former’s. As subjective second-order reasons, what formal principles demand is a systematic bias in favor of the authority’s assessment of the relative weight of the relevant reasons in the agent’s deliberation about how these reasons should be weighed. To borrow Perry’s phrase, formal principles can be viewed as reweighting reasons, which are reasons “to treat a reason as having a greater or lesser weight than the agent would otherwise judge it to possess in his or her subjective determination of what the objective balance of reasons requires.”64

63 Alexy, Formal Principles (n. 1), 515.
64 Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 932. Perry thinks that an exclusionary reason in Raz’s sense is only the special case of a reweighting reason: it is a reason to treat some conflicting reasons as having zero weight.
In fact, as reweighting reasons, the effect of formal principles is not on the substantive weight of pro tanto reasons in the objective balance but rather on one’s assessment of it. Only when understood in such a way can a theory of formal principles be immune to the criticism that they will turn a disproportional interference with substantive principles into a proportional one.65

Finally, we can see how formal principles contribute to the entrenchment of authoritative decisions and under what circumstances deviating from authoritative decisions is justifiable. As positive second-order reasons, formal principles are reasons to act on the decisions of authorities. In order to overrule an authoritative decision by means of a substantive principle \( P \), one has to show that not only the first-order reason based on \( P \) outweighs those counting in favor of the decision, but also the second-order reason provided by \( P \) overrides the formal principle requiring one to defer to the decision. In other words, \( P \) must defeat all competing reasons both in first-order and second-order balancing; it is therefore more difficult to override an authoritative decision than simply to outweigh its underlying substantive principles.

On this construction, a deviation from authoritative decisions can be justified in one of the following two scenarios: The first is when one knows what the objective balance of reasons requires and that the first-order reason provided by the substantive principle opposed to an authoritative decision is the decisive one in the objective balance of reasons. As mentioned above, reliance on formal principles is a strategy for dealing with uncertainty. If one is certain beyond doubt that the authoritative decision is contrary to the objective balance of reasons in a given situation, there will be no epistemic uncertainty, and formal principles will stop working here. In such a case,

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65 I have to retract my opinion in an earlier article, where I mistakenly thought that formal principles can increase the objective strength of some principles in first-order balancing, thereby reinforcing the binding force of authoritative directives. See Wang, Are Rules Exclusionary Reasons in Legal Reasoning ? (n. 34), 48.
what one ought to perform is the action required by the objective balance of reasons.

The second scenario is when the uncertainty of the assumptions on which an authority’s judgment is based reaches such a degree that the judgment is no longer reliable. For example, in Alexy’s epistemic model, if the reliability of the premises underlying a legislative infringement of constitutional rights is lower than “not evidently false,” “[s]uch an extremely bad epistemic quality destroys the power of even the strongest substantive reasons for interference with constitutional rights nearly completely.” 66 These substantive reasons, together with the legislative decision they support, can be very easily overridden by a counter-principle with a fairly good epistemic quality.

In this situation, even if one is not quite certain about what the objective balance of reasons requires, it is no longer reasonable to have resort to formal principles to argue for deference to the legislative decision, because following authoritative directives grounded in extremely uncertain assumptions can hardly increase one’s chance of acting in accordance with the objective balance of reasons. Thus, to borrow Perry’s phrase again, formal principles are epistemically-bounded reasons, namely, subjective second-order reasons that require a person to defer to an authority’s practical judgement only within a specified epistemic bound. 67

Let me use “the epistemic threshold” to refer to a certain degree of certainty, below which one should cease to defer to the practical judgement of another with respect to a given type of situation. 68 The epistemic threshold need not be uniquely fixed to an extremely low epistemic value in every case. Rather, it can be determined

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66 Alexy, Formal Principles (n. 1), 515.  
67 Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 942.  
68 For a similar conception of epistemic threshold, see Borowski, Formelle Prinzipien und Gewichtsformel (n. 2), 172–173. In Perry’s theory of second-order reasons, the epistemic threshold is defined by the strength of an agent's conviction that the authority’s judgement has made a mistake. See Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 934. But this can be put in terms of uncertainty: the greater the uncertainty of the underlying premises is, the stronger is the agent’s conviction that a mistaken has been made.
by various considerations in different contexts, and the limits on the extent to which deference should be shown to the practical judgment of authorities may vary from person to person and situation.69

An important, though not the only, consideration in determining the epistemic limitation on the deference to the judgement of authorities is the balancing of second-order reasons. The second-order reason based on a formal principle requires one to defer to the judgement of authorities no matter how uncertain its underlying premises are. On the contrary, the second-order reason provided by a substantive principle requires one not to defer to any subjective judgement based on uncertain premises but only to act on the objective balance of reasons. If the formal principle took absolute precedence, the epistemic threshold would be very low, even nearly zero. On the other hand, if the substantive principle took absolute precedence, there would be a very high epistemic threshold that could hardly be crossed in most cases.

Since none of those two principles has an absolute priority over the other, the epistemic limitation has to be determined by a case-by-case second-order balancing. This leads to a variable epistemic threshold, which requires different degrees of epistemic quality correlating with the different strengths of the substantive second-order reason. Such an idea can be stated in the following proposition: the stronger the second-order reason provided by a substantive principle is, the greater must be the certainty of the underlying assumptions of the authoritative decision counting against this principle.

If the second-order strength of a substantive principle, like its first-order strength, also depends on the intensity of interference (the degree of its non-realization), the proposition above will be just an alternative formulation of Alexy’s epistemic law of

69 Perry, Second-Order Reasons, Uncertainty and Legal Theory (n. 36), 935–941; see also Borowski, Formelle Prinzipien und Gewichtsformel (n. 2), 173.
balancing, which says: “the more intensive an interference in a principle is, the greater must be the certainty of its underlying premises.”\textsuperscript{70} However, it is an open question whether the first-order and the second-order strength of a substantive principle are congruent.

VII. Conclusion

In this paper, I recast formal principles as a special type of second-order reasons: they are both reasons to act on the decisions of some authority and reasons to disregard one’s own judgement about the balance of reasons. Reliance on formal principles can be regarded as a rational strategy for dealing with uncertainty. As reweighting reasons, formal principles require one to accept an authority’s assessment of the first-order strength of substantive principles when one is faced with epistemic uncertainty about balancing. As epistemically-bounded reasons, formal principles require one to defer to an authority’s practical judgment only when the epistemic quality of its underlying assumptions is beyond a certain threshold, and the limits of deference to authoritative decisions are determined by a second-order balancing between formal and substantive principles.

\textsuperscript{70} Alexy, A Theory of Constitutional Rights (n. 3), 418–419.