



# Arguing to Defeat: Eristic Argumentation and Irrationality in Resolving Moral Concerns

Rasim Serdar Kurdoglu<sup>1</sup> · Nüfer Yasin Ateş<sup>2</sup>

Received: 12 September 2019 / Accepted: 19 October 2020 / Published online: 26 October 2020  
© Springer Nature B.V. 2020

## Abstract

By synthesizing the argumentation theory of new rhetoric with research on heuristics and motivated reasoning, we develop a conceptual view of argumentation based on reasoning motivations that sheds new light on the morality of decision-making. Accordingly, we propose that reasoning in eristic argumentation is motivated by psychological (e.g., anxiety reduction) or material (e.g., vested interests) gains that do not depend on resolving the problem in question truthfully. Contrary to heuristic argumentation, in which disputants genuinely argue to reach a practically rational solution, eristic argumentation aims to defeat the counterparty rather than seeking a reasonable solution. Eristic argumentation is susceptible to arbitrariness and power abuses; therefore, it is inappropriate for making moral judgments with the exception of judgments concerning moral taboos, which are closed to argumentation by their nature. Eristic argumentation is also problematic for strategic and entrepreneurial decision-making because it impedes the search for the right heuristic under uncertainty as an ecologically rational choice. However, our theoretical view emphasizes that under *extreme* uncertainty, where heuristic solutions are as fallible as any guesses, pretense reasoning by eristic argumentation may be instrumental for its adaptive benefits. Expanding the concept of eristic argumentation based on reasoning motivations opens a new path for studying the psychology of reasoning in connection to morality and decision-making under uncertainty. We discuss the implications of our theoretical view to relevant research streams, including ethical, strategic and entrepreneurial decision-making.

**Keywords** Heuristics · Eristic argumentation · Ethical decision-making · Rationality · Irrationality

## Introduction

In organizations, managers often use their discretion to resolve moral disputes (Hiekkataipale and Lämsä 2019, 2017). Organizational norms and codes (Coughlan 2005; Fotaki et al. 2019) in addition to institutional legitimacy standards (Kurdoglu 2019a) set some boundaries on managerial discretion. Nonetheless, the ethical quality of managerial moral judgments still largely depends on how managers reason when exercising their discretion to resolve moral disputes (Huhtala et al. 2020).

When resolving moral disputes, a decision-making manager cannot resort to *formal rationality* (i.e., deductive logic) because formal rationality depends on logical or probabilistic rules that inherently exclude subjective preferences,<sup>1</sup> which are pivotal to moral choices. However, moral judgments are amenable to *practical rationality*, which involves establishing values by reasoning and argumentation instead of by arbitrary will (Perelman 1980, 1982). Despite its subjective and disputable outcome, practical rationality is desirable because it genuinely strives for “finding ‘good reasons’

✉ Rasim Serdar Kurdoglu  
r.s.kurdoglu@bilkent.edu.tr  
Nüfer Yasin Ateş  
nufer.ates@sabanciuniv.edu

<sup>1</sup> Faculty of Business Administration, Bilkent University, Ankara, Turkey

<sup>2</sup> Sabancı Business School, Sabancı University, İstanbul, Turkey

<sup>1</sup> Many eminent philosophers (Descartes 1998/1637; Hume 2006/1740; Leibniz 1978/1875) conceive of values as completely outside the realm of rationality because they recognize formal rationality as the sole form of rationality. Weber (1978) refers to formal rationality as instrumental rationality and contrasts it with substantive rationality, which involves values in decision-making. For Weber (1978), substantive rationality is irrational from the point of view of instrumental rationality (Brubaker 2006). Overall, such conceptualizations of rationality presume that value choices are set in an arbitrarily irrational way. By contrast, Perelman and Olbrechts-Tyteca (1969) propose that value choices can be determined through practical rationality—a different form of rationality.

to justify a decision” (Perelman 1979, p. 32). Practical rationality solves problems, including moral ones, through justifiable heuristic principles comprising simple short-cut solutions originating from experience, social conventions or innate tendencies (Gigerenzer et al. 2016; Gigerenzer and Gaissmaier 2011). However, the use of practical rationality is open to the important threat of reasoning that is not motivated toward truthful problem-solving as enacted by eristic argumentation (Perelman and Olbrechts-Tyteca 1969; Walton 1999; Wolf 2010).

While *heuristic argumentation* genuinely aims to solve the problem in question by truthful practical reasoning, *eristic argumentation* aims to defeat the disputant and win the debate while pretending to be reasonable and truthful (Perelman 1982; Perelman and Olbrechts-Tyteca 1969; Walton 1999). Eristic arguments pose serious ethical challenges because they conceal the untruthful reasoning behind arguments with spurious associations and dissociations that artificially subdue objections (Kurdoglu 2019a, 2019b; Walton 1999). Untruthful reasoning has been widely studied in the motivated reasoning literature (e.g., Kim et al. 2020; Kunda 1990; Noval and Hernandez 2019; Zimmermann 2020), which acknowledges that reasoning can be non-directional (motivated to accurately capture reality) as well as directional (motivated to justify a personally favored conclusion). In this regard, we posit that the reasoning behind managerial moral judgments should be crucially motivated for truthful (non-directional) problem-solving as opposed to the goal of eristic argumentation.

Eristic argumentation is ethically problematic because it conceals power abuses and arbitrary interpretations of reality. Corrupt and self-serving motivated reasoning (Aguilera and Vadera 2008; Noval and Hernandez 2019), as well as ethically controversial negotiating tactics (Sobral and Islam 2013), can manifest in eristic arguments. For instance, through eristic arguments, business managers can uncompromisingly deny responsibility for faulty products (e.g., scandals in airlines industry), mistreatment of their workers (e.g., sweatshops) or the pollution they cause (e.g., diesel engine emissions and greenwashing scandals) until the truth is undeniable. As Kunda (1990, p. 482) remarks, there are limits to being untruthful in reasoning: “...people motivated to arrive at a particular conclusion attempt to be rational and to construct a justification of their desired conclusion that would persuade a dispassionate observer”. As such, eristic arguments are specifically a threat to practically rational moral decision-making whenever reality is disputable. In this regard, as post-truth politics increase the use of fake news to shape public opinion (Baird and Calvard 2019), moral issues are more vulnerable than ever to eristic argumentation.

By elaborating on eristic argumentation and theorizing on the rationality of argumentation, our study offers important

theoretical implications for research related to moral judgment and decision-making. First, we contribute to the ethical decision-making literature (e.g., Bazerman and Sezer 2016; Hayibor and Wasieleski 2009; Sparks and Pan 2010; Tenbrunsel and Smith-Crowe 2008; Zeni et al. 2016; Zollo et al. 2017) by revealing the risks to ethics posed by the irrational nature of eristic argumentation. Second, we advance moral intuitionist approaches that posit that most moral judgments are formed unconsciously, and therefore irrationally, under the influence of intuition and emotions, where reasoning only produces post hoc rationalizations of intuitions of emotions (Dedeker 2015; Egorov et al. 2019; George and Dane 2016; Haidt 2001; Mcmanus 2019; Sonenshein 2007; Weaver et al. 2014; Zollo 2020; Zollo et al. 2017). Moral intuitionists implicitly recognize eristic argumentation through their emphasis on post hoc rationalizations; however, they neglect heuristic argumentation and heuristic decision-making, which can be conducted both consciously and unconsciously (Gigerenzer and Gaissmaier 2011; Kruglanski and Gigerenzer 2011). As such, rather than consciousness, we take reasoning motivations as the main rationality criterion. Third, we propose rational decision-making by heuristic argumentation as the appropriate choice to deal with moral problems, while we note that eristic arguments can be justifiably employed to deal with exclusively technical concerns (i.e., when moral concerns are already eliminated) under extreme uncertainty. Accordingly, we discuss implications for strategic and entrepreneurial decision-making influenced by uncertainties (e.g., Calabretta et al. 2017; Dunham 2010; Maitland and Sammartino 2015; McKelvie et al. 2011).

In the following pages, we first elaborate on the relationships between moral judgments, reasoning motivations and rationality. We then discuss how eristic and heuristic approaches in reasoning and argumentation differ from each other in terms of their ethical appropriateness for resolving moral and technical concerns. The mechanisms of heuristic and eristic argumentation and the philosophical background of distinguishing the two types of argumentation follow. Subsequently, we explain the interplay between varying levels of uncertainty and the two types of argumentation. Finally, we discuss the implications of our conceptual approach for relevant research streams.

## A Motivational View of Rationality: Moral Judgements and Reasoning Motivations

Extant research on moral judgments revolves around two views. One set of scholars—rationalists—focus on the factors that shape moral deliberations, such as personal (e.g., moral awareness), organizational (e.g., ethical climate) and issue characteristics (e.g., moral intensity)

(e.g., Craft 2013; Kish-Gephart et al. 2010; Lehnert et al. 2015; O'Fallon and Butterfield 2005; Schwartz 2016; Tenbrunsel and Smith-Crowe 2008; Treviño et al. 2006; Zeni et al. 2016). The other set of scholars—moral intuitionists—emphasize the dominance of unconscious factors, such as emotions and intuition, in forming moral judgments (e.g., Egorov et al. 2019; George and Dane 2016; Greenbaum et al. 2020; Haidt 2001; Latan et al. 2016; Mcmanus 2019; Weaver et al. 2014; Zollo et al. 2017). Examining beyond the issue of whether moral judgments are formed consciously by deliberation or unconsciously by intuition or emotion, we posit that reasoning motivation of decision-makers constitutes a critical distinction for rationality. Reasoning motivation is a better criterion than consciousness because all conscious cognitive processes can also be performed unconsciously (Hassin 2013), and both conscious and unconscious judgments can rely on the same inferencing rules—that is, logical, probabilistic or heuristic (Gigerenzer and Gaissmaier 2011; Kruglanski and Gigerenzer 2011).

While we offer our rationality distinction based on reasoning motivations, we recognize that a decision can be deemed rational or irrational depending on how one defines these terms. There is a clear semantic problem with these two words, and the “rationality debate” seems never-ending in the literature (e.g., Chater et al. 2018; Shafir and LeBoeuf 2002; Volz and Hertwig 2016). On the one hand, some scholars define rationality quite narrowly by exclusively associating it with logical rigor (e.g., Ariely 2010; Thaler 2016). For these proponents, anyone who violates logical or probabilistic rules is irrational. On the other hand, others argue that even a poor decision can be rational if it optimizes cognitive resources (Lieder and Griffiths 2020) or if it represents adaptation to uncertainty, that is, ecological rationality (Artinger et al. 2015; Goldstein and Gigerenzer 2002). Likewise, even rationalization of a seemingly absurd decision can be argued to be rational if the rationalization is conceived as useful for subsequent reasoning tasks that can be improved by prior spurious coherence between beliefs, desires and actions (Cushman 2020).

It seems that once the traditional procedural view of rationality (i.e., rationality following logical and probabilistic rules) is rejected, it is possible to argue that “human action is necessarily always rational” (Mises 1988, p. 18) as long as it satisfies some purposes. It is as if an action can be irrational only if it is purposeless, meaningless or random. However, if all purposeful beliefs were rational, it would be impossible to call superstitions irrational. Research shows that superstitious beliefs serve certain psychological purposes, such as relieving anxiety and increasing confidence (Damisch et al. 2010; Risen 2016; Walco and Risen 2017). Thus, irrationality is not purposeless behavior; rather, it has different bases and purposes than rationality.

According to the motivational view of rationality we suggest, rationality and irrationality are ultimately about belief formation and the underlying motivations that determine the reasoning behind a decision. The motivated reasoning literature (Barclay et al. 2017; Kahan 2013; Kim et al. 2020; Kunda 1990; Noval and Hernandez 2019; Zimmermann 2020) suggests that if individuals are motivated to achieve accuracy in their reasoning, they form their beliefs truthfully and engage accordingly in truthful reasoning. Conversely, when individuals are motivated to achieve other goals in their reasoning (e.g., removing fear or taking sides with the powerful), they distort their beliefs accordingly. We posit that all such kinds of untruthful reasoning, including bold superstitions and wishful thinking, are irrational in nature, not because they are purposeless but rather because their purposes are different: irrationality involves interest-seeking that does not depend on truthfully resolving the problem in question.

We posit that rationality represents reasoning that is motivated to achieve truthful problem-solving, whereas irrational reasoning is based on achieving psychological and material goals unrelated to truthful problem-solving. That is, with irrationality, beliefs are not formed by motivations for accuracy (e.g., Kunda 1990; Noval and Hernandez 2019; Zimmermann 2020), and vested interests are pursued at the expense of interests that could be achieved by solving the problem in question truthfully. To put it differently, rationality and irrationality, and their manifestations in different types of argumentation, serve different interests (which can be self-interested or altruistic). The practical rationality present in heuristic argumentation seeks interests that can be gained by resolving the problem in question in a truthful way (i.e., following heuristic principles in an open-minded way and aiming to capture reality accurately). By contrast, the irrationality present in eristic argumentation seeks interests (vested material or psychological interests) that can be gained without resolving the problem in question in a truthful way (i.e., loss of impartiality by dogmatic side-taking and blind faith).

Our motivational view of rationality has an important implication for moral judgments: when dealing with moral issues, managers should pursue rationality; that is, their reasoning should be motivated to pursue truthful problem-solving to provide justice to the moral problem on hand and avoid arbitrary decision-making, which is antithetical to ethics (Perelman 1980). This is an especially salient concern when two stakeholders need to communicate and exchange arguments to resolve a moral issue. As such, one would seek heuristic argumentation rather than eristic argumentation when settling moral disputes.

**Table 1** Definitions and core characteristics of argumentation types*Argumentation*

Produces justifications to approve or refute a view

Uses error-prone informal logic

Susceptible to linguistic or conceptual ambiguities

Can be used heuristically as well as eristically

If used heuristically, despite all logical imperfections, generates reasonable conclusions (albeit biased to reflect subjective choices) that are helpful for truthful problem-solving

If used eristically, generates self-serving conclusions according to the speaker's desires

*Heuristic argumentation*

Aims for persuasion by reasoning motivated for truthful problem-solving

Draws on heuristic rules or principles to establish inferences and preferences

Serves practical rationality from the perspective of the proposed motivational view of rationality

Generates reasonable conclusions (albeit logically imperfect and biased to reflect subjective choices)

*Eristic argumentation*

Aims to win the debate by reasoning motivated by interests that do not depend on resolving the problem in question truthfully

Expediently uses pretentious reasoning (i.e., sophistry) to defeat the disputed counterparty

Serves irrationality from the perspective of the proposed motivational view of rationality

Generates self-serving conclusions driven by the speaker's desires

## Eristic vs. Heuristic argumentation

Arguing is the verbal expression of thoughts to justify or reject a certain conclusion (Van Eemeren et al. 2014). Reasoning, the cognitive activity of thinking (Oaksford and Chater 2020), shapes arguing (Mercier and Sperber 2011; Oaksford and Chater 2020; Perelman and Olbrechts-Tyteca 1969). Arguing is usually employed for persuasion, that is, to elicit voluntary adherence to an advocated thesis by heuristic reasoning (Perelman and Olbrechts-Tyteca 1969). However, arguing can also be performed eristically, that is, simply to defeat one's opponent. In eristic argumentation, the desire to win subjugates the reasoning process leading to untruthful beliefs (e.g., wishful thinking) (Walton 1999). By comparison, in heuristic arguments, beliefs are formed realistically because the reasoning motivation is truthful problem-solving.

When used for persuasion, arguing employs practical (heuristic) reasoning (Van Eemeren et al. 2014), which is an imperfect but pragmatic use of logic and, unlike formal logical reasoning, is open to disputes about accuracy (Toulmin 2003; Van Eemeren et al. 1996; Van Eemeren and Henkemans 2017). While formal logic aims for perfectly logical and accurate conclusions (i.e., apodictic) through deductive reasoning, practical reasoning operates by approximations through heuristic rules and assumptions, essentially to infer claims of associations and dissociations between different phenomena (Perelman 1982). Practical reasoning attends to value preferences to reach subjectively justifiable decisions that draw on heuristic principles (Perelman and Olbrechts-Tyteca 1969), which is desirable for moral decision-making in terms of protecting morality from arbitrariness (Perelman 1980).

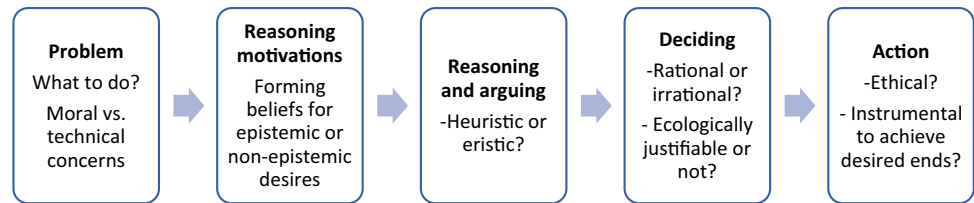
Due to its imperfect use of logic, the application of practical rationality in argumentation is susceptible to irrationality

because of eristic arguments that could be used to defeat a disputant rather than to seek a reasonable solution in practically rational terms (Perelman and Olbrechts-Tyteca 1969). We posit that contrary to heuristic argumentation, which serves practical rationality, inferencing in eristic argumentation is irrational in the sense that its reasoning does not aim for truthful problem-solving. Table 1 presents an overview of definitions of eristic and heuristic arguments.

Our conceptualization of *eristic argumentation* is different from the notion of *eristic dialogue* studied within argumentation theory (See Walton 1998a, 1998b; Walton and Krabbe 1995). In eristic dialogues, the common goal of the interlocutors is to defeat the opponent rather than to elicit voluntary adherence to their respective theses. A prime example of eristic dialogues is a court trial where attorneys' arguments are assessed by a competent authoritative judge (Walton 1998b). In such eristic dialogues, the motivations of both parties are clear, and the presence of a competent and impartial judge-like authority can guarantee the quality of reasoning (Perelman 1980). However, eristic arguments are not solely confined to eristic dialogues; eristic arguments can be covertly exploited by one party to threaten any type of dialogue. In this regard, our focus on the reasoning motivation of individual arguers is more meaningful for ethical inquiry.

To showcase how eristic argumentation takes place in organizations, we discuss nepotism as a case in point. Since human resource management decisions are fertile ground for moral issues (Greenwood 2002), let us consider nepotism in hiring new employees. Despite obviously nepotistic recruitment practices, a manager may eristically attempt to justify his or her hiring decisions by developing ostensibly acceptable arguments about the merits of the new recruits. These arguments may even seem valid in the eyes of an unengaged audience. When nepotism is too obvious to be denied, the



**Fig. 1** Reasoning motivations leading to action

manager can then eristically aim to change the interpretation of reality (Kurdoglu 2019a, 2019b). For instance, managers can argue that nepotism is not subject to disapproval, such as by suggesting that nepotism is like a family business with many instrumental benefits to organizations (see Bellow's (2004) provocative book for possible heuristic and eristic arguments on nepotism). Real life, not so strangely perhaps, echoes this hypothetical example: when the Trump family was criticized for nepotism, Eric Trump defended his position at the White House by interpreting their nepotism as a benign practice as he (possibly eristically) argued;

We might be here because of nepotism, but we're not still here because of nepotism. You know, if we didn't do a good job, if we weren't competent, believe me, we wouldn't be in this spot (Forbes 2017).

A couple of months after this remark, he further boldened his defense of nepotism by suggesting that nepotism and family business were the same in essence:

Is that nepotism? Absolutely. Is that also a beautiful thing? Absolutely. Family business is a beautiful thing.... (Independent 2017).

## Ethics and Argumentation Types

Ethically assessing a decision is distinct from assessing its technical effectiveness for achieving a desired end. Ethics pertains to the *goodness of the desired end* and the way that human *action is in line with that end* (Perelman 1963). Similarly, morality pertains to the *rightness of human action* according to a certain ethical criterion (de Colle and Werhane 2008; Hiekkataipale and Lämsä 2017; Singer 2000). Thus, when someone faces a problem, we should distinguish moral concerns from technical concerns for action. Broadly, a moral concern is about the ethical *rightness or wrongness of an action* (Malle 2021). By contrast, technical concerns are about selecting the *best action* to attain the desired ends.

As shown in Fig. 1, individuals' reasoning process starts with facing an action problem (what to do?) with technical as well as moral concerns. These concerns coexist in most situations since any decision that has an impact on humans inevitably involves a moral concern (Jones 1991; Tenbrunsel and Smith-Crowe 2008). However, technical concerns can be separated from moral concerns if

the action alternatives (choices) are already established to be morally acceptable (by prior heuristic reasoning). We call such concerns exclusively technical concerns. We posit that the use of eristic argumentation can be ethically acceptable for exclusively technical concerns because they are removed from moral controversies.

By contrast, we posit that using eristic argumentation to resolve moral concerns is ethically inappropriate. Morally bounded concerns necessitate the use of truthful problem-solving endeavors (Perelman 1963, 1980), irrespective of uncertainties. Figure 1 shows that reasoning and arguing lead to decision-making, which in turn leads to action (Westaby et al. 2010). In this process, reasoning needs to be motivated by appropriate desires and beliefs to handle a concern accordingly (Cushman 2020; Kunda 1990). For moral concerns, the appropriate desire should be problem-solving, and the appropriate beliefs are truthful beliefs. Without such a rational stance, moral issues become vulnerable to power abuses, partiality, personal whims and arbitrariness (Perelman 1963, 1980).

The only exception to this guideline would be moral taboos (e.g., incest), which are inherently closed to discussion. Taboos are deeply wired biological and/or social responses (Haidt 2001) and thus are difficult to justify explicitly by argumentation. Taboos are considered firmly resolved moral concerns that do not lend themselves to further reasoning or persuasive interaction. Therefore, what matters the most with regard to argumentation are moral issues that usually spawn heated disagreements.

For instance, disputes about bribery are not uncommon (Yan and Qi 2020). In the context of such a moral concern, arguments can be proposed against or in favor of the morality of bribery. For instance, one may argue in an *open-minded* way that bribery is immoral because it is incoherent with some endorsed moral principles, such as by saying that bribery is an undeserved payment because it is not part of the employment contract. Such an argument is what we refer to as heuristic argumentation, which we endorse for moral concerns. However, our conceptual view does not address *which actions are inherently ethical or not*. Likewise, it does not address *which moral principles (each principle reflects a different heuristic) should be endorsed by arguers*. We simply assert that the *motivation* of reasoning should be rational (truthful problem-solving) and that arguments for or against should

**Table 2** Eristic and heuristic approaches to reasoning and argumentation

	Eristic	Heuristic
Reasoning motivations	<i>Non-epistemic</i> : Forming beliefs to pursue desires (material or psychological) that do not depend on truthful problem-solving	<i>Epistemic goals</i> : Forming beliefs to pursue desires that can be attained by truthful problem-solving
Reasoning tendency	<i>Partial</i> : Uninterested in truth in a side-taking manner	<i>Biased</i> : Only a few variables are taken into consideration while still pursuing truth
The nature of desires and beliefs	Desires subjugate beliefs (e.g., wishful thinking)	Beliefs are formed realistically to satisfy desires by truthful problem-solving
Ethical appropriateness and the nature of concern	It is ethically acceptable to use heuristic as well as eristic arguments to resolve exclusively technical concerns (concerns that are <i>devoid of moral concerns</i> )	Only heuristic argumentation is ethically acceptable for resolving moral concerns, except moral taboos

be formed heuristically when a decision-maker is involved with a moral problem.

As a counterexample, a person may obstinately argue that bribery is moral because bribery does not harm anyone, despite many indications that bribery can be harmful. That is an eristic argument if the unyielding reasoning behind the argument is untruthful and intended not for problem-solving but rather to form a self-serving conclusion with a dogmatic attitude, possibly due to vested interests in bribery or due to a passionate commitment to a certain ideological view.

When the problem does not have a moral concern and thus is an exclusively technical concern, our ethical position about argumentation differs. Imagine the problem of choosing stocks in a stock market among numerous alternatives where none of the alternatives raises a moral concern. Here, the arguments would all be about which option is the best one to pursue, meaning that the concern of the arguments is technical in nature, not moral. In such a case, the concern is exclusively technical. One can heuristically argue that a particular option is *technically* better than others by relying on supporting evidence (reality), such as by indicating the possible lucrativeness of a certain stock. However, others may argue eristically, denying the lucrativeness of that stock and clinging passionately to another stock despite the counter-evidence. If someone passionately loves something or holds an ideological *faith* in something, persuasive attempts to change that person's mind would be in vain. Thus, such an eristic attitude for an exclusively technical concern is understandable. However, that same eristic attitude (which is irrational in essence) would be ethically unacceptable if the problem involved a moral concern. Table 2 summarizes our distinctions.

### How Does Heuristic Argumentation Work?

Before we probe the mechanism of eristic argumentation, it is useful to delineate its rational counterpart, heuristic argumentation. This method involves a genuine exercise of

reasoning in practically rational terms. In heuristic argumentation, the arguer's motivation is truthful problem-solving; hence, this approach has a rational base. However, heuristic argumentation and its practical rationality operate in a different way than the formal rationality of logic and probability. We turn to the argumentation theory of Perelman and Olbrechts-Tyteca (1969) to present how heuristic argumentation works.

According to Perelman and Olbrechts-Tyteca (1969), individuals form associations and dissociations to arrive at specific conclusions. Associations are built by producing conclusions from perceived observations, alleged quasi-logical relationships or sensed resemblances (such as the use of analogies). By contrast, in dissociations, conceptual interpretations are constructed to deny apparent associations (for an overview of the theory, see Kurdoglu 2019b; Van Eemeren et al. 1996).

The sources of inferences and preferences in heuristic arguments are categorized into real versus value-based factors (Perelman and Olbrechts-Tyteca 1969). Real factors are assertions of facts (observations), truths (perceived connections between facts) and presumptions (heuristic presuppositions), which are primarily employed to produce inferences. Note that all real factors represent disputable perceptions that nevertheless can be used as inputs of practical reasoning. Hence, they are only tentatively real. In comparison, value-based factors are preferred values, value hierarchies and the loci of value preferences, which are primarily employed to form preferences. Values denote preferences that guide an action toward certain alternatives. Value hierarchies rank the preferred values. Finally, the loci of value preferences are heuristic principles that govern value preferences and their hierarchies. For instance, if a selected locus of value preferences prioritizes quantity over quality, then it would be preferable to have what is abundant rather than what is durable. Value-based factors do not have any real (i.e., perceived) existence because they merely represent subjective preferences.

Preference heuristics, that is, the loci of value preferences, solve preferencing problems by offering simplified biased solutions. For instance, if the loci of value preferences prioritize essence, then the representative characteristics of a person or a thing can be preferred over variable aspects (Perelman 1982). This is like choosing an employee for her intelligence rather than for her latest performance level. Indeed, all heuristic solutions involve such a reductionist bias, which narrows down the number of relevant cues to simplify decision-making (Gigerenzer et al. 2016; Gigerenzer and Gaissmaier 2011). For this reason, practically rational moral judgments, and therefore heuristic arguments, are essentially products of heuristic decision-making.

Heuristic argumentation has a crucial intersubjective function for moral judgments because it rationally settles differences in subjective value preferences. Some values, such as justice, freedom and dignity, may be universally preferred, at least in their abstract form, either because of common dictates of reason (e.g., Kantian categorical imperatives) or by our natural moral inclinations (Saltzstein and Kasachkoff 2004; Weaver et al. 2014). These universally accepted values may be especially used by arguers to make an appeal to all reasonable individuals, that is, to the universal audience. In this sense, “when inserted into a system of belief for which universal validity is claimed, values may be treated as facts or truths” (Perelman and Olbrechts-Tyteca 1969, p. 76). However, these values lose universal acceptance when they are made concrete for application to particular instances because it is possible to apply universal values in different ways and within different value hierarchies (Perelman 1979). For instance, some people would prioritize freedom over equality, while others might argue for the reverse. In sum, some values admittedly have universal acceptance, but they can be applied differently in multiple reasonable forms and in subjective and debatable ways. The outcome of heuristic argumentation to settle such differences is inevitably a subjective choice but is considered a product of practical rationality as long as the choice depends on heuristic principles that are applied in an open-minded way (Perelman and Olbrechts-Tyteca 1969).

### How Does Eristic Argumentation Work?

The alternative to heuristic argumentation is eristic argumentation. Eristic arguments involve pretentious reasoning and disputatious ploys (i.e., sophistry) and are primarily employed to defeat the disputant(s) rather than to achieve truthful problem-solving (Perelman 1982; Perelman and Olbrechts-Tyteca 1969; Walton 1999). In this sense, eristic arguers reach their goals by forcing their counterparties into submission instead of persuading them to adopt their view. To this end, eristic arguers strive to impress potential or actual third parties who may judge the conversation and thus

change the power balance in the arguer’s favor (Kurdoglu 2019a).

Eristic arguments impair the possibility of exercising practical rationality, which is ideal to use when making moral decisions. When practical rationality is impeded, individuals are susceptible to personal interests, whims and power abuses (Perelman 1963). Moreover, when a decision is defended by eristic argumentation, social scrutiny into the decision-maker’s view is hampered. However, because individuals are usually better at questioning others’ arguments than their own (Kahneman 2011; Mercier and Sperber 2011; Provis 2017), scrutinizing decision-makers—especially those in the public’s trust—is critical to avoid harmful decisions.

Eristic arguers cling to their opinions and obstinately impose these opinions on their disputants (Walton 1999). Therefore, eristic arguments represent dogmatic commitment to a decision that is protected from any rational questioning. While all rationally imperfect solutions may naturally require some level of intuitive commitment (Dane and Pratt 2007), dogmatism is a rigid belief that manifests frequently in eristic argumentation. This commitment impedes the search for reasonable solutions and leads the arguer to reject others’ ideas without any consideration. A commitment to untruthful beliefs can be so powerful that even if individuals recognize their irrationality, they may still continue to yield to the psychological urge to follow them (Risen 2016; Walco and Risen 2017). In the case of eristic arguers, there is usually no explicit disclosure of untruthfulness because they hide their eristic motivations for the sake of social acceptability (Kurdoglu 2019b). Eristic motivations originate from vested material or psychological interests which might be driven by passion (Perelman 1979, 1982; Perelman and Olbrechts-Tyteca 1969). Here, passion does not directly refer to emotions (i.e., “pathos” in rhetorical theory), which play a legitimate rhetorical role (Hartelius and Browning 2008), particularly in heuristic argumentation. Similarly, psychology research recognizes emotions as potentially heuristic cues (regarding affect heuristics, see Finucane et al. 2000; Pham and Avnet 2009). In contrast to simple emotions, passion here represents compelling emotional attachments (to a person, object or belief) that distort impartiality and block truthful reasoning, such as favoring someone because of passionate love so much that any counter cues are ignored.

### Philosophical Foundations of the Distinction Between Heuristic and Eristic Argumentation

The roots of eristic argumentation can be traced to ancient Greece. The term was first introduced by Plato, who, in his *Republic*, identified eristic argumentation as pseudo-philosophy (Wolfsdorf 2008). In his book *Gorgias*, Plato

advocated dialectic argumentation as a proper philosophical and rational method of asking and answering questions while considering rhetoric a tool of eristic (winning-oriented) demagoguery (Perelman 1979). According to Plato, dialectics is a method to eliminate untenable hypotheses by argumentation to reach the truth, whereas rhetoric is a political tool to make a particular opinion more dominant (in relative terms) than others. Plato did not admire rhetoric because he detested Protagoras' relativist assertion that man is the measure of all things (Perelman 1979). For Plato, only absolute truth mattered, not subjective opinions. His concern was that judgments based on opinions can be easily manipulated by eristic argumentation for the sake of political victories (Poulakos 1995). Similarly, Aristotle pejoratively referred to eristic argumentation as sophistry and contentious reasoning, contrasting it with dialectical argumentation in his *Sophistical Refutations* (Walton 1998a; Wolf 2010).

We echo Plato's and Aristotle's concerns regarding eristic argumentation in that it misuses reasoning. However, we disagree with their dismissal of rhetoric. Subjective values and opinions do not necessarily impede reasoning; rather, they can facilitate practical rationality (Perelman 1982) and moral agency (Hiekkataipale and Lämsä 2019; Watson et al. 2008; Wilcox 2012). Moreover, there is no substantial difference between dialectic and rhetoric since both depend on argumentation: dialectic is a special type of rhetorical attempt to persuade a universal audience (i.e., all reasonable beings), and rhetoric is employed to persuade a particular audience—a specific group of people holding a unique set of values (Perelman and Olbrechts-Tyteca 1969). Likewise, both dialectic and rhetoric are susceptible to epistemological relativism.

In argumentation, conflicting opinions can be subjectively reasonable from different perspectives (Perelman and Olbrechts-Tyteca 1969). However, relativism is curbed in practice because certain arguments are so unreasonable that they fail to persuade the relevant audience. Thus, in the absence of objective standards of validity, subjective evaluations made by the relevant audience must assume critical importance. Of course, this subjective evaluation makes the entire rhetorical reasoning process susceptible to concerns about the quality of the audience that receives the argument. Despite all its imperfections, rhetorical (heuristic) argumentation and its employment of practical rationality are much more ideal than eristic argumentation, which aims to avoid any inter-subjective evaluation (Perelman and Olbrechts-Tyteca 1969).

Our epistemology of practical rationality denounces positivism as well as relativism.<sup>2</sup> From the perspective of logical positivism, when two individuals disagree on a subject and if there is no way to resolve their disagreement in an objective way, as in the case of value-laden disputes, the arguments in such disputes are considered meaningless or devoid of worth (Perelman 1984). Relativism similarly dismisses the role of reason in adjudicating disagreements by claiming that there is no common ground on which to evaluate the validity of opposing arguments. In a way, both positivism and relativism suggest that there is no place for reason to resolve disagreements on values—as if the outcomes of such disagreements could only be set arbitrarily. However, this thinking does not reflect real life. As Perelman (1963, p. 136) remarked,

...[M]ust we draw the conclusion that reason is quite incompetent in areas that escape mathematics? Must we conclude that, when neither experience nor logical deduction can furnish the solution of a problem, we can do nothing but abandon ourselves to irrational forces, to our instincts, to suggestion or violence?

The answer is surely no; we can always safely turn to practical rationality, which is manifested in heuristic argumentation. However, unlike formal logic, practical rationality does not promise certainty. Practical rationality strives to determine action by reasoning in complex circumstances rather than contributing to the production of scientifically reliable knowledge. In other words, it may be fallible, but it is still useful for guiding action pragmatically (Behfar and Okhuysen 2018; Martela 2015).

Our conceptualization of practical rationality ultimately relies on Perelman and Olbrechts-Tyteca's (1969) argumentation theory, which is built on a Kantian approach to practical reasoning in addition to elements from the ancient traditions of rhetoric and dialectic (Maneli 2010). As the Kantian approach to morality reminds us, intentions are critical for rationality. We thus reach the core tenet of our theory: if argumentation is to be considered the manifestation of practical rationality, then speakers' motivations must

<sup>2</sup> When denouncing positivism, we adopt the epistemological perspective of Perelman and Olbrecht's (1969) argumentation theory. However, we also see Gigerenzer and his colleagues as difficult to categorize as typical positivists. Gigerenzer's fast-and-frugal heuristics approach and his emphasis on ecological rationality challenged the norms of rationality embedded in rational choice theory as well as in behavioral economics (Gigerenzer 2018). By relying on the concept of ecological rationality, Gigerenzer (2008, 2011) essentially rejected the rationality norms of rational choice theory, which confines being rational to a simple utility-maximization behavior performed by actors who follow tenets of logic and probability. Gigerenzer's approach can be considered a challenge to a positivist conception of rationality embedded in rational choice theory.



assume critical importance. Motivations compensate for and explain the absence of objective logical-procedural validity checks (which are available in formal rationality). Practical rationality can only be checked subjectively, and doing so is crucially contingent on the speaker's truthful problem-solving motivation in his or her reasoning. Hence, we recognize the lack of this motivation as a threat to practical rationality.

## Decision-Making Under Uncertainty and Eristic Argumentation

Technical concerns are likely to accompany moral concerns in many problems faced by decision-makers. To assess whether a decision is (technically) instrumental to achieve desired ends, it is essential to comprehend the uncertainty dimension of argumentation and decision-making. Under uncertainty, heuristic approaches to decision-making are ecologically justifiable because they often work more satisfactorily than formally logical or probabilistic approaches in adapting to uncertainties (Gigerenzer 2008; Gigerenzer and Gaissmaier 2011). Since heuristic argumentation also depends on heuristic rules and presumptions (Perelman 1982), we posit that heuristic argumentation is likewise ecologically justifiable under uncertainty. However, we further claim that eristic argumentation can also be ecologically justifiable if the level of uncertainty is extreme. The reason is that when uncertainty is extreme, heuristic approaches can lose their epistemic effectiveness in terms of achieving truth-seeking goals, while eristic approaches can still be beneficial for non-epistemic goals. Before explaining the ecological justifiability of heuristic and eristic argumentation in further detail, we first elaborate on the levels of uncertainty.

### Levels of Uncertainty in Decision-Making

Uncertainty and risk are different concepts: Uncertainty is unpredictable by statistical methods, unlike conditions of risk (Artinger et al. 2015; Gigerenzer 2008; Knight 1921). For risks, probabilistic mathematical models can be used effectively to estimate expected outcomes. However, under uncertainty, the absence of probabilistic (as well as deterministic) data impedes the effectiveness of mathematical calculations. Thus, decision-makers may feel a need for heuristic decision-making and rely on practical rationality in uncertain environments. However, there is a wide spectrum of levels that uncertainty can encompass.

Uncertainty can be graded based on a decision-maker's knowledge about the set of options and outcomes in a problem (Packard et al., (2017)). Uncertainty exists when the set of decision options, their outcomes or both are not known or identifiable (and thus the decision-maker

cannot calculate the probabilities of certain outcomes). Among these situations, *absolute uncertainty* is referred to as a situation wherein the sets of options and outcomes are open (Packard et al. 2017). For instance, launching a technologically new commercial product may be subject to absolute uncertainty because it is difficult to determine all possible technological alternatives and predict their outcomes. However, to describe highly uncertain situations, uncertainty does not have to be absolute. The quality of the knowledge available to the decision-maker should also be taken into consideration rather than just the quantity of information.

We suggest that the level of uncertainty is a function of the decision-maker's realistic confidence in heuristic cues in terms of how those cues inform about possible sets of options and outcomes. Confidence in heuristic cues can be altered realistically by the quantitative availability as well as the qualitative potency of heuristic cues. Uncertainty is very low when there are many potent heuristic cues available that realistically increase the decision-maker's confidence in the knowledge and type of possible options and outcomes. Similarly, uncertainty is extreme when heuristic cues are totally absent or are available but very weak and thus do not realistically induce confidence in foreseeing possible options and their outcomes. Therefore, we ascribe uncertainty levels to the decision-maker's level of ignorance and ensuing realistic confidence about possible sets of options or outcomes. Our approach is aligned with Bayesian approaches to reasoning, which take subjective probability inferences and confidence levels into consideration instead of objective probabilistic data (Hahn and Oaksford 2007; Li et al. 2017; Oaksford and Chater 2020). In this respect, each available heuristic cue, depending on its potency, increases the decision-maker's confidence by strengthening his or her realistic beliefs in subjective inferences.

Low to moderate levels of uncertainty, as signaled by the level of abundance or potency of heuristic cues, would likely increase a decision-maker's confidence. Similarly, high to extreme uncertainty would likely leave a decision-maker highly unconfident of his or her choice. For instance, in the case of a recruitment decision, there may exist several relevant heuristic cues, such as the candidate's educational background, references and previous work experience, all of which can be confidently accepted as potent indicators of future success or failure. Such a case should be considered as one with low to moderate uncertainty. In comparison, a case of extreme uncertainty might be one in which an individual enters into an entrepreneurial partnership with an unfamiliar person. In such a scenario, with few to no heuristic cues available, the

decision-maker can only unrealistically believe that the partner is the right one to work with because, for example, he or she is physically attractive. Here, the decision-maker uses a very weak heuristic cue, that is, physical attractiveness.<sup>3</sup> Therefore, this case can be considered an extremely uncertain case that should leave a rational decision-maker unconfident about his or her choice from a realistic perspective.

### Ecological Justifiability of Heuristic Approaches Under Uncertainty

Complex problems imbued with known risks normally require equal complexity in reasoning methods. However, under increasing levels of uncertainty, risks become increasingly intractable, making complex methods increasingly inaccurate as several independent variables can vary unexpectedly under uncertainty (Gigerenzer and Gaissmaier 2011). By contrast, simple heuristic solutions, which rely on a single or a few salient variable(s) (i.e., fast-and-frugal heuristics), would be less hurt by variations because there are only a few factors to vary (Gigerenzer 2008). Thus, with a limited number of decision-making variables, heuristics become less prone to decision-making errors under uncertainty compared to formally logical or probabilistic approaches (Gigerenzer 2008). For instance, recognition heuristics guide the decision-maker to choose the most familiar option, simplifying the decision-making process (Goldstein and Gigerenzer 2002). Hence, uncertainty changes the appropriateness of the epistemic stance and type of reasoning (Bhatia and Levina 2020) from formal rationality to practical rationality because the use of formal rationality unproductively complicates the decision-making process when there is a substantial level of uncertainty.

Although heuristic decision-making is a better option than formal rationality under uncertainty, it is not flawless. A major downside of heuristic decision-making is the subjectivity of the choice process. Because there are no objective criteria to assess the relative effectiveness of one heuristic alternative over another, a decision-maker might choose an inferior heuristic solution. Hence, heuristic argumentation plays a crucial role in negotiating which particular heuristic solution is relatively the most reasonable among all heuristic alternatives.

### Ecological Justifiability of Eristic Reasoning Under Extreme Uncertainty

Employing practical rationality through heuristic methods helps a decision-maker adapt to uncertain conditions because these methods can lead to satisfactory outcomes with little computational effort (Gigerenzer et al. 2016). Extrapolating this ecological rationality thesis raises the idea that under extreme uncertainty, where truthful problem-solving reasoning becomes ineffective because heuristic cues are very weak or absent, there may be justifiable psychological and material gains to be earned by irrationality. Likewise, although irrationality embedded in eristic argumentation is devoid of the pursuit of problem-solving and truth-seeking reasoning, it is not devoid of all merit: it offers psychological and material gains irrespective of truthful problem resolution. Irrationality is a part of human nature for a purpose. Accordingly, we suggest that irrationality may become a potentially ecologically justifiable instrument to cope with extreme uncertainty.

For instance, decision-making using superstitions is demonstrated to decrease anxiety and increase confidence in the face of a problem tainted by many uncertainties (Damisch et al. 2010; Ganzin et al. 2020; Hamerman and Morewedge 2015; Risen 2016; Tsang 2004, 2011). Untruthful beliefs in general can be ecologically rational because they can suppress fear, such as the fear of death, and can help the decision-maker gain composure in the face of an extremely uncertain future. Because it is fruitless to pursue problem-solving by truthful reasoning in excessively uncertain environments, it can be justifiable to focus on anxiety relief and other psychological benefits of such irrational decisions. In this regard, spirituality can also be useful to find solace and cope with uncertainty (Ganzin et al. 2020). Likewise, wishful thinking and overoptimism can bolster confidence, albeit unrealistically (Lowe and Ziedonis 2006; Simon and Shrader 2012; Vosgerau 2010).

Irrationality can also provide material benefits under extreme uncertainty, such as efficiency in solving a problem to direct cognitive resources elsewhere. Blindly following traditions may also be a preferable action when there is almost complete uncertainty, such as situations in which any form of deliberation is futile. Similarly, dogmatic irrational commitment to a decision, as displayed in eristic arguments, might be an advantageous behavior for survival under excessively uncertain conditions. For instance, extreme uncertainty regarding an entrepreneurial project, such as developing a completely new product for a new market, means that there are no or very few heuristic cues with little potency about the technological viability of the product as well as market receptivity. The availability and potency of the cues are not enough to build realistic confidence in the pursuit of this entrepreneurial endeavor; however, the passion of

<sup>3</sup> We assume that there is neither empirical support (statistical data) nor a viable truthful belief about such an association between being physically attractive and being a good entrepreneurial partner.

the entrepreneur may eristically instigate pseudo-confidence in the project so that he or she continues to strive for its realization. If decision-makers always depend on solving their decision-making problems on the basis of the reality they face, they may never dare to venture under extremely uncertain situations.

While irrationality is not intended to solve a problem truthfully, it may nevertheless help solve a problem truthfully in an unpredictable fashion (Newark 2018). However, the ecological value of irrationality originates from gains unrelated to problem resolution. As noted, irrational decisions satisfy psychological or material vested interests and offer a way forward in the face of extreme uncertainty. Irrationality, such as clinging to a superstition or divinity, may represent adaptive thinking in that respect. However, when the level of uncertainty is not extreme, irrational reasoning and its representation in eristic argumentation cannot be considered ecologically justifiable; in such cases, it is wise to adopt heuristic reasoning and argumentation. For instance, if a firm suffers losses due to harsh competition, a useful solution would not involve casting a magic spell, which may only contribute psychological relief and decrease the sense of uncertainty (Tsang 2004, 2011), but rather engaging in truthful rational problem-solving efforts. Thus, in organizations (and most other environments), it is critical to pursue practical decision-making enabled by heuristic argumentation and avoid the irrationality of eristic argumentation unless there is a very high level of uncertainty.

## Implications for Research on Moral Judgements

Eristic argumentation poses serious ethical threats to resolving moral disputes in organizational settings. It is ideal to approach moral conundrums rationally (Zhang et al. 2018) by exercising heuristic decision-making and argumentation. However, our conceptual view suggests that instead of making principled decisions with the best intentions to accurately capture reality, decision-makers may be motivated to resolve moral problems expediently by eristic argumentation under the influence of their vested material or psychological interests.

Eristic arguments have a hidden nature because they involve the pretenses of reasonableness (van Laar 2010). Therefore, it may be difficult to separate heuristic argumentation from eristic argumentation with confidence. Furthermore, eristic arguers might be unwilling to accept their eristic motivations (van Laar 2010), or they may simply be unaware of them (Von Hippel and Trivers 2011). For instance, wishful thinking and self-serving-motivated reasoning usually operate implicitly (Noval and Hernandez 2019; Vosgerau 2010). However, such challenges make the

issue all the more important from an ethical standpoint. It is important to study how to identify arguers' motivations in decision-making to clearly diagnose the use of eristic argumentation during ethical decision-making. Accordingly, further research could explore irrational approaches to moral disputes to better understand why and how they are used, including possible remedies for such irrational tendencies.

Ethical decision-making also involves organizational leadership; therefore, the study of eristic argumentation holds promise for ethical leadership research (e.g., Kaptein 2019; Koopman et al. 2019; Xu et al. 2017). Ethical procedures in organizations cannot be used to resolve issues on their own because they are subject to different interpretations and executions (Babri et al. 2019; Kurdoglu 2019a). Further, it is critical to understand the quality of the agency delineating and implementing the organizational procedures (Fotaki et al. 2019; Munter 2013) because some firms outwardly declare that they are ethical and inwardly function entirely differently. Ideally, an organization would have principled, reasonable and impartial leaders who make rational and ethical decisions as opposed to leaders with irrational attitudes shaped by partialities and expediencies. Further research could explore deviations from this rationality norm by studying leaders' reasoning motivations and determining why, when and how they prefer eristic to heuristic arguments. Accordingly, investigating leaders' reasoning and argumentation strategies could bridge the gap often found between organizational codes of ethics and agency behavior and act as the critical first step in establishing ethical decision-making (Hiekkataipale and Lämsä 2019).

Our framework opens up a novel perspective to study moral judgments and associated topics such as ethical decision-making and leadership. Our theoretical framework presents some unique propositions for further research, which can be best understood by comparing it to moral intuitionism. In this respect, we highlight our different conception of the role of emotions in moral judgments and how we deal with moral taboos and the politics of decision-making for moral issues.

## The Role of Emotions in Moral Judgments

Unlike moral intuitionism, we posit that the automaticity or unconsciousness observed in some moral judgments does not necessarily rule out the role of reasoning because heuristics can be performed both consciously and unconsciously (DeTienne et al. 2019; Gigerenzer 2008; Kruglanski and Gigerenzer 2011). Likewise, we are against moral intuitionism's sharp distinctions between *cold* (deliberate) and *hot* (intuitive and emotional) reasoning because both intuitive and deliberate judgments are bound to the same reasoning processes (Kruglanski and Gigerenzer 2011). Instead of such dual-process distinctions, our conceptual view deals with

emotions by contrasting compelling emotional attachments (e.g., loving or hating someone) with simple emotions (e.g., liking, aversion, desiring, enjoyment or displeasure) that can be used as cues to form affect heuristics (Finucane et al. 2000; Loewenstein et al. 2001; Pham and Avnet 2009; Volz and Hertwig 2016; Zolotoy et al. 2020).

As part of the cognitive system, emotions are, in many cases, inseparable from perception (Todd et al. 2020). For instance, emotions provide sensory inputs associated with pain and pleasure (Faraji-Rad and Pham 2017; Pham 2007), which can be helpful for truthful problem-solving. Affect heuristics demonstrate the possible heuristic functions of emotions (e.g., Finucane et al. 2000). For instance, an individual's positive and negative impressions of another person or object can be used as heuristic cues (George and Dane 2016; Zolotoy et al. 2020). Rhetorical studies have established that emotions can reasonably change people's minds and influence their decisions (e.g., Conrad and Malphurs 2008), so emotions also facilitate reasoning rather than solely blocking it.

Emotions are complex phenomena, and as such, they perform many functions (Lerner et al. 2015; Pham 2007). Therefore, we do not suggest that they are exclusively or always useful in truthful problem-solving; instead, we highlight their possible heuristic functions. However, compelling emotional attachments are different. Simple emotions, such as sadness, anger, happiness or fear, can lead to biases, that is, subjective and error-prone judgments, but biases are applicable to heuristics as well. By contrast, compelling emotional attachments, such as lust, love and hate, by definition hamper impartiality and therefore distort truthful problem-solving attempts and lead to eristic argumentation. In contrast to the inherent biases of simple emotions, compelling emotional attachments create partialities and one-sidedness. Being biased is different than being partial; the latter indicates a dogmatic closure in reasoning (Bukowski et al. 2013; Dijksterhuis et al. 1996; Kruglanski et al. 1993; Kruglanski and Webster 1996), whereas the former does not (Perelman and Olbrechts-Tyteca 1969). The distinction between being biased and being partial provides a firm normative basis for distinguishing simple emotions from compelling emotional attachments. With that distinction, future research might advance moral intuitionism by illuminating rational versus irrational motives behind the use of emotions and intuition.

### Moral Taboos and Politics of Decision-Making

Moral intuitionism asserts that people make moral decisions unconsciously under the influence of intuition and emotions, as if moral judgments were often devoid of reason (Greene and Haidt 2002; Haidt 2001; Mcmanus 2019). To support this conclusion, researchers (e.g., Haidt 2001) draw on experiments

in which people are often unable to explicitly justify why they endorse some strong moral taboos (e.g., incest, necrophilia, cannibalism). As we noted earlier, there is usually no room for discussion about taboos because they are often dogmatically endorsed. When taboos are the concern, we would only expect eristic argumentation and the overarching influence of compelling emotional attachments that impede motivation for truthful problem-solving in the reasoning. Heuristic argumentation can only be expected if the issue's taboo status is shaken by political movements, which may have the power to change such beliefs.

Taboos depend on instinctual urges (e.g., disgust) as well as on strong religious (e.g., dietary taboos) or cultural rules (e.g., monogamy) that strongly drive individuals to defend these instincts and social dogmas (Graham et al. 2009; Tetlock 2003) with eristic reasoning. Political movements (e.g., civil rights movement) can disrupt these drives by eliciting public attention to the related issues and forcing people to consider the issues in an open-minded heuristic way. Thus, when a moral issue becomes a taboo, resolving the issue necessarily depends on a political effort that does not always rely on heuristic argumentation. As such, the nature of politics can be tainted by eristic argumentation.

If eristic argumentation is institutionalized, it can lead to the closure of genuine communication in the political and social arenas and allow a reign of ideologies rife for manipulation by powerful parties. While ideologies can be useful as social guidelines to resolve disputes, particularly around the legitimacy of alternative views, a dogmatic institutional allegiance to ideologies signifies an irrational culture because such belief systems eliminate the problem-solving role of reason and initiate self-serving motivated moral reasoning (Brunsson 1982; Ditto et al. 2009; Kahan 2013).

At the sociological level, Habermas' (1984, 1990) emphasis on the value of communicative rationality and ideal speech situations involves concerns related to the suppression of rationality. However, unlike Habermas, our motivational approach to rationality does not stipulate a procedural ethical system for regulating discussion or defining ideal speech conditions that enable rationality. Rather, our approach focuses on speakers' reasoning motivations. Further research could elaborate on the importance of reasoning motivations to establish a reasonable social order. For instance, exploring contemporary political activities by attending to politicians' eristic arguments would be a fertile research direction.

### Implications for Research on Strategic and Entrepreneurial Decision-Making

Eristic argumentation also offers meaningful implications for the strategy (e.g., Bingham and Eisenhardt 2011; Busenitz and Barney 1994; Luan et al. 2019; Maitland and



Sammartino 2015; Vuori and Vuori 2014) and entrepreneurship (e.g., Cardon et al. 2013; Croce et al. 2019; Hubner et al. 2019; Townsend et al. 2018) literature. Compared to information-intensive and cognitively demanding methods, the strategic decision-making literature acknowledges the value of heuristic methods and recognizes them as ecologically rational choices for strategic decision-making under considerable uncertainty (while extreme uncertainty is not taken into consideration) (Bingham and Eisenhardt 2011).

The multiplicity of actors in strategic decision-making necessitates the negotiation of various heuristic solutions among organizational members. Some heuristics might not fit well with the environment, while some might be covertly irrational. Thus, the proper use of heuristics requires heuristic argumentation to select the most appropriate heuristic or to refine the chosen heuristic. Otherwise (i.e., engaging in eristic argumentation), the selection and refinement process is severely impaired, which is a real threat to effective strategy formulation. The strategy literature demonstrates that actors may engage in self-serving interpretations of a selected strategy (Guth and Macmillan 1986; Meyer 2006), act opportunistically through linguistic moves that influence the strategic initiatives (Sillince and Mueller 2007) and withhold organizational strategies from subordinate employees (Ateş et al. 2020). Future studies could illuminate the use of heuristic and eristic arguments by strategic actors and their reasoning motivations during collective decision-making processes. By using our conceptual distinctions, research would also be in a better position to explain controversies in micro-level interactions within strategic decision-making processes and understand the rationality dynamics of organizational politics and the micro-foundations of strategic decision-making (Eisenhardt and Bourgeois 1988; Elbanna 2006; Felin et al. 2015; Foss and Pedersen 2016).

Our view also has implications for the entrepreneurship literature, which pays special attention to the role of passion (Cardon et al. 2009; Duckworth et al. 2007; Riza and Heller 2015) and uncertainty (McMullen and Shepherd 2006; Packard et al. 2017; Townsend et al. 2018) in entrepreneurial decision-making. For instance, many entrepreneurial initiatives are observed to benefit from a passionate irrational commitment to certain investments, products or technologies (Cardon et al. 2013; Croce et al. 2019; Hubner et al. 2019). The ecological rationality of such compelling emotional attachments can be best observed when entrepreneurs follow their passions in the face of extreme uncertainties. Future research can explore how entrepreneurial passion manifests in eristic argumentation in collective decision-making processes, particularly within start-up teams who may have to face extreme uncertainty. Research can also reveal how eristic argumentation relates to entrepreneurial confidence and resilience under extreme uncertainty. In many respects, it is important to consider the adaptive role of irrational

decision-making rooted in eristic argumentation as a part of strategic and entrepreneurial decision-making.

## Conclusion

By integrating the philosophical tenets of Perelman and Olbrechts-Tyteca's (1969) argumentation theory with the psychological research on heuristic decision-making (e.g., Artinger et al. 2015; Gigerenzer 2008; Gigerenzer and Gaissmaier 2011; Goldstein and Gigerenzer 2002; Luan et al. 2019) and motivated reasoning (e.g., Kruglanski and Webster 1996; Kunda 1990; Noval and Hernandez 2019; Zimmermann 2020), we offer a novel theoretical view that highlights the irrational nature of eristic argumentation contrasted with the practically rational heuristic argumentation. Accordingly, we propose that eristic argumentation is characterized by irrationality, which involves the pursuit of material (i.e., vested interests) or psychological gains (e.g., anxiety relief) through untruthful reasoning. By contrast, we posit that heuristic argumentation is marked by rationality, characterized by truthful practical reasoning that pursues problem-solving. Overall, by focusing on the motivations of reasoning and their manifestation in different forms of argumentation, this study offers a new perspective that can be insightful for future research.

From an ethical standpoint, we denounce eristic argumentation to resolve morally implicated problems, with the exception of moral taboos. Therefore, we recommend protecting moral issues (those that are not related to taboos) from eristic argumentation because ethics would otherwise depend on power politics, compelling emotional attachments and vested interests rather than on rational reasoning. Eristic arguments are especially problematic when performed by powerful actors who are expected to act impartially, such as during arbitration of an ethical dispute. However, eristic argumentation cannot be categorically condemned; its irrationality can be used as an instrumental tool to cope with extreme uncertainty, specifically when the concern is exclusively technical and devoid of moral concerns. Irrationality can yield anxiety relief under extremely uncertain conditions and hence has an adaptive value (Damisch et al. 2010; Risen 2016; Tsang 2011). Irrationality can also lead to surprisingly creative outcomes as much as it can lead to dramatic failures (Newark 2018). However, when uncertainties are considerable but not extreme, heuristic solutions should be preferred as the ecological rational choice (Artinger et al. 2015; Gigerenzer and Gaissmaier 2011; Luan et al. 2019).

Ultimately, the choice between rationally formed heuristic arguments and irrationally formed eristic arguments is a choice between (i) being biased vs. being partial, (ii) being persuasive vs. being domineering, (iii) being reasonable vs. being self-righteous, (iv) being principled vs. being

expedient, (v) being kind to others by providing justifications vs. decreeing and (vi) being respectful of other people's views with the goal of cooperation vs. defying or rejecting their views with the goal of winning. Overall, exploring heuristic and eristic argumentation from the motivational view of rationality that we propose provides a rich lens into human behavior, reasoning and decision-making as well as into their psychological, cultural and institutional roots.

## Compliance with Ethical Standards

**Conflict of interest** The authors declare that they have no conflict of interest.

## References

- Aguilera, R. V., & Vadera, A. K. (2008). The dark side of authority: Antecedents, mechanisms, and outcomes of organizational corruption. *Journal of Business Ethics*, 77(4), 431–449.
- Ariely, D. (2010). *Predictably irrational: The hidden forces that shape our decisions*. New York: Harper Collins.
- Artinger, F., Petersen, M., Gigerenzer, G., & Weibler, J. (2015). Heuristics as adaptive decision strategies in management. *Journal of Organizational Behavior*, 36(S1), S33–S52.
- Ateş, N. Y., Tarakci, M., Porck, J. P., van Knippenberg, D., & Groenen, P. J. F. (2020). The dark side of visionary leadership in strategy implementation: Strategic alignment, strategic consensus, and commitment. *Journal of Management*, 46(5), 637–665.
- Babri, M., Davidson, B., & Helin, S. (2019). An updated inquiry into the study of corporate codes of ethics: 2005–2016. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04192-x>
- Baird, C., & Calvard, T. S. (2019). Epistemic vices in organizations: Knowledge, truth, and unethical conduct. *Journal of Business Ethics*, 160(1), 263–276. <https://doi.org/10.1007/s10551-018-3897-z>
- Barclay, L. J., Bashshur, M. R., & Fortin, M. (2017). Motivated cognition and fairness: Insights, integration, and creating a path forward. *Journal of Applied Psychology*, 102(6), 867–889.
- Bazerman, M. H., & Sezer, O. (2016). Bounded awareness: Implications for ethical decision making. *Organizational Behavior and Human Decision Processes*, 136(9), 95–105.
- Behfar, K., & Okhuysen, G. A. (2018). Perspective—Discovery within validation logic: Deliberately surfacing, complementing, and substituting abductive reasoning in hypothetico-deductive inquiry. *Organization Science*, 29(2), 323–340.
- Bellow, A. (2004). *In praise of nepotism: A natural history*. New York: Anchor.
- Bhatia, A. K., & Levina, N. (2020). The diverse rationalities of entrepreneurship education: Epistemic stance perspective. *Academy of Management Learning & Education*. <https://doi.org/10.5465/amle.2019.0201?journalCode=amle>
- Bingham, C. B., & Eisenhardt, K. M. (2011). Rational heuristics: The “simple rules” that strategists learn from process experience. *Strategic Management Journal*, 32(13), 1437–1464.
- Brubaker, R. (2006). *The limits of rationality: An essay on the social and moral thought of Max Weber* (2nd ed.). London: Routledge.
- Brunsson, N. (1982). The irrationality of action and action rationality: decisions, ideologies and organizational actions. *Journal of Management Studies*, 19(1), 29–44.
- Bukowski, M., von Hecker, U., & Kossowska, M. (2013). Motivational determinants of reasoning about social relations: The role of need for cognitive closure. *Thinking & Reasoning*, 19(2), 150–177.
- Busenitz, L. W., & Barney, J. B. (1994). Biases and heuristics in strategic decision making: Differences between entrepreneurs and managers in large organizations. In *Academy of management proceedings* (Vol. 1994, No. 1, pp 85–89). Briarcliff Manor, NY: Academy of Management.
- Calabretta, G., Gemser, G., & Wijnberg, N. M. (2017). The interplay between intuition and rationality in strategic decision making: A paradox perspective. *Organization Studies*, 38(3–4), 365–401.
- Cardon, M. S., Gregoire, D. A., Stevens, C. E., & Patel, P. C. (2013). Measuring entrepreneurial passion: Conceptual foundations and scale validation. *Journal of Business Venturing*, 28(3), 373–396.
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review*, 34(3), 511–532.
- Chater, N., Felin, T., Funder, D. C., Gigerenzer, G., Koenderink, J. J., Krueger, J. I., et al. (2018) Mind, rationality, and cognition: An interdisciplinary debate. *Psychonomic Bulletin and Review*, 25(2), 793–826.
- Conrad, C., & Malphurs, R. (2008). Are we there yet? Are we there yet? *Management Communication Quarterly*, 22(1), 123–146.
- Coughlan, R. (2005). Codes, values and justifications in the ethical decision-making process. *Journal of Business Ethics*, 59(1–2), 45–53.
- Craft, J. L. (2013). A review of the empirical ethical decision-making literature: 2004–2011. *Journal of Business Ethics*, 117(2), 221–259.
- Croce, A., Ughetto, E., & Cowling, M. (2019). Investment motivations and UK business angels' appetite for risk taking: The moderating role of experience. *British Journal of Management*. <https://doi.org/10.1111/1467-8551.12380>
- Cushman, F. (2020). Rationalization is rational. *Behavioral and Brain Sciences*. <https://doi.org/10.1017/S0140525X19001730>
- Damisch, L., Stoberock, B., & Mussweiler, T. (2010). Keep your fingers crossed! How superstition improves performance. *Psychological Science*, 21(7), 1014–1020.
- Dane, E., & Pratt, M. G. (2007). Exploring intuition and its role in managerial decision making. *The Academy of Management Review*, 32(1), 33–54.
- de Colle, S., & Werhane, P. H. (2008). Moral motivation across ethical theories: What can we learn for designing corporate ethics programs? *Journal of Business Ethics*, 81(4), 751–764.
- Dedeke, A. (2015). A cognitive-intuitionist model of moral judgment. *Journal of Business Ethics*, 126(3), 437–457.
- Descartes, R. (1998). *Discourse on Method and Meditations on First Philosophy*. Indianapolis, IN: Hackett Publishing Company.
- DeTienne, K. B., Ellertson, C. F., Ingerson, M.-C., & Dudley, W. R. (2019). Moral development in business ethics: An examination and critique. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04351-0>
- Dijksterhuis, A., Van Knippenberg, A., Kruglanski, A. W., & Schaper, C. (1996). Motivated social cognition: Need for closure effects on memory and judgment. *Journal of Experimental Social Psychology*, 32(3), 254–270.
- Ditto, P. H., Pizarro, D. A., & Tannenbaum, D. (2009). Motivated moral reasoning. In B. H. Ross, D. M. Bartels, C. W. Bauman, L. J. Skitka, & D. L. Medin (Eds.), *Psychology of learning and motivation—Advances in research and theory* (Vol. 50, pp. 307–338). San Diego, CA: Academic Press.
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087–1101.

- Dunham, L. C. (2010). From rational to wise action: Recasting our theories of entrepreneurship. *Journal of Business Ethics*, 92(4), 513–530.
- Egorov, M., Pircher Verdorfer, A., & Peus, C. (2019). Taming the emotional dog: Moral intuition and ethically-oriented leader development. *Journal of Business Ethics*, 160(3), 817–834.
- Eisenhardt, K. M., & Bourgeois, L. J. (1988). Politics of strategic decision making in high-velocity environments: Toward a midrange theory. *Academy of Management Journal*, 31(4), 737–770.
- Elbanna, S. (2006). Strategic decision-making: Process perspectives. *International Journal of Management Reviews*, 8(1), 1–20.
- Faraji-Rad, A., & Pham, M. T. (2017). Uncertainty increases the reliance on affect in decisions. *Journal of Consumer Research*, 44(1), 1–21.
- Felin, T., Foss, N. J., & Ployhart, R. E. (2015). The microfoundations movement in strategy and organization theory. *Academy of Management Annals*, 9(1), 575–632.
- Finucane, M. L., Alhakami, A., Slovic, P., & Johnson, S. M. (2000). The affect heuristic in judgments of risks and benefits. *Journal of Behavioral Decision Making*, 13(1), 1–17.
- Forbes. (2017, April 4). Eric Trump offers surprisingly candid thoughts on nepotism. Retrieved September 21, 2020, from <https://www.forbes.com/sites/danalexander/2017/04/04/eric-trump-offers-surprisingly-candid-thoughts-on-nepotism-ivanka-jared-kushner-role-donald-white-house/#77e1845e2e55>.
- Foss, N. J., & Pedersen, T. (2016). Microfoundations in strategy research. *Strategic Management Journal*, 37(13), E22–E34.
- Fotaki, M., Lioukas, S., & Voudouris, I. (2019). Ethos is destiny: Organizational values and compliance in corporate governance. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04126-7>
- Ganzin, M., Islam, G., & Suddaby, R. (2020). Spirituality and entrepreneurship: The role of magical thinking in future-oriented sense-making. *Organization Studies*, 41(1), 77–102.
- George, J. M., & Dane, E. (2016). Affect, emotion, and decision making. *Organizational Behavior and Human Decision Processes*, 136, 47–55.
- Gigerenzer, G. (2008). Why heuristics work. *Perspectives on Psychological Science*, 3(1), 20–29.
- Gigerenzer, G. (2018). The bias bias in behavioral economics. *Review of Behavioral Economics*, 5(3–4), 303–336.
- Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual Review of Psychology*, 62(1), 451–482.
- Gigerenzer, G., Hertwig, R., & Pachur, T. (2016). *Heuristics: The foundations of adaptive behavior*. Oxford: Oxford University Press.
- Goldstein, D. G., & Gigerenzer, G. (2002). Models of ecological rationality: The recognition heuristic. *Psychological Review*, 109(1), 75–90.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96(5), 1029–1046. <https://doi.org/10.1037/a0015141>
- Greenbaum, R., Bonner, J., Gray, T., & Mawritz, M. (2020). Moral emotions: A review and research agenda for management scholarship. *Journal of Organizational Behavior*, 41(2), 95–114.
- Greene, J., & Haidt, J. (2002). How (and where) does moral judgment work? *Trends in Cognitive Sciences*, 6(12), 517–523.
- Greenwood, M. R. (2002). Ethics and HRM: A review and conceptual analysis. *Journal of Business Ethics*, 36(3), 261–278.
- Guth, W. D., & Macmillan, I. C. (1986). Strategy implementation versus middle management self-interest. *Strategic Management Journal*, 7(4), 313–327.
- Habermas, J. (1984). *The theory of communicative action, Vol. 1, Reason and the rationalization of society*. London: Heinemann.
- Habermas, J. (1990). *Moral consciousness and communicative action*. London: Polity Press.
- Hahn, U., & Oaksford, M. (2007). The Rationality of informal argumentation: A Bayesian approach to reasoning fallacies. *Psychological Review*, 114(3), 704–732.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108(4), 814–834.
- Hamerman, E. J., & Morewedge, C. K. (2015). Reliance on luck: Identifying which achievement goals elicit superstitious behavior. *Personality and Social Psychology Bulletin*, 41(3), 323–335.
- Hartelius, E. J., & Browning, L. D. (2008). The application of rhetorical theory in managerial research: A literature review. *Management Communication Quarterly*, 22(1), 13–39.
- Hassin, R. R. (2013). Yes it can: On the functional abilities of the human unconscious. *Perspectives on Psychological Science*, 8(2), 195–207.
- Hayibor, S., & Wasieleski, D. M. (2009). Effects of the use of the availability heuristic on ethical decision-making in organizations. *Journal of Business Ethics*, 84(S1), 151–165.
- Hiekataipale, M.-M., & Lämsä, A.-M. (2019). (A)moral agents in organisations? The significance of ethical organisation culture for middle managers' exercise of moral agency in ethical problems. *Journal of Business Ethics*, 155(1), 147–161.
- Hiekataipale, M.-M., & Lämsä, A. M. (2017). What should a manager like me do in a situation like this? Strategies for handling ethical problems from the viewpoint of the logic of appropriateness. *Journal of Business Ethics*, 145(3), 457–479.
- Hubner, S., Baum, M., & Frese, M. (2019). Contagion of entrepreneurial passion: Effects on employee outcomes. *Entrepreneurship Theory and Practice*. <https://doi.org/10.1177/1042258719883995>
- Huhtala, M., Fadjuoff, P., & Kroger, J. (2020). Managers as moral leaders: Moral identity processes in the context of work. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-020-04500-w>
- Hume, D. (2006). *Moral philosophy* (G. Sayre-McCord, Ed.). Cambridge, MA: Hackett Publishing Company.
- Independent. (2017, April 12). Donald Trump's son Eric calls nepotism "a beautiful thing". <https://www.independent.co.uk/news/world/americas/donald-trump-nepotism-criticism-eric-trump-family-a7679101.html>. Accessed 22 September 2020
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review*, 16(2), 366–395.
- Kahan, D. M. (2013). Ideology, motivated reasoning, and cognitive reflection. *Judgment and Decision Making*, 8(4), 407–424.
- Kahneman, D. (2011). *Thinking, Fast and Slow*. London: Macmillan.
- Kaptein, M. (2019). The moral entrepreneur: A new component of ethical leadership. *Journal of Business Ethics*, 156(4), 1135–1150.
- Kim, M., Park, B. K., & Young, L. (2020). The psychology of motivated versus rational impression updating. *Trends in Cognitive Sciences*, 24(2), 101–111.
- Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology*, 95(1), 1–31.
- Knight, F. (1921). *Risk, uncertainty and profit*. Boston, MA: Houghton Mifflin Company.
- Koopman, J., Scott, B. A., Matta, F. K., Conlon, D. E., & Dennerlein, T. (2019). Ethical leadership as a substitute for justice enactment: An information-processing perspective. *Journal of Applied Psychology*, 104(9), 1103–1116.
- Kruglanski, A. W., & Gigerenzer, G. (2011). Intuitive and deliberate judgments are based on common principles. *Psychological Review*, 118(1), 97–109.
- Kruglanski, A. W., & Webster, D. M. (1996). Motivated closing of the mind: "Seizing" and "freezing." *Psychological Review*, 103(2), 263–283.



- Kruglanski, A. W., Webster, D. M., & Klem, A. (1993). Motivated resistance and openness to persuasion in the presence or absence of prior information. *Journal of Personality and Social Psychology*, 65(5), 861–876.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480–498.
- Kurdoglu, R. S. (2019a). The mirage of procedural justice and the primacy of interactional justice in organizations. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04166-z>
- Kurdoglu, R. S. (2019b). An inquiry into pseudo-legitimations: A framework to investigate the clash of managerial legitimations and employees' unfairness claims. *Business Ethics: A European Review*, 28(1), 129–138.
- Latan, H., Jabbour, C. J. C., Lopes, A. B., & de Sousa Jabbour. (2016). Ethical awareness, ethical judgement and whistleblowing: A moderated mediation analysis. *Journal of Business Ethics*, 139(4), 755–776.
- Lehnert, K., Park, Y., & Singh, N. (2015). Research note and review of the empirical ethical decision-making literature: Boundary conditions and extensions. *Journal of Business Ethics*, 129(1), 195–219.
- Leibniz, G. W. (1978). *Die philosophischen Schriften* (C. J. Gerhardt, Ed.). Hildesheim: Georg Elms.
- Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and decision making. *Annual Review of Psychology*, 66(1), 799–823.
- Li, C. W., Tiwari, A., & Tongb, L. (2017). Investment decisions under ambiguity: Evidence from mutual fund investor behavior. *Management Science*, 63(8), 2509–2528.
- Lieder, F., & Griffiths, T. L. (2020). Resource-rational analysis: Understanding human cognition as the optimal use of limited computational resources. *Behavioral and Brain Sciences*. <https://doi.org/10.1017/S0140525X1900061X>
- Loewenstein, G. F., Hsee, C. K., Weber, E. U., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin*, 127(2), 267–286.
- Lowe, R. A., & Ziedonis, A. A. (2006). Overoptimism and the performance of entrepreneurial firms. *Management Science*, 52(2), 173–186.
- Luan, S., Reb, J., & Gigerenzer, G. (2019). Ecological rationality: Fast-and-frugal heuristics for managerial decision making under uncertainty. *Academy of Management Journal*, 62(6), 1–75.
- Maitland, E., & Sammartino, A. (2015). Decision making and uncertainty: The role of heuristics and experience in assessing a politically hazardous environment. *Strategic Management Journal*, 36(10), 1554–1578.
- Malle, B. F. (2021). Moral judgments. *Annual Review of Psychology*. <https://doi.org/10.1146/annurev-psych-072220-104358>
- Maneli, M. (2010). *Perelman's new rhetoric as philosophy and methodology for the next century*. Amsterdam: Springer.
- Martela, F. (2015). Fallible inquiry with ethical ends-in-view: A pragmatist philosophy of science for organizational research. *Organization Studies*, 36(4), 537–563.
- McKelvie, A., Haynie, J. M., & Gustavsson, V. (2011). Unpacking the uncertainty construct: Implications for entrepreneurial action. *Journal of Business Venturing*, 26(3), 273–292.
- Mcmanus, J. (2019). Emotions and ethical decision making at work: Organizational norms, emotional dogs, and the rational tales they tell themselves and others. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04286-6>
- McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, 31(1), 132–152.
- Mercier, H., & Sperber, D. (2011). Why do humans reason? Arguments for an argumentative theory. *Behavioral and Brain Sciences*, 34(2), 57–74.
- Meyer, C. B. (2006). Destructive dynamics of middle management intervention in postmerger processes. *The Journal of Applied Behavioral Science*, 42(4), 397–419.
- Mises, L. von. (1988). *Human action: A treatise on economics* (The Scholar's ed.). Auburn, ALA: Ludwig von Mises Institute.
- Munter, D. (2013). Codes of ethics in the light of fairness and harm. *Business Ethics: A European Review*, 22(2), 174–188.
- Newark, D. (2018). Leadership and the logic of absurdity. *Academy of Management Review*, 43(2), 198–216.
- Noval, L. J., & Hernandez, M. (2019). The unwitting accomplice: How organizations enable motivated reasoning and self-serving behavior. *Journal of Business Ethics*, 157(3), 699–713.
- O'Fallon, M. J., & Butterfield, K. D. (2005). A review of the empirical ethical decision-making literature: 1996–2003. *Journal of Business Ethics*, 59(4), 375–413.
- Oaksford, M., & Chater, N. (2020). New paradigms in the psychology of reasoning. *Annual Review of Psychology*, 71(1), 305–330.
- Packard, M. D., Clark, B. B., & Kleinc, P. G. (2017). Uncertainty types and transitions in the entrepreneurial process. *Organization Science*, 28(5), 840–856.
- Perelman, C. (1963). *The idea of justice and the problem of argument*. London: Routledge & Kegan Paul.
- Perelman, C. (1979). *The new rhetoric and the humanities: Essays on rhetoric and its applications*. Dordrecht: D. Reidel.
- Perelman, C. (1980). *Justice, law, and argument: Essays on moral and legal reasoning*. London: D. Reidel.
- Perelman, C. (1982). *The realm of rhetoric*. London: University of Notre Dame Press.
- Perelman, C. (1984). Rhetoric and politics. *Philosophy & Rhetoric*, 17(3), 129–134.
- Perelman, C., & Olbrechts-Tyteca, L. (1969). *The new rhetoric: A treatise on argumentation* (E-book ver.). London: University of Notre Dame Press.
- Pham, M. T. (2007). Emotion and rationality: A critical review and interpretation of empirical evidence. *Review of General Psychology*, 11(2), 155–178.
- Pham, M. T., & Avnet, T. (2009). Contingent reliance on the affect heuristic as a function of regulatory focus. *Organizational Behavior and Human Decision Processes*, 108(2), 267–278.
- Poulakos, J. (1995). *Sophistical rhetoric in classical Greece*. Columbia, SC: University of South Carolina Press.
- Provis, C. (2017). Intuition, analysis and reflection in business ethics. *Journal of Business Ethics*, 140(1), 5–15.
- Risen, J. L. (2016). Believing what we do not believe: Acquiescence to superstitious beliefs and other powerful intuitions. *Psychological Review*, 123(2), 182–207.
- Riza, S. D., & Heller, D. (2015). Follow your heart or your head? A longitudinal study of the facilitating role of calling and ability in the pursuit of a challenging career. *Journal of Applied Psychology*, 100(3), 695–712.
- Saltzstein, H. D., & Kasachkoff, T. (2004). Haidt's moral intuitionist theory: A psychological and philosophical critique. *Review of General Psychology*, 8(4), 273–282.
- Schwartz, M. S. (2016). Ethical decision-making theory: An integrated approach. *Journal of Business Ethics*, 139(4), 755–776.
- Shafir, E., & LeBoeuf, R. A. (2002). Rationality. *Annual Review of Psychology*, 53(1), 491–517.
- Sillince, J., & Mueller, F. (2007). Switching strategic perspective: The reframing of accounts of responsibility. *Organization Studies*, 28(2), 155–176.
- Simon, M., & Shrader, R. C. (2012). Entrepreneurial actions and optimistic overconfidence: The role of motivated reasoning in new product introductions. *Journal of Business Venturing*, 27(3), 291–309.
- Singer, M. S. (2000). Ethical and fair work behaviour: A normative-empirical dialogue concerning ethics and



- justice. *Journal of Business Ethics*, 28(3), 187–209. <https://doi.org/10.1023/A:1006299811213>
- Sobral, F., & Islam, G. (2013). Ethically questionable negotiating: The interactive effects of trust, competitiveness, and situation favorability on ethical decision making. *Journal of Business Ethics*, 117(2), 281–296.
- Sonenshein, S. (2007). The role of construction, intuition, and justification in responding to ethical issues at work: The sensemaking-intuition model. *Academy of Management Review*, 32(4), 1022–1040.
- Sparks, J. R., & Pan, Y. (2010). Ethical judgments in business ethics research: Definition, and research agenda. *Journal of Business Ethics*, 91(3), 405–418.
- Tenbrunsel, A. E., & Smith-Crowe, K. (2008). Ethical decision making: Where we've been and where we're going. *The Academy of Management Annals*, 2(1), 545–607.
- Tetlock, P. E. (2003). Thinking the unthinkable: Sacred values and taboo cognitions. *Trends in Cognitive Sciences*, 7(7), 320–324.
- Thaler, R. H. (2016). *Misbehaving: The making of behavioral economics*. London: W. W. Norton & Company.
- Todd, R. M., Miskovic, V., Chikazoe, J., & Anderson, A. K. (2020). Emotional objectivity: Neural representations of emotions and their interaction with cognition. *Annual Review of Psychology*, 71, 25–48.
- Toulmin, S. E. (2003). *The uses of argument* (Updated ed.). Cambridge: Oxford University Press.
- Townsend, D. M., Hunt, R. A., McMullen, J. S., & Sarasvathy, S. D. (2018). Uncertainty, knowledge problems, and entrepreneurial action. *Academy of Management Annals*, 12(2), 659–687.
- Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management*, 32(6), 951–990.
- Tsang, E. W. K. (2004). Toward a scientific inquiry into superstitious business decision-making. *Organization Studies*, 25(6), 923–946.
- Tsang, E. W. K. (2011). Superstition and decision-making: Contradiction or complement? *Academy of Management Executive*, 18(4), 92–104.
- Van Eemeren, F. H., Garssen, B., Krabbe, E. C. W., Snoeck Henkemans, A. F., Verheij, B., & Wagemans, J. H. M. (2014). *Handbook of argumentation theory*. New York: Springer.
- Van Eemeren, F. H., Grootendorst, R., Henkemans, F. S., Blair, A., Johnson, R. H., Krabbe, E. C. W., et al. (1996). *Fundamentals of argumentation theory: A handbook of historical backgrounds and contemporary developments*. Mahway, NJ: Lawrence Erlbaum Associates.
- Van Eemeren, F. H., & Henkemans, A. F. S. (2017). *Argumentation: Analysis and evaluation*. New York: Routledge.
- van Laar, J. A. (2010). Argumentative bluff in eristic discussion: An analysis and evaluation. *Argumentation*, 24(3), 383–398.
- Volz, K. G., & Hertwig, R. (2016). Emotions and decisions: Beyond conceptual vagueness and the rationality muddle. *Perspectives on Psychological Science*, 11(1), 101–116.
- Von Hippel, W., & Trivers, R. (2011). The evolution and psychology of self-deception. *Behavioral and Brain Sciences*, 34(1), 1–56.
- Vosgerau, J. (2010). How prevalent is wishful thinking? Misattribution of arousal causes optimism and pessimism in subjective probabilities. *Journal of Experimental Psychology: General*, 139(1), 32–48.
- Vuori, N., & Vuori, T. (2014). Comment on “heuristics in the strategy context” by Bingham and Eisenhardt (2011). *Strategic Management Journal*, 35(11), 1689–1697.
- Walco, D. K., & Risen, J. L. (2017). The empirical case for acquiescing to intuition. *Psychological Science*, 28(12), 1807–1820.
- Walton, D. N. (1998a). *The new dialectic: Conversational contexts of argument*. Toronto: University of Toronto Press.
- Walton, D. N. (1998b). Eristic dialogue. *The new dialectic: Conversational contexts of argument account* (pp. 178–197). Toronto: University of Toronto Press.
- Walton, D. N. (1999). *One-sided arguments: A dialectical analysis of bias*. Albany, NY: State University of New York Press.
- Walton, D. N., & Krabbe, E. C. W. (1995). *Commitment in dialogue: Basic concepts of interpersonal reasoning*. Albany, NY: SUNY Press.
- Watson, G. W., Freeman, R. E., & Parmar, B. (2008). Connected moral agency in organizational ethics. *Journal of Business Ethics*, 81(2), 323–341.
- Weaver, G. R., Reynolds, S. J., & Brown, M. E. (2014). Moral intuition: Connecting current knowledge to future organizational research and practice. *Journal of Management*, 40(1), 100–129.
- Weber, M. (1978). *Economy and society: An outline of interpretive sociology*. Berkeley, CA: University of California Press.
- Westaby, J. D., Probst, T. M., & Lee, B. C. (2010). Leadership decision-making: A behavioral reasoning theory analysis. *Leadership Quarterly*, 21(3), 481–495.
- Wilcox, T. (2012). Human resource management in a compartmentalized world: Whither moral agency? *Journal of Business Ethics*, 111(1), 85–96.
- Wolf, S. (2010). A System of argumentation forms in Aristotle. *Argumentation*, 24(1), 19–40.
- Wolfsdorf, D. (2008). *Trials of reason: Plato and the crafting of philosophy*. Oxford: Oxford University Press.
- Xu, A., Loi, R., & Ngo, H. Y. (2017). Ethical leadership behavior and employee justice perceptions: The mediating role of trust in organization. *Journal of Business Ethics*, 134(3), 493–504.
- Yan, Y., & Qi, S. (2020). I know what I need: Optimization of Bribery. *Journal of Business Ethics*, 1, 3. <https://doi.org/10.1007/s10551-020-04608-z>
- Zeni, T. A., Buckley, M. R., Mumford, M. D., & Griffith, J. A. (2016). Making “sense” of ethical decision making. *Leadership Quarterly*, 27(6), 838–855.
- Zhang, T., Gino, F., & Margolis, J. D. (2018). Does “could” lead to good? On the road to moral insight. *Academy of Management Journal*, 61(3), 857–895.
- Zimmermann, F. (2020). The dynamics of motivated beliefs. *American Economic Review*, 110(2), 337–363.
- Zollo, L. (2020). The consumers’ emotional dog learns to persuade its rational tail: Toward a social intuitionist framework of ethical consumption. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-019-04420-4>
- Zollo, L., Pellegrini, M. M., & Ciappei, C. (2017). What sparks ethical decision making? The interplay between moral intuition and moral reasoning: lessons from the scholastic doctrine. *Journal of Business Ethics*, 145(4), 681–700.
- Zolotoy, L., Seo, M.-G., & Veeraraghavan, M. (2020). Mood and ethical decision making: Positive affect and corporate philanthropy. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-020-04432-5>

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