Book Reviews

Bongiovanni, Giorgio; Postema, Gerald; Rotolo, Antonino; Sartor, Giovanni; Valentini, Chiara; Walton, Douglas (eds.), *Handbook of Legal Reasoning and Argumentation.*
Dordrecht: Springer, 2018, pp. xxiii + 764.

The volume is composed of three parts. The first, "Basic Concepts for Legal Reasoning", addresses a number of topics that are preliminary to an understanding and discussion of reasoning and argumentation in legal contexts. The titles of the chapters collected in this part read like this: Reasons (and Reasons in Philosophy of Law); Reasons in Moral Philosophy; Legal Reasoning and Argumentation; Norms; Norms in Action; the Goals of Norms; Values; Authority; and the Authority of Law.

The second part of the book, "Kinds of Reasoning and the Law", explores the ways and the extent to which some general patterns of reasoning figure in legal practice and decision-making. These are the topics: Deductive and Deontic Reasoning; Inductive, Abductive, and Probabilistic Reasoning; Defeasibility in Law; Analogical Reasoning; Teleological Reasoning in Law; Interactive Decision-Making and Morality.

The third and last part of the volume, "Special Kinds of Legal Reasoning", focuses on some aspects and forms of reasoning that characterize legal practice and make it different from other argumentative practices in several respects. These are the topics addressed here: Evidential Reasoning; Interpretive Arguments and the Application of the Law; Statutory Interpretation as Argumentation; Varieties of Vagueness in the Law; Balancing, Proportionality and Constitutional Rights; a Quantitative Approach to Proportionality; Coherence and Systematization in Law; Precedent and Legal Analogy; Economic Logic and Legal Logic.

All contributors are renowned scholars and have made a valuable effort to put in concise and effective form a subject-matter which is multifaceted and somewhat unstable, in that it depends on the perspectives and vagaries of different legal systems and jurisdictions. All in all, the volume is a treasure trove of information and philosophical insights into legal reasoning and argumentation; it is and would be an excellent tool for those who want to learn about that, as well as for those who want to engage in scholarly debates.

An introduction by the late Douglas Walton precedes everything and sets the stage for the more detailed presentations that follow. In particular, in his own chapter, Walton makes it clear that argumentation is not the same as reasoning, because in an argument "the conclusion is always the claim made by one party that is doubted or is open to doubt by the other party. The other party may be a single person or an audience composed of more than one person, for example a jury. In argument, the conclusion is always unsettled, or open to doubt. Indeed, that is the whole point of using an argument. If there is no doubt about a proposition, and everybody accepts it as true, there is no reason for arguing either for or against it" (68). So, argumentation involves reasoning and has distinguishing features. Among these, an argument is performed in public; it is about a disputed point or claim; and it is part of a dialectical exchange, where critical questions are posed and the claim is unsettled.

The focus on reasons (rather than rules of positive law, or rules of other sorts) characterizes the first two chapters (by Giorgio Bongiovanni and Carla Bagnoli respectively) on reasons in philosophy of law and in moral philosophy. This

partakes in the contemporary shifting of attention *from rules to reasons*.[1] The understanding that reasons guiding legal practice and argumentation are antecedent to, and consequently more important than, specific rules of positive law has opened up new paths of inquiry in legal scholarship and reflection. This volume contributes to this in a significant manner. Additionally, the primacy of reasons has created a sizeable common ground for theorizing on legal practice by scholars from different countries and traditions. It was once said, as a commonplace, that the legal world was divided into common law and civil law countries, and that their differences were remarkable. With a focus on reasons rather than rules or specific procedural arrangements, the gap between argumentation in the Anglo-American common law systems and the European civil law systems, which was once understood as dramatic, has become much smaller.

As I already said, there is a lot of material in this book. This is good, even if some parts are not strictly speaking necessary for an account of legal reasoning and argumentation (I wonder about the two chapters on authority,[2] and about some parts that, like the chapter on values, do not deal with legal issues directly), and even if some parts overlap to a certain degree (for example, the chapter on evidential reasoning and the one on inductive, abductive and probabilistic reasoning, or the chapter on interpretive arguments and the one on statutory interpretation as argumentation).[3]

Given space constraints and my limited expertise, I will just add a few comments on some specific topics. Remember first that argumentation is pervasive in legal practice: legislators argue about statutes to enact, parties in a dispute argue about their claims and counterclaims, judges and jurors argue about the arguments of the parties, other judges argue about the reasons given to justify earlier judicial decisions, and so on. Very roughly, legal arguments in a judicial context can be divided into *evidentiary* and *interpretive* ones. The former deal with the evidence presented to support a factual claim (e.g., in a civil case, the claim that the plaintiff was injured by the defendant's negligent driving, or, in criminal case, that the victim was shot by the defendant during a robbery attempt). The latter deal with the interpretive canons employed to extract normative content from legal provisions or texts (e.g. the argument from literal meaning, the argument from legislative intent, the argument from purpose, the argument from systemic coherence, etc.). As a challenging case for interpreters, consider for instance the well-known *Smith v. United States*, where the United States Supreme Court had to decide in 1993 whether the exchange of a gun for drugs constituted "use" of the firearm "during and in relation to" a drug trafficking crime, within the meaning of the relevant federal statute (see 576-578, in the chapter by Andrei Marmor). The Court said so and supported its decision, basically, with an argument from literal meaning ("use" means any use) and an argument from purpose ("drugs

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[1] See also, e.g., the introduction to Dahlman, C., Stein, A. and Tuzet, G. (eds.) 2021, *Philosophical Foundations of Evidence Law*, Oxford: Oxford University Press.

[2] Of course it is important to see that authoritative sources are a constraint in legal reasoning and argumentation: in the application of law one cannot disregard what the relevant authorities (constitutional framers, legislators, judges creating precedents, administrative agencies and the like) established. I wonder whether this deserved two chapters.

[3] By the way, some overlapping is inevitable in works like this. For those who want to learn more on legal interpretation along argumentative lines, see Walton, D., Macagno, F. and Sartor, G. 2021, *Statutory Interpretation. Pragmatics and Argumentation*, Cambridge: Cambridge University Press.

and guns are a dangerous combination" and, by enacting the relevant statute, Congress wanted to minimize such risks). In a famous dissent, based on the use of language in context, Justice Scalia argued that to speak of "using a firearm" is to speak of using it for its distinctive purpose, i.e., as a weapon.

Quite reasonably, in their chapter on interpretive arguments and the application of law, Moreso and Chilovi say that "interpretive methods should not be conceived as separate elements of analysis: they should be considered as parts of an integrated method we use to determine legal content" (500).

When interpretive arguments are not sufficient because there is a gap in the law, one has to argue from *analogy*. Analogical reasoning fills the gaps in a legal system. As Bartosz Brożek points out in his chapter, the big problem lies in the assessment of the *relevant* similarities and differences between cases (368-370, 376-378). Everything is similar to everything else in some respect. The essential justification condition of an argument from analogy lies in the individuation of the relevant similarity. In the famous 1896 *Adams* case the alleged and conflicting similarities were two. This is how Brożek describes the case:

> Adams, a passenger on a boat operated by the New Jersey Steamboat Co., had some money stolen from his stateroom, despite having his door locked and windows fastened. The question the court had to answer was whether the defendant was liable as an insurer, i.e., without proof of negligence. There was no explicit rule stating the criteria for the responsibility of steamboat's operators. There were, however, other cases pertaining to the liability of service providers. In such cases as *Pinkerton v. Woodward* it was assumed that innkeepers were liable as insurers for their guests' losses. On the other hand, in cases such as *Carpenter v. N.Y.* … it was established that the operators of a berth in a sleeping car of a railroad company are liable only if negligent. There are analogies between steamboats and inns, as well as between steamboats and sleeping cars. The court considered both analogies and decided that the first one was more relevant, stating that the steamboat's operator is liable as an insurer (368).

Adams was a case of "dueling analogies",[4] for in a sense steamboats providing staterooms resemble inns, and in another sense as vehicles they resemble trains. The plaintiff argued for the first analogy, the defendant for the second. The court established the first as the relevant one, in order to protect the special trust relationship between the parties (provider of the service and customer). However, as a general point, for Brożek "there is no single, commonly accepted way of determining the relevant similarity between two cases" (378).

Finally, let me go back to evidentiary arguments. These are the arguments on matters of *evidence and proof*. They have a crucial importance for the outcome of a litigated case, since the application of the law is conditional on how the facts are reconstructed and categorized. Evidence is collected, admitted at trial, presented to the decision-makers, and evaluated to the purpose of reconstructing the relevant facts and make a correct decision on them. Evidentiary items become the content of arguments and evaluations by the parties first and the decision-makers then (e.g. the witness is reliable, the picture is ambiguous, the DNA evidence just shows that the defendant was there and not that he or she committed the crime, and so on). To transform evidence into proof one needs a "standard of proof".

[4] Schauer, F. 2009, *Thinking Like a Lawyer. A New Introduction to Legal Reasoning*, Cambridge, MA: Harvard University Press, 96-99.

Standard of proof (or burdens of proof, as they are also called) can be understood as decision thresholds.[5] Traditionally they come with qualitative formulations like "preponderance of the evidence" (civil standard) and "beyond reasonable doubt" (criminal standard). More recently scholars have been arguing about translating them into probability values and quantitative thresholds (> 0.50 for the civil standard, something like > 0.90 or more for the criminal standard). The shared assumption is that the criminal standard is more demanding in terms of evidential support because we generally think that convicting the innocent is worse than acquitting the guilty. To put it more technically, false positives (false convictions) are worse than false negatives (false acquittals). The extent to which it is so is a matter of debate. The more it is so, the higher must be the criminal threshold.

But the very translation of evidence into probabilities remains a controversial matter.

The chapter authored by Burkhard Schafer and Colin Aitken reviews the legal uses of inductive, abductive and probabilistic reasoning. Shafer and Aitken recall the philosophical and methodological issues involved in such uses and claim that, after having gone out of fashion due to Popperian falsificationism, induction has recently regained interest in the form of Bayesian confirmation theory (275). They distinguish different schools of Bayesian reasoning (objectivist and subjectivist) and point out that in legal cases statistical data are often not available, something which favors the subjectivist versions of Bayesianism (279).

The chapter authored by Marcello Di Bello and Bart Verheij presents three frameworks for the assessment of the evidence presented in a case, namely the argumentation framework, the probability framework and the scenario framework. In the first, one goes from evidence to arguments; in the second, from evidence to probabilities; in the third, evidence is assessed against scenarios. Di Bello and Verheij show the strengths and weaknesses of the three and reasonably prospect some integration between them (483).

DNA profiling and the use of Bayes' theorem are extensively discussed in both chapters. Bello and Verheij also mention Bayesian networks and ultimately highlight that no probabilities justify a decision by themselves: to this purpose we need standards of proof. A decision-theoretic framework must supplement any account of evidence assessment.

As a possible cross-fertilization between perspectives, to conclude, consider the issue of what I would call, in the absence of a better name, *argument ranking*. Let me focus on the arguments about the promotion of values and goals, and the arguments about the value of evidence. Sometimes these arguments are presented in quantitative terms (e.g. quantitative costs and benefits, probabilities) and objectors frequently claim that the relevant numbers are just arbitrarily chosen, for instance by attributing monetary values to legal goods in the context of proportionality analysis, or assigning arbitrary numbers to prior probabilities in the context of updating beliefs through Bayes' theorem. As Giovanni Sartor points out in his chapter on proportionality, "in most legal cases (at least when constitutional adjudication is at issue), we do not have sensible ways for assigning numbers and

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[5] Cf. this characterization by Walton: "A burden of proof is a requirement set on one side or the other to meet a standard of proof in order for the argument of that side to be judged successful as a proof" (71).

constructing the corresponding functions" (614).[6] However, Sartor contends that we can "reason with non-numerical quantities" (615). Not only can we put things in ordinal rankings (e.g. this line is longer than that): we can also express non-numerical cardinal evaluations and quantitative proportions (e.g. this line is twice longer than that). This is a challenging and inspiring way to think about constitutional balancing and proportionality, if it is true that we can "compare situations where values are realised in different ways" (618). Similarly, we can compare evidentiary arguments along several dimensions and arrange them in rankings that are not only ordinal but also quantitative, provided that the conceptual link between quantitative and numerical is severed or at least diluted.[7] Some arguments are better than others, and we can say how much they are so if we can specify the relevant dimensions.

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Lapointe, Sandra (ed.), *Logic from Kant to Russell: Laying the Foundation for Analytic Philosophy*.
New York and London: Routledge 2019, pp. 255.

The edited volume *Logic from Kant to Russell: Laying the Foundations for Analytic Philosophy* aims to display the theoretical relevance of Kant's logic for the development of the 19th and 20th century logic. The volume does not belong to the philosophical genre of the histories of logic, but it collects a series of thematically organised essays. The chapters follow a chronological order and one may read them accordingly (25). This notwithstanding, they do not intend to provide a mere historical description, or rather a rational reconstruction of the long trajectories of thought that connect Kant and Russell, and that pave the way for the rising of analytic philosophy and the establishment of the paradigm of contemporary logic. None of the contributions exclusively assesses either Kant or Russell's views on logic, but they rather focus on famous and lesser-known thinkers that elaborated their views on logic in the time between the publication of Kant's *Critique of the Pure Reason* and Russell's *Principia Mathematica* (25). This alternative, non-mainstream narrative has Kant as its leading figure, and it intentionally leaves Frege in the background (*ibidem*). The volume also does not cover possible counter-narratives on a positive relation between Kant and a leading figure in this tradition as Frege, or on Kant and the analytic philosophy in general, provided by more theoretically shaped interpretations.[1] This methodological choice is indeed an explicit reaction against the mainstream narratives on the historical development of contemporary logic (1). In fact, the standard narrative depicts Kant both as adding

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[6] On proportionality review and constitutional rights see also the chapter by Giorgio Bongiovanni and Chiara Valentini (581-612), providing also a valuable survey of the literature.
[7] This is in line with the *relative plausibility* approach on evidence and proof. See especially Allen, R. and Pardo, M. 2019, "Relative Plausibility and Its Critics", *The International Journal of Evidence and Proof*, 23, 5-59.
[1] Among these reconstructions, see the classic Sluga, H. 1980, *Gottlob Frege*, London: Routledge and Kegan Paul, especially on 58-61, and Reed, D. 2008, *Origins of the Analytical Philosophy. Kant and Frege*, London, New York: Continuum International Publishing Group. See also Hanna, R. 2001, *Kant and the Foundations of Analytic Philosophy*, Oxford: Oxford University Press, Heis J. 2014; "The Priority Principle from Kant to Frege", *Noûs*, 48, 2, 268-97.

an irrelevant contribution to the history of logic (2), and mostly as a widely criticised philosopher of mathematics (4). In addition, standard 20th century history of logic defines 19th century post-Kantian logic in terms of a "confused mixture of metaphysics and epistemology",[2] and similar narratives, as in Dummett's example (24), consider the publication of Frege's *Begriffsschrift* in 1879 as a revolutionary event in thought, which took place in complete independence from its context (*ibidem*). On the contrary, to justify its peculiar non-standard reconstructive approach focused both on "minor" figures in "Kant's wake" and on Kant's own conception of logic, the *ratio* of the volume is to put a great deal of attention on the methodology. In the Introduction, the editor Sandra Lapointe classifies six different alternative methodological approaches to the development of logic—rational reconstruction, contextualisation, doctrinal history, disciplinary history, thematic investigation and genealogy—and she states that the collective effort of the contributors intends to produce an example of "disciplinary history" (12). More precisely, the goal is to establish a disciplinary "historiography of logic" of the 19th century, rather than its history (5). By means of this definition, she identifies an interpretation of the development of logic backed by substantial theoretical and interpretive claims (5). With this respect, another key requirement for this approach is engaging with careful contextualisation (2), a feature that appears to be missing in the canonical texts in the history of logic that deal with Kant's conception of logic and its developments. In order to write a disciplinary history of logic, Lapointe deems necessary to look at the context in which different conceptions of logic in the 19th century have been put forward also by "minor" figures, avoiding thereby any retrospective judgement over their plausibility in light of modern standards, as it usually happens in rational reconstructions (10). On these premises, the interpretive assumption that lies at the core of the historiographical reconstruction is that Kant's "metaepistemological framework" (15) played a pivotal role in shaping the conception of logic in the 19th century. Said "metaepistemological framework" boils down to the distinction between pure general and transcendental logic, as well as between pure and applied general (i.e. psychology) and applied special (i.e. methodology) logic, drawn by Kant in Analytic of Concepts of the *Critique of the Pure Reason* (18). Choosing this very feature of Kant's logic as a guiding hypothesis for a historiographical reconstruction of 19th century logic is an insightful and fruitful move for several reasons. For instance, it fosters a more comprehensive reading of the evolution of the discipline and its "scopes and methods" (20) before (and beyond) its mathematisation, showing commonalities in the theoretical framework that are not reducible to mere historical continuities and do not resort to genealogies. As an additional result, the use of this metaepistemological framework for historiographical purposes proves to be in harmony with John MacFarlane's reading of the formality of Kant's logic. In fact, MacFarlane insisted on the significance of Kant's establishment of a pure general logic, characterising it as the first explicit theorisation of the "formality" of logic in its history.[3] By virtue of the inclusion of Kant's applied logic—conceived as

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[2] I am referring to Kneale, M., Kneale W., 1962, *The Development of Logic*, London: Oxford University Press, 355: "For it was he [Kant] with his transcendentalism who began the production of the curious mixture of metaphysics and epistemology which was presented as logic by Hegel and the other idealists in the nineteenth century".

[3] See MacFarlane, J. 2000, *What Does It Mean to Say that Logic is Formal?*, University of Pittsburgh, PhD Dissertation, 95.

psychology and methodology[4]—in the metaepistemological framework, the volume collects contributions that enrich and deepen MacFarlane's proposal with respect to the historiography of logic of the 19th century. The chapters provide the validity of the claim with references both to notable logicians after Kant, such as Boole, Dedekind or Hilbert, and to lesser-known thinkers. In fact, in compliance with the method of disciplinary history, the volume targets a cluster of thinkers that Franz Ueberweg named "Logicians of the Kant's School" (20).[5] These logicians have elaborated on Kant's scarce remarks on pure general logic, highlighting further problems and issues that relate with parts of the metaepistemological framework mentioned above that go beyond general logic, such as methodology (18). Except for a couple of chapters, Kant's own doctrines and the relevance of the logicians of the School and their positions on logic are constantly under scrutiny in the volume.

Let us now look more closely at the contents of each chapter. In this overview I will try, when possible, to stress how Kant's logic enters in them. The first essay by Jeremy Heis epitomises the goals set in the Introduction, and thematises the Logicians of Kant's School between 1789 and 1851 by considering their relation to Kant. These thinkers, among the others Krug, Kiesewetter, Hamilton, Herbart and Mansel, emphasised a number of problems connected with Kant's division between thinking and knowing, which corresponds to the division between pure general and transcendental logic. Heis evaluates how the logicians of the school tackled problems such as the analyticity of formal logic, a precise determination of logical laws of thought, the formality of Kant's pure general logic, and Kant's theory on the formation of concepts. The second essay, by Graham Priest, and the third, by Clinton Tolley, deal with Hegel's logic. Priest traces back his renowned dialetheist interpretation of Hegel's logic to Kant's *Antinomies* in the *Critique of Pure Reason*, defining Hegel as the "zenith" of dialetheism in the history of philosophy between Aristotle and the present times (71), but highlighting at the same time the importance of the Kantian background in the formulation of his dialectic logic. Tolley focuses on Hegel's logic as well, and he engages in an attempt to rehabilitate the continuity of Hegel's conception of logic as "objective thinking" and "science of truth" (93) with the logicians in the century after Kant, downsizing in his reading its theological and hard-core metaphysical interpretations. Tolley does not refer to the logicians of the Kant's School, but rather to three different conceptions of logic (95), namely the mathematical-objectivist, semantical objectivist, and pragmatist-intersubjective conceptions, which are ascribable respectively to Russell, Frege and Brandom among the others. In the fourth essay, the editor of the volume Sandra Lapointe underlines the innovative views on logic put forward by the Czech mathematician and philosopher Bolzano. In doing so, she puts at work the methodological principles enucleated in the Introduction to the volume, and she argues that one may interpret Bolzano's logical reform through a different narrative in continuity with Kant (104-105). The standard narrative credits Bolzano with innovative theories on "antipsychologism and semantical realism, logical consequence and logical truth as invariance" (104). Lapointe argues that one shall not refer to a contemporary

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[4] It shall be noted that with 'methodology' I hint at Kant's 'applied special logic'. Therefore, the term should be taken in a restricted sense.

[5] MacFarlane sketched also a description of the effects of Kant's 'discovery' of the formal character of logic on logicians in Germany and in Britain, before dealing in the dissertation with the very same theoretical issue in Frege. See MacFarlane, J. 2000, *What Does It Mean to Say that Logic is Formal?*, University of Pittsburgh, PhD Dissertation, 127-33.

account of analyticity (107) and of logical consequence (109) to account for the origin of Bolzano's theoretical novelties on these topics, but one should rather look to the logic of his time.

In the fifth essay, Lydia Patton addresses George Boole and his ground-breaking contribution to the theory on the relations between logic and algebra, to the point that he can be judged a "precursor to the model-theoretic approach" (123). She reconstructs how Krug, Esser and especially the debates on the status of logic among British post-Kantians, for instance Thomson, influenced Boole's account of logic (123-4). The result is surprising, and shows how Boole's application of logics to algebra is intertwined with more general theoretical problems, such as the question on the scientific status of logic and the objectiveness of its laws, that stem from Locke and Kant and from the subsequent debates in the "New Analytic" approach to logic (128-34). The sixth essay by Nicholas Stang defends a new interpretation of Lotze's logic, according to which he supported a form of "non-hypostatic Platonism" (139). Lotze had defended the existence of propositions, while at the same time denying the claim that they belong to a separate ontological realm. After a *detour* through the different senses in which Lotze's characterises the elements that are part of his ontology (141-147), Stang criticises a reading of Lotze that would ascribe a strong ontological conception of propositions to him, and he shows to what extent his alternative line of thought resembles the non-hypostatic reading of Frege's Platonism (151). Stang's characterisation of B-Platonism, that he does not attribute directly to Frege, is a useful tool to express Lotze's idea that the propositional content of judgement is objectively valid but not actual (*wirklich*), since it is neither spatially nor temporally extended, and not subject to causal laws. Hence, one may conceive of the objective content of judgements as integrally established by the laws of logic (157). In the seventh essay, Frederick Beiser exposes the late theory of logic of the Neo-Kantian Hermann Cohen. In the *Logik der reinen Erkenntnissen*, Cohen theorises a notion of "pure thinking" that has a strong idealistic flavour, given that it states that thought can produce its object *a priori*. Arguing against the hypothesis that Cohen may have given up on Neo-Kantianism, Beiser holds that Cohen is making reference to Kant's notion of "*a priori* thinking" in establishing its account of pure thinking (164). In the second part of the essay, Beiser goes through Cohen's theory of infinitesimals (166 and f.), and demonstrates how this notion plays a fundamental role in the explanation of qualitative and quantitative features of reality, being part of the "nomological idealism" Cohen would defend in his mature works (170). The eighth essay by Erich Reck is devoted to Dedekind and to his peculiar version of the logicist thesis. Roughly speaking, this thesis contrasts Kant's intuition-based doctrines on the discipline, and it states both that arithmetic is a part of logic (172) and that numbers are to be conceived set-theoretically. In contraposition to Kant, Dedekind explains space and time through the doctrine of real numbers, rather than the other way around. Despite the opposition to Kant's account of mathematics, and the fact that Dedekind shares fundamental innovative ideas with the logicists and with Frege (185), Reck argues that Dedekind thinks of logic in agreement with his time. His notion of thinking and his basic claims on the laws of thought were "pointing towards Kant's categories of the understanding" (183), whereas Frege thought of logic in a different way. Also in light of this, Reck acknowledges and defends the originality of Dedekind's version of logicism. The ninth, tenth and eleventh essays focus on Russell. In the ninth essay, Consuelo Preti provides a detailed explanation for an apparently perplexing statement Russell made in a letter to Couturat in 1900, in which he defined Moore as "the most subtle

in pure logic" (190). The motivations behind this definition can be detected in Moore's innovations with respect to his philosophical background, in particular concerning his realist stance on the metaphysics of judgements. Preti takes into account how prominent figures such as Bradley and Kant contributed to the development of Moore's realist stance on logic, which had in turn an influence on Russell. The conception of psychology that was widespread in Cambridge at the end of the 19th century plays an important role as well in this narrative: following the attempt to establish a "scientific psychology", Kant was read in Cambridge as a "bad psychologist" (196), and his theories of the morals were interpreted along the same lines. Moore's reaction to Kant's theories on morals exposed in the dissertation he delivered for his Trinity Fellowship in Cambridge, together with his rejection of Bradley's Idealism (202), are then crucial, according to Preti, to account for the positions that led to Russell's positive assessment of Moore as a logician. In the tenth essay, Sean Morris suggests a continuity between Russell's "idealistic" period and his works on epistemology and theory of knowledge in the 1910s, under the common concern on the methodology of scientific philosophy (206). A key step for proving this claim is to look at the German philosopher Sigwart, whom Russell praised and showed appreciation for (208). In his *Logik* (210 and f.), Sigwart underlines the importance of logic for scientific methodology concerning the logical perfection of judgements and the striving to systematicity of knowledge both with regards to its complete deductive derivability from principles and with regards to "*systematic classification*" (215 and f.). For Sigwart, both logic and empirical results should jointly contribute to the construction of a metaphysics that is contiguous to science. Morris observes the similarities between this conception and Russell's late theorisation of a scientific philosophy (226) that does not imply a foundationalist account of knowledge, but which conceives of philosophy as "complementary" to empirical science (232). According to Morris, this proves that the influence of Sigwart on Russell spans beyond the foundations of mathematics. The very last chapter by Nicholas Griffin analyses the presence of Kant's in the epigraph of Hilbert's *Foundations of Geometry* (235) and in the axiomatization of space given by Russell before embracing the logicist view (239). As for Hilbert, Griffin shows how in the lectures before 1898 the foundations of geometry were characterised by an appeal to the notion of space conceived along Kantian lines, i.e. regarding its perception in experience and in intuitions (237), although in the published book Kant is only quoted in the epigraph. As for Russell, Griffin argues that, even after he rejected Kantian transcendental arguments in geometry in 1897 (239), he remained under the influence of a Kantian conception of space in laying the foundations of geometry in algebraic terms before his logicist turn. This was due to the influence of Whitehead's "abstract's general idea of space", which underlies Russell's own conception of algebra. In light of this, Griffin proves that Russell's, as well as Hilbert's, initial axiomatizations of geometry were "glued" by "the faint reflection of Kant's 'fading glow'" (245).

To conclude, the volume is faithful to the methodological principles outlined in the Introduction and it proves worth reading. While it may appear not homogenous at first glance, the volume shows how an alternative narrative based on Kant can be both justified on solid methodological grounds and successfully applied to specific instances in the history of logic of the 19th century.

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Westphal, Kenneth, *Kant's Critical Epistemology: Why Epistemology Must Consider Judgment First*.
Abingdon: Routledge, 2020, pp. xxv + 369.

Westphal's project seeks to read Kant's *Critique of Pure Reason* against the transcendental idealist grain whilst highlighting resources and insights from Kant's commonsense perceptual realism. The book is divided into three parts: I) Epistemological Context, II) Kant's Critical Epistemology, and III) Further Ramifications. While Westphal commits to an impressive and sundry review of Kant's First Critique, balanced with Neo-Kantian bricolage, the central theses that he offers draw from Kant's three Analogies of Experience and the four Paralogisms of Rational Psychology, with interest in the relationship between Kant's theory of perceptual judgment and account of empirical knowledge.[1] Westphal makes the case that Kant's first Critique correctly defends a robust fallibilist account of empirical justification, an insight that has eclipsed most, if not all, previous Kantian interlocutors. Despite Westphal's book is brimming with analyses and critiques of philosophers inspired by and reacting to Kant, historical and contemporary, the true merits of Westphal's project are in his erudite parsing of the first Critique with cognitive semantics in mind.

The first three chapters, which comprise the first section, find Westphal situating Kant within the history of analytic epistemology. In developing this section, Westphal enumerates the state of epistemology prior to Kant—guided by the Cartesian assumption and epitomized by Hume, epistemology was anchored to evidential data, with states of sensory-consciousness undifferentiated from states of self-consciousness awareness. This presumption, when conjoined with infallibilist assumptions about cognitive justification—the infallibilist doctrine being that nothing short of provability suffices for justification—inevitably leads to the egocentric predicament of Cartesian skepticism and internalist infallibilism. Westphal's project stakes to evince that Kant is the first great non-Cartesian epistemologist, developing forms of externalism not only about mental content and causal judgment, but also about cognitive justification (49).

By the end of the first chapter, we see Westphal's thesis begin to take shape: that, although necessary, sensory stimulation is insufficient for cognitive warrant. Sense-data is such that we can process it by bringing it under concepts in judgments whereby we classify and identify the various particulars (objects, events, structures, processes or persons) surrounding us. Throughout Westphal's project, this will reappear in different applicatory scenarios, ranging from semantics to perceptual psychology to metaethics. Westphal's ultimate Critical endeavor is to poise Kant via scientific realism's mold, making the case that Kant's anti-skeptical transcendental proof(s) demonstrates that any human being who is apperceptive—insofar as they are aware of some appearances appearing to occur before, during, or after others—"must actually perceive at least some particulars in her or his surroundings, in order to identify even a presumptive, approximate temporal sequence amongst appearances" (219). Situating Kantian epistemology historically throughout these first three chapters, Westphal cites a number of contemporary epistemological puzzles, such as Gettier-type problems regarding justified true belief and the examples

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[1] Kant, I. 1998, *Critique of Pure Reason*, Cambridge: Cambridge University Press, §A190, 192– 3/B235, 237-38, 275.

therewith, which centrally involve what are termed "externalist" factors bearing upon the justificatory status of Someone's beliefs—factors such that Someone cannot become aware of truth-laden belief(s) by simple reflection. Following Descartes' cogito argument, stilted on the putative self-transparency of beliefs qua ideas—and those Cartesian epistemologists prioritizing access-internalist infallibilism regarding inner experience—"internalism" was launched in the service of what Westphal terms "global perceptual skepticism".[2] Kant's fallibilism, and his transcendental proof that we can only be self-conscious of our existence as determined in time via apperception if we have *some* perceptual experience and knowledge of spatio-temporal causally active substances in our surroundings, counters the skeptical generalization from *occasional* perceptual error to the possibility of universal perceptual error (or, *mutatis mutandis*, insufficient cognitive justification):

> […] any world in which we are altogether perceptually deluded is a world in which no human being can be apperceptive [...]. Global perceptual sceptics simply assume that we can be self-conscious without being conscious of anything outside our minds. Kant's transcendental proof of realism shows just how portentous is this assumption (227-28).

Furthermore, Kant's three principles of causal judgment, as detailed in the three Analogies of Experience anchor Westphal's description of our cognitive capacity for identifying enduring events:

1. Substance persists through changes of state.
2. Changes of state in any one substance are regular or law governed.
3. Causal relations between substances are causal interactions (147).

Kant's three Analogies are universally quantified and these principles *guide* causal judgment. Moving from phenomenal causality to cognitive semantics, having now broadly outlined his project's ambitions, Westphal's second section, "Kant's Critical Epistemology", is comprised of six chapters (viz., chapters 4-9). Notably, it is in the fourth chapter, "Constructing Kant's Critique of Pure Reason", where Westphal begins to formalize Kant's semantics of singular, specifically cognitive, reference, prodding philosophy of language, epistemology, and Kant scholarship into truly novel and exciting territory. Westphal first makes the general case that to understand empirical knowledge we must distinguish between predication as a grammatical form of sentences, statements or (candidate) judgments, and predication as a (proto-)cognitive act of ascribing some characteristic(s) or feature(s) to some localized particular(s). By way of Kant, Westphal argues that term "particulars" ought to be construed broadly so as to include any kind of particular we may localize within space and time. Kant sought to expound upon a general phenomenon rather than individual facts, thus systematizing how natural regularities can be and are localized. Westphal argues that Kant's semantics of singular reference achieves verification empiricism *without* invoking empiricism. Contra verificationist theories of meaning—which only require logically consistent propositions—and whether stated in terms of concepts, propositions, or judgments, Kant's justification of realism involves explicating classificatory content

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[2] Descartes, R. 1985. *The Philosophical Writings of Descartes*, 3 Vols., J. Cottingham, R. Stoothoff, D. Murdoch, A. Kenny (eds. & trs.), Cambridge: Cambridge University Press.

descriptions *vis-à-vis* further requirements involved in *actually* classifying or identifying any extant instance so-described, doing so accurately, warrantedly/justifiedly and, thus, cognizantly.

By the sixth chapter, Westphal has successfully bridged Kant's objective significance and justifiable cognitive judgment with the refutation of global perceptual skepticism. Thus follows one of Westphal's most interesting developments: drawing from the Transcendental Deduction's description of synthesis in apprehension, where perception must fully accord with the category of quantity, Kant's Thesis of Singular Cognitive Reference "concerns the cognitive, and hence also the epistemological significance of identifying by locating those individuals to which we ascribe any features, by which alone we can know them and can claim to have knowledge of them" (117). Constructing Kant's Semantics of Singular Cognitive Reference, Westphal espouses Gareth Evans' notion of predication as ascription, which requires conjointly specifying a relevant spatio-temporal region and manifest characteristics of any particular that we self-consciously experience or identify (§55).[3] These conjoint specifications allow for the ascription of manifest characteristics that are mutually independent cognitive achievements, integrating sensation/sense-data and conception/understanding through co-operation and integration. Westphal eventually develops a Critical method wherein:

> Sensibility is required (though not sufficient) for sensing the various manifest characteristics of the sensed particular, and directing us to its location; Understanding is required (though not sufficient) for explicitly identifying its region and its manifest characteristics, thus enabling us to be apperceptively aware of this particular (262).

Westphal argues that Kant's Thesis of Singular Cognitive Reference services epistemology by substantiating that knowledge, justified belief, or experience of or about particulars require satisfying further conditions than those of conceptual content ("intension") or linguistic meaning alone. No matter how specified or detailed a description/intension may be, it cannot, by itself, determine whether it is referentially empty, determinate, or ambiguous because it describes *what* there is: either zero, one, or several individuals. However, to *know* any spatio-temporal particular requires correctly ascribing *characteristics* to it and localizing it in space and time. Via ostensive designation, we ascribe predicates used in our judgments to some putatively known particular, differentiating and characterizing it. The ascription of characteristics is required for singular, specifically *cognitive*, reference to a spatio-temporal particular, providing the necessary requirement for the truth-evaluability of our claims.

Between Chapters 6-9, Westphal aims to further enrich Kant's cognitive semantics qua particulars in order to provide a legitimate stand-alone epistemological doctrine. It follows that, insofar as epistemological "success term(s)" are considered, logical consistency requires that Someone *uses* that predicative proposition ascriptively to describe characteristics or features to some localized particulars. Kant's transcendental sense of "real possibility" denies that descriptions alone suffice for knowledge—no description suffices to specify and therefore determine whether there is any particular in some specific context by way of sentential meaning, as reference to some extant perceptual particular is required. Westphal pellucidly

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[3] Evans, G. 1975, "Identity and Predication", *Journal of Philosophy*, 72, 13, 343-63.

writes that "only when the performer known as Prince ordered and purchased a flamboyantly purple guitar did the concept 'purple guitar' come to have 'real possibility' in Kant's full, referable-in-practice, empirical sense of this designation" (246). This undermines Russellian-cum-Quinean confidence in mere intension (predicates as classifications, explicated as mere descriptive phrases) and regimenting indexicals. Kant's demonstrative ("deictic") reference is required to obtain even *candidate* cognitive claims. Speaking does not suffice to speak *about* any individual thing, person, event, structure. Merely speaking or thinking intelligibly/understandably requires avoiding self-contradiction, whereas cognition or any claim to knowledge requires localizing the putatively known individual(s) within space and time, together with some approximately correct attribution of characteristics to it or them. Only in referential contexts can we advance from uttering sentences to making any epistemically warranted cognitive statement or claim (§89).

More broadly, Westphal's point is that empirical knowledge and semantic meaning involve more than simply supplying values for logical variables, as such stipulations, by design, abstract from descriptive identification and intelligibility while presuming purported reference. Reading Kant's reference-in-practice *vis-à-vis* Tetens' *realisieren*, Westphal articulates a key "deictic point" central to the conditions that must be satisfied so as to be able to make any sufficiently accurate attribution to even *claim* that something is such-and-so:

> S/he must localize that (or those) particulars to which (or to whom) S/he purports to ascribe any feature(s), so as (putatively) to know (cognize) it or them. Cognition is not secured by fortunate guesses in the form of mere descriptions which happen to have (had) some instance somewhere or other within nature or history. Cognition requires identifying by locating relevant particulars so as to be able to know them, or even to mistake them! (118)

Truth pertaining to knowledge, and therefore to epistemology, requires demonstrative reference to relative particulars. Only under these conditions can there by candidate objects of knowledge. Westphal's project recalls Carnap's "descriptive semantics"—the pragmatic use of propositions when making cognitive judgments in suitable perceptual or experimental contexts about localized individuals/particulars.[4] As demonstrated by Kant's Analogies, the causal principles regulating our causal judgments do so by guiding our identifying efficient causes of observed spatio-temporal events. Making such discriminatory, perceptual-causal judgments to identify particulars within our surroundings requires anticipation and modal imagination to consider relevant causally possible alternatives to the apparently perceived causal scenario. Westphal here argues that Kant's conception of "imagination" is not simply imaging/picture-thinking, but empirically informed counterfactual reasoning about causal possibilities.

The constitutive point in Kant's three Analogies involves our typically reliable capacities to distinguish and discriminate various kinds of causal sequences and processes amongst the perceptible, causally structured, and interacting particulars that surround us (§§48-49).[5] These particulars regulate our causal judgments. Were we unable to make any such causal discrimination(s) and identification(s) accurately and justifiedly, we would altogether lack apperception of our

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[4] Carnap, R. 1956, *Meaning and Necessity*, Chicago: University of Chicago Press.
[5] Kant, I. *Critique of Pure Reason*, §A84-130/B116-69.

own existence as determined in time. Westphal's cognitive-semantic point here has far-reaching relevance for philosophy of language and epistemology, as well as for the history and philosophy of science, theory of action, and philosophy of mind. As will become the nexus for the third section of Westphal's book, which concerns scientific realism, Kant's cognitive semantics is embedded in and strongly supports Newton's causal realism regarding gravitational force—Westphal makes the case that Newton's methodological Rule 4 of (experimental) philosophy requires any competing scientific hypothesis to have not merely empirical evidence in its favor but also sufficient evidence with sufficient precision to either make an accepted scientific theory or law more exact or to restrict it and demonstrate exceptions to the rule (§§66-67). It is here that Westphal's reading of Kant, rigorous and unique when applied to semantics and epistemology, feels somewhat wanting—while the reader will feel assured that Kant's context-bound externalist epistemology warrants cognitive application within the non-formal domain of empirical knowledge, the diachronic development of physics and other such natural sciences are necessarily tethered to the uptake of particulars (i.e., replicated experiments and tests). Indeed, the Sellarsian apothegm rings true that there are as many scientific images of man as there are sciences which have something to say about man, where each science deploys distinct instruments and methods. It would thus be fruitful if Westphal, particularly given his Hegelian expertise, further explored the always-developing and self-correcting descriptive and explanatory resources of the scientific image and how it shapes rational judgments, which cannot be exhausted by the causal locutions of justificatory judgment, while at once pointing towards a radically non-normative picture of ourselves. Westphal briefly touches on this important consideration but his elaboration of Kant's work on transeunt causal action via rule-governed succession of states does not contend with the irresolvable frame-bound discrepancies between various scientific theories (quantum mechanics vs. Newtonians classical mechanics) or quantum measurement (viz. perceptual observation overdetermines superposition).

Despite this very minor limitation, Westphal's engagement with Kant *vis-à-vis* the history of philosophy is extremely fertile. The second section's latter chapters find Westphal reviewing Kant's inventory of cognitive capacities, describing Kant's insights into rational judgment as articulating "sensationism" about sensations, the view that sensations typically are components of acts of awareness of particulars. Situating Kant as steeped in the Humean predicament of psychological epistemology, Westphal illuminates Kant's account of consciousness by parsing an issue pertinent to contemporary representationalist accounts of perception—that if a sensory idea is caused by an object, then that idea also represents some feature of that object. In the philosophy of perception and neurophysiology, this issue transpires in the "binding problem(s)"—a problem concerning cognitive psychology that deals with explaining what unites any group of sensations into what might be a unified, fluid percept of any one object (§22). This problem arises synchronically within any moment of perception of an object and arises diachronically as a problem of integrating successive percepts of the same object: one set of issues is sensory, concerning the generation of sensory appearances to each of us; the second set is intellectual, concerning how we recognize the various parcels of sensory information we receive through sensory experience to be information about a spatio-temporally consistent object. Westphal makes the case that Kant's Transcendental Logic may provide us with a helpful conceptual primer here, as it

concerns the kinds of judgment (classification, differentiation, conditionalization) required to identify, distinguish, track and classify individuals perceived in our surroundings. Although Westphal is not the first philosopher to cull Kant's unity of consciousness as relevant to the binding problem, the case study strengthens Westphal judgment-first epistemological approach, with the *a priori* concepts space and time utilized to identify any (actual) region of space and period of time in which various particulars change, are perceived, and are arranged.

Chapter 8 and 9 are perhaps Westphal's strongest chapters. It is here that Kant's epistemological findings about perception and causal judgment crystalize, with Westphal elaborating on Kant's proofs of content externalism. It follows that any world in which human beings are capable of apperceptive experience is one that must provide us some minimal regularity and variety amongst the contents of our sensations. This is what allows us to make judgments by way of identifying objects or events, for it is by way of judgment, and not sense-data, that we can distinguish ourselves from the objects that populate our environs and achieve apperception (§51). Kant's semantic point about singular cognitive reference and the proof of mental content externalism are here reinforced by his proof that we can only make legitimate causal judgments about spatio-temporal particulars (viz., persisting substances) using our conceptual categories.

The final third of the book, titled Further Ramifications, comprises four chapters. Chapter 10 elaborates on the aforementioned thesis regarding scientific realism, which veers towards a programmatic Carnapian rendering. However, it is Westphal's consideration of the free will vs. determinism debate that occupies the bulk of the final chapters. Westphal approaches this debate qua metaphysics rather than metaethics and, as is characteristic of Westphal's reading—contra those interpreters who contend that Kant's compatibilism entails the truth of causal determinism and, thus, insist upon the wellspring of the noumenon for radical freedom—Westphal reads Kant's argument here without appealing to his transcendental idealism. Westphal argues that Kant reveals the entire free will vs. determinism debate as void, intractable, and an *argumentum ad ignorantium* (§§74-83). This will undoubtedly serve as the most controversial section for those Kant scholars who uphold the "two-worlds" view as key to linking Kant's practical and theoretical philosophy. Nevertheless, Westphal's judgment-first approach offers a robust conception of normativity, where "rational judgment is normatively structured insofar as it consists in critical assessment of justifying grounds, principles, evidence and our use of them in any specific judgment, and because the normative character of justificatory judgment cannot be reduced to, nor eliminated by, causal considerations" (288). In Chapters 11-12, Westphal argues that Kant's account of causal judgment suffices to preserve the possibility of free and imputable action at the psychological level. Westphal underscores that we can *only* make accurate and justifiable causal judgments about spatio-temporal particulars—causal knowledge results from successful, exclusively causal explanation of actual events but the principle of universal causal determinism is not, nor can be, a known causal law at the psychological register.

Reviewing Kant's Paralogisms of Pure Reason, Westphal asserts that we have well-justified causal beliefs *only* to the extent that we have credible evidence for causal explanation of events.[6] Consequently, the transcendental causal principle, that every event has a cause, is a *regulative* principle of causal inquiry and we

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[6] Ibid., A341–61, B399–413.

obtain causal knowledge only from successful causal explanation, which does not obtain for inner psychology (mental events). Mistaking the causal principle for a justified causal law is an instance of "transcendental subreption", of "mistaking conditions for the possibility of human experience for substantive features of the world we experience" (167). Westphal emphasizes that Kant's principles of causal judgment, as justified in the "Analogies", only hold when referred to spatio-temporal substances; via *modus tollens*, causal judgment *cannot* be known to hold of merely psychological phenomena (§§45-46). Here, the physicalist may rejoinder: but inner psychology is composed of physical neural events, and thus spatio-temporal particulars-cum-substances which we can represent and use as positive empirical evidence given our contemporary brain-imaging techniques (e.g., fMRI, EKG)! Westphal does not consider such responses, leaving (naturalist) readers who might agree with Westphal's sidelining Kant's transcendental idealism teeming with such queries. Nevertheless, Westphal also takes a second approach to determinism, not via psychology but bodily behavior. Appealing to Kant's transcendental justification of bodily comportment within perceptible judgment, Westphal claims that causal behavior is underinformed and that identifying causally interacting substances in our surroundings does not justify causal determinism universally across the domain of spatio-temporal events. Westphal links his conception of the freedom of behavior to the semantics of cognitive behavior via the Principle of Sufficient Reason (PSR)—that every event has a sufficient cause or causes—claiming that it suffices as a regulative principle guiding causal inquiry, causal explanation, and causal judgment; it is not, nor can it be, a principle known to hold constitutively of all events within space and time (§§79-80). Westphal warns against our mistaking the PSR for an "unrestricted universal, demonstrated (i.e., cognitively fully and unrestrictedly justified) assertoric *law of causality*" (299)—we must never mistake a *principle* of causal inquiry for successful *outcomes* of such inquiry.

Westphal underscores that Richard McCarty conflates the causal principle—that each spatio-temporal event has (a) numerically distinct spatio-temporal cause(s)—for an established assertoric causal law, whereby every event in fact has some sufficient set of causes.[7] Westphal responds that: "Kant's Critical strictures on causal judgments within the merely temporal psychological domain entail that we cannot know pro or contra whether psychological phenomena are causally structured, or are causally deterministic" (321). Westphal is correct that a complete cause-and-effect schema will, necessarily, always be incomplete: enumerating a causally-closed map will forever be undermined by the nature of open systems, i.e., the fact that space and time are always present. But does this preclude reflection on causal determinism via best-inference? For Westphal, in the domain of human behavior, such attempts will make use of unjustified suppositions based on under-informed models, which are supplanted by highly abbreviated and short-hand causal commands.

Rather than relaying his critique to develop a metaethical doctrine separate from the Categorical Imperative and its noumenal purview, Westphal's methodological concerns brings him to conclude the book by advocating scientific realism. This will, indeed, satisfy naturalist Kantians like myself who are favorable towards Sellars' rendering. For Westphal, the supposition that mere logical possibilities undermine cognitive justification remains pervasive and props up

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[7] McCarty, R. 2009, *Kant's Theory of Action*, Oxford: Oxford University Press.

cognitive skepticism, tendering multitudinous concerns in epistemology and philosophy of mind like the "hard problem" of consciousness, which trade in logical possibilities rather than demonstrative reference. Westphal's critique is leveled at philosophical methodologies that ascribe various characteristics to something that does not suffice for any actual ascription—as delineated by the semantics of cognitive reference, actual ascription always requires localizing relevant particular(s) sufficiently to discriminate them.

For Westphal, the conjoint implication of the Analogies of Experience and the Paralogisms of Rational Psychology is that we cannot make any legitimate, justifiable causal judgments about internal, psychological, or temporal states/occurrences. While there may loom large the impulse to project the universal determinist principle of binding causality from the constitutive principle of objective experience, Westphal is quick to remind us that this is what Kant criticized as "transcendental subreption"—mistaking transcendental conditions of the possibility of apperceptive human experience and knowledge for ontological conditions constitutive of spatio-temporal objects. Westphal conclusively claims that the debate of determinism vs. free will is not only deeply unsatisfactory but an empty question; philosophy would do better to engage in exercises of specific judgment or matters of action via the compatibilist framework that asks "[t]o what extent, or in what regard(s) is each action free?" (304). One hopes, however, that Westphal is not content with deeming the entire Kantian-metaethical purview of practical philosophy an altogether empty pursuit—it is here that the reader may underscore that the determinism vs. free will debate is tethered to critical questions concerning responsibility, culpability, and freedom. This debate informs our evaluative norms, reactive attitudes, and pragmatics, down to influencing jurisprudence and legislation; opting out of the debate may not be a choice when so much of our moral system is carved around it. Considering that reasons for doing are never categorially given, like sense-data, and that no moral particulars can be identified *a priori*, Westphal's prescription risks lapsing into abdication. Although Westphal is not a moral philosopher, having stepped into the metaethical boxing ring, the onus looms large for Westphal, and us as his readers, to grapple with how, and if, a judgment-first epistemology obtains in the metaethical terrain. Despite this query—which Westphal's construction very well may provide an answer to, although it must be made explicit—Westphal's epistemological rendering of Kant, particularly his work on cognitive semantics and content externalism, achieves the goal of proving Kant a meticulous epistemologist.

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