Received: 4 October 2021 | Accepted: 18 December 2021

DOI: 10.1111/ejop.12762

ORIGINAL ARTICLE

European Journal of Philosophy WILEY

Phenomenology, anti-realism, and the knowability paradox

James Kinkaid

Department of Philosophy, Boston University, Boston, Massachusetts, USA

Correspondence
James Kinkaid, Department of Philosophy, Boston University, 745 Commonwealth Ave. Boston, MA 02215, USA.
Email: jkinkaid@bu.edu

Abstract

Husserl endorses *ideal verificationism*, the claim that there is a necessary correlation between truth and the ideal possibility of experience. This puts him in the company of semantic anti-realists like Dummett, Tennant, and Wright who endorse the *knowability thesis* that all truths are knowable. Unfortunately, there is a simple, seductive, and troubling argument due to Alonzo Church and Frederic Fitch that the knowability thesis collapses into the *omniscience thesis* that all truths are known. Phenomenologists should be worried. I assess the damage by surveying responses that may be open to Husserl. In particular, I explore whether Husserl ought to have adopted intuitionistic logic and motivate a restriction of ideal verificationism on phenomenological grounds.

1 | INTRODUCTION

Notoriously, the later Husserl endorses some form of transcendental idealism. There is little consensus on just what Husserl means by "transcendental idealism," and in particular on whether it is a form of anti-realism. Most of the discussion has focused on whether Husserlian transcendental idealism is a form of *ontological* anti-realism. But starting in the work of Michael Dummett and continuing with the refinements of Dummett's program by Neil Tennant and Crispin Wright, the realism/anti-realism debate has been transposed into a *semantic* key. There is good reason to ask where Husserl falls in the realism/anti-realism debate semantically construed because of his *ideal verificationism*: his view that there is a necessary correlation between truth and the ideal possibility of experience. Ideal verificationism bears a strong resemblance to the central plank of contemporary semantic anti-realism, namely, the view that truth is epistemically constrained and thus that all truths are knowable. Husserl's apparent commitment to this *knowability thesis* should worry phenomenologists. This is because there is a simple, seductive, and troubling proof due to Alonzo Church and Frederic Fitch that the knowability thesis entails the *omniscience thesis*: all truths are, have been, or will be known.

The Church-Fitch proof relies on three principles of a rather weak and uncontroversial modal epistemic logic. Let Kp mean "someone at some time knows that p." Then the knowability thesis is:

$$\text{KT } p \supset \Diamond Kp$$

The proof relies on two principles about knowledge: that knowledge is factive and that it distributes over conjunction:

$$\text{FACT } Kp \supset p$$

$$\text{DIST } K(p \,\&\, q) \supset (Kp \,\&\, Kq)^{1}$$

It also relies on the Rule of Necessitation (read: theorems are necessary), which is present in all normal modal logics:

$$\text{NEC If } \vdash p, \text{ then } \Box p$$

Finally, it relies on the standard interdefinability of the box and the diamond in modal logic.

Here is the proof. Consider an arbitrary unknown truth, that is, a proposition p such that (p & ¬Kp). Assume for reductio that it is known that this proposition is unknown, that is, K(p & ¬Kp). By DIST, Kp & K¬Kp. By FACT, Kp & ¬Kp. Contradiction. By reductio, ¬K(p & ¬Kp). Since this is a theorem, by NEC, □¬K(p & ¬Kp), and by the interdefinability of the box and the diamond, ¬◇K(p & ¬Kp). Now plug (p & ¬Kp) into the knowability thesis to get (p & ¬Kp)⊃◇K(p & ¬Kp). By modus tollens, ¬(p & ¬Kp), which is (classically) equivalent to the omniscience thesis:

$$\text{OT } p \supset Kp$$

If we understand the knowledge operator as ranging over only finite knowers, OT is absurd. Indeed, there are innumerable mundane counterexamples to OT so construed: for example, it will never be known how many hairs are on my head as I write this sentence.

The Church-Fitch proof poses a serious threat to Husserl's phenomenology, or so I shall argue. Williamson (2000) considers the proof an "embarrassment" for semantic anti-realism (271); in Husserl's case, I'm inclined to agree with Williamson at least to the extent that I believe Husserl's ideal verificationism is in need of serious revision.[2] Whereas Husserl's ideal verificationism makes room for the contingent epistemic limitations of human knowers, it does not allow for necessary epistemic limitations on any possible knower, and this is what leaves it vulnerable to the Church-Fitch proof.

In addition to posing a serious threat to Husserl's ideal verificationism, the Church-Fitch proof invites us to situate Husserl's transcendental idealism within the contemporary semantic anti-realist landscape. As I argue in Section 2 by examining the case of Dan Zahavi's Husserl interpretation, doing so is fruitful because extant interpretations tend to run together importantly distinct forms of realism and anti-realism. By distinguishing ontological from semantic (anti-)realism and various forms of semantic anti-realism, I hope to provide a richer framework for interpreting Husserl than has been employed in previous scholarship. In Section 2, I also distinguish five logically distinct theses that both Husserl and the literature on his work conflate.

Having laid out a wide range of (anti-)realist positions in Section 2, in Section 3 I explore whether Husserl ought to have followed semantic anti-realists like Dummett, Tennant, and Wright in their *logical revisionism*. Rejecting classical in favor of intuitionistic logic would open up a possible response to the Church-Fitch proof for Husserl, and given the historical affinity between phenomenology and intuitionism this might seem like a promising route to neutralizing the threat to ideal verificationism. After considering both Brouwerian and Dummettian motivations for logical revisionism, I tentatively conclude that there is no strong pressure on Husserl to weaken his logic—and doing so might be in tension with one of the most central commitments of his phenomenology.

Having tentatively mooted an intuitionistic response, Section 4 develops a phenomenologically motivated version of the *restriction strategy* for defending semantic anti-realism. I argue that Husserl already has reasons independent of the knowability paradox to restrict ideal verificationism. In particular, I show that two phenomena constitute counterexamples to ideal verificationism: the inadequacy of perception and blindspots. Drawing on Husserl's rich analyses of the types and structures of intentional acts, I provide a phenomenological explanation of why blindspots lack what Husserl calls a "fulfilling sense." The analysis of blindspot motivates a restriction of ideal verificationism that does not entail the knowability thesis and so does not fall prey to the Church-Fitch proof. Section 5 is a brief conclusion.

2 | IDEAL VERIFICATIONISM AND ANTI-REALISM

Starting at least in the *Logical Investigations* Husserl is committed to a claim about the in-principle epistemic accessibility of reality. Here is a representative statement of this commitment:

> To each object "that truly is," there corresponds in principle… the idea of a possible consciousness in which the object itself can be apprehended *in an originary* and thereby *perfectly adequate manner*. (Husserl, 2014, Id §142)

Husserl's commitment to epistemic accessibility puts him in the company of broadly "anti-realist" views on which all truths are in principle knowable, including Kant's transcendental idealism,[3] Peirce's pragmatism, Putnam's internal realism, and Dummett's semantic anti-realism. Indeed, Husserl endorses this knowability thesis: "What cannot be known cannot exist; existence is knowability" (quoted in Smith, 2003, 186). The plan for this section is as follows. First, I will zero in on a more precise formulation of ideal verificationism by distinguishing it from four related but distinct theses. Second, by focusing on Dan Zahavi's interpretation of Husserl's transcendental idealism, I will argue that the interpretation of Husserl's transcendental idealism has been stymied by scholars' reliance on imprecise conceptions of (anti-)realism. Third, I will introduce Michael Dummett's semantic anti-realism and refinements of the Dummettian program by Neil Tennant and Crispin Wright and distinguish semantic from ontological (anti-)realism.

It is important to distinguish five related but distinct theses: ideal verificationism, the knowability thesis, the effability thesis, platonism about propositions, and transcendental idealism. I will understand ideal verificationism[4] as a claim about the correlation between truth and experience. Husserl endorses a version of ideal verificationism on which each consistent[5] proposition has a "fulfilling sense," that is, a set of (contents) of originary experiences (for simplicity, perceptual experiences) that would confirm it. In Section 4, I will argue that Husserl ought to have endorsed only a weaker version of ideal verificationism: for each consistent proposition p, there is a set of experiences that bring some "epistemic fulness" to p. One way to bring epistemic fulness to a proposition is to imagine the state of affairs it represents; I will argue in Section 4 that Husserl should hold only that all consistent propositions can be "intuitively illustrated" in imagination.

Neither ideal verificationism nor the knowability thesis entails the effability thesis, according to which all objects are in principle experienceable. As Wright (1992) explains, semantic anti-realism

> need not entail, as is so often assumed, a thesis about the bounds of reality—the thought that, as it were, the totality of facts is conveniently (but mysteriously) trimmed to ensure that there is nothing there that outreaches human inquisitiveness. They are motivated by arguments to the effect that it is a condition on the full intelligibility of a representational content that its faithfulness—things being as it represents them as being—be in principle detectable… (159)

The semantic anti-realist, Wright goes on to explain, can "concede that it is unjustified to suppose that all aspects of reality allow of humanly intelligible representation" (159). Ideal verificationism and the knowability thesis as I will

understand them are neutral on the scope of representation: they do not entail that there are propositions (truths) corresponding to all obtaining states of affairs. What bridges the gap between ideal verificationism and the knowability thesis, which both posit a correlation between truth and experience, and the effability thesis, which posits a correlation between being and experience, is platonism about propositions: the claim that there is a proposition corresponding to every state of affairs.[6] Husserl plausibly holds this view about the scope of representation,[7] though Dummettian anti-realists do not. For the purposes of this paper, I will bracket platonism about propositions and the effability thesis and understand ideal verificationism and the knowability thesis as concerning only humanly formulable claims. The knowability paradox threatens the Husserlian claim about the correlation between truth and experience even on these weaker construals. Finally, I remain neutral here on how transcendental idealism relates to the other theses, for example, whether it is identical to the threefold correlation between truth, being, and experience or whether it involves some further grounding claim.

Interpreters of Husserl's transcendental idealism tend to fall into one of three camps. Metaphysical neutrality interpreters (Carr, 1999; Crowell, 2001) argue that even in his transcendental idealist period Husserl retains the neutrality with respect to questions of realism and anti-realism he explicitly endorses in the *Logical Investigations* (LI v.1 166, 178). On this interpretation, phenomenology studies not being but meaning. Idealist interpreters (Gurwitsch, 1967; Ingarden, 1975; Philipse, 1995; Smith, 2003) read Husserl as a kind of phenomenalist. Finally, realist interpreters like Willard (2011) and Hopp (2020) argue that Husserl is an "idealist" only in the sense that he recognized the indispensability of ideal (abstract) objects.[8]

Zahavi (2003, 2010, 2017) has attempted to carve out a fourth reading on which transcendental idealism is a metaphysical thesis (contra the metaphysical neutrality reading) but is neither metaphysically idealist nor metaphysically realist. Unfortunately, in advancing this interpretation Zahavi relies on unduly narrow conceptions of metaphysical idealism and realism and conflates semantic and ontological (anti-)realism. First, Zahavi opposes A.D. Smith's interpretation, on which for Husserl reality supervenes on consciousness. More precisely, on Smith's interpretation the following three conditions hold: (a) certain experiential facts suffice for the physical facts to obtain, (b) these experiential facts are necessary for the physical facts to obtain, and (c) some experiential facts could hold without any physical facts holding (Smith, 2003, 183–8). Zahavi agrees with Smith that Husserl holds (a): "Husserl might indeed consider consciousness a necessary condition for reality. To that extent, Smith is right in saying that for Husserl nothing would exist in the absence of consciousness" (Zahavi, 2010, 87). But he denies that Husserl holds (b) and because of this denies that Husserl is a metaphysical idealist. This strikes me as an overly narrow understanding of metaphysical idealism. There is plausibly no set of individually necessary and jointly sufficient conditions that unify all and only those thinkers who have been called or called themselves "idealists." But one legitimate and arguably paradigmatic[9] way of understanding idealism is the claim that physical objects modally depend on minds.

Second, Zahavi understands metaphysical realism as committed to a non-epistemic conception of truth (Zahavi, 2017, 70), an invidious distinction between properties entities have "in themselves" and those that are "projected by us" (Zahavi, 2010, 85), and eliminativism about non-fundamental entities (Zahavi, 2010, 87). First, as we will see in more detail shortly, the debate over whether truth is epistemic is a debate between semantic realists and anti-realists, and semantic (anti-)realism is orthogonal to ontological (anti-)realism. Second, I see no reason to think that ontological realists cannot be realists about, for example, secondary qualities and social objects. The "metaphysical realist" Zahavi targets is not just a straw man, but the commitments of this "metaphysical realist" need not come as a packaged deal. I agree with Zahavi's claim that Husserl's transcendental idealism is both defensible and not easily separable from his phenomenology (Zahavi, 2010), but I think we need a sharper set of tools than Husserl scholars have so far employed to make good on this claim. In the remainder of this section, I introduce some of these tools.

On Dummett's view, the traditional, ontological debate between realism and anti-realism (in particular in the context of mathematics) amounts to little more than a contrast between competing metaphors or pictures:

> The platonist metaphor assimilates mathematical enquiry to the investigations of the astronomer: mathematical structures, like galaxies, exist, independently of us, in a realm of reality which we do not

> inhabit but which those of us who have the skill are capable of observing and reporting on. The constructivist metaphor assimilates mathematical activity to that of the artificer fashioning objects in accordance with the creative power of his imagination. (Dummett, 1978, 229)

So construed, Dummett sees no criteria for deciding the debate: "What basis can exist for deciding which metaphor is to be preferred? How are we to know in which respects the metaphors are to be taken seriously, how the pictures are to be used?" (ibid.).[10] To make the debate more tractable, Dummett proposes casting the realism/anti-realism debate in terms of criteria on an adequate theory of meaning. Dummett's semantic anti-realist holds that truth is epistemically constrained in the sense that all truths are in principle verifiable and that classical logic ought to be rejected in favor of intuitionistic logic. The semantic realist, on the other hand, holds that truth can in principle transcend verification and retains classical logic. Dummett defends global semantic anti-realism (i.e., semantic anti-realism about all discourses) with the manifestation argument. Based on Wittgensteinian considerations about the publicity of meaning, Dummett argues that an adequate theory of meaning must only attribute meanings to linguistic expressions the grasp of which competent speakers are able to publicly manifest. Realist truth conditions fail to meet this manifestation requirement, and this entails that truth is epistemically constrained: a meaningful statement must be such that a competent speaker could in principle settle its truth value. Semantic content should then be understood in terms of verification conditions rather than truth conditions, and for Dummett this entails a rejection of classical in favor of intuitionistic logic. This is because truth has to be reconstrued in terms of proof (and mutatis mutandis for defeasible empirical discourse), and there may be statements for which we lack either a proof or a refutation.

Tennant's anti-realist program differs from Dummett's in two major ways. First, whereas Dummett conceives of the debate between semantic realists and anti-realists as a replacement for the traditional, ontological debate, Tennant argues that the semantic and ontological debates are orthogonal: the truth of the former concerns truth, the latter concerns being (Tennant, 1987, Ch. 2; Tennant, 1997, Ch. 2). Second, Tennant argues that the manifestation argument as developed by Dummett only shows that truth is epistemically constrained; it does not show, without considerable reworking, that classical logic should be rejected in favor of intuitionistic logic.[11] Dummett assumes that verification-transcendence (T) and bivalence (B) stand or fall together; but Tennant argues that there are really four available positions where Dummett recognizes only two: orthodox realism (T & B), moderate anti-realism (¬T & ¬B), M-realism (T & ¬B), and Gödelian optimism (¬T & B). I return to this second point in the next section.

The Husserl literature would benefit from taking Tennant's distinction between the ontological (anti-)realism debate, construed as a debate about being, and the semantic (anti-)realism debate, construed as a debate about truth, on board. Husserl's ideal verificationism is a form of semantic anti-realism, but it need not entail that reality modally depends on or is grounded on minds; and even if Husserl did hold this ontological view, as some of his manuscripts may seem to suggest, it is open to modern-day Husserlians to pursue a defense of Husserl's views on the necessary correlation between truth, experience, and being without following him in his ontological anti-realism (=idealism). As noted above, Zahavi fails to clearly distinguish the ontological and semantic debates: his definition of metaphysical realism combines claims about truth (that it is verification-transcendent) and being (eliminativist scientific realism). On Tennant's view, scientific realism and semantic anti-realism form a natural pairing: "…any scientific realist who approaches semantics as a branch of natural science must conclude his investigation as a semantic anti-realist" (Tennant, 1987, 7). Wright argues that the semantic anti-realist's commitment to bivalence for decidable statements is "a perfectly adequate vehicle for the [ontological realist] conviction that the world is mind-independent" (Wright, 1987, 361). The upshot here is that those interested in understanding or defending Husserl's transcendental idealist program must be more careful to tease out and trace the connections between its semantic and ontological dimensions.

Wright's anti-realist program, too, differs in two major ways from Dummett's. First, Wright argues that an affirmative answer to the Dummettian question of whether truth is epistemically constrained still leaves open multiple realism-relevant questions. Second, whereas Dummett's semantic anti-realism is a global thesis about all discourses,

Wright investigates local questions about particular discourses, for example, moral, aesthetic, comic, modal, mathematical, and secondary quality discourse.

For Wright, even after settling on an epistemically constrained conception of truth for a discourse, there are three questions to be asked, answers to which mark a discourse as having a more or less substantial truth predicate, or equivalently, as being more or less realist. On Wright's account, an affirmative answer to the Dummettian question for a discourse entails the following for statements of that discourse: p is true if p is superassertible, where "a statement is superassertible… if and only if it is, or can be, warranted and some warrant for it would survive arbitrarily close scrutiny of its pedigree and arbitrarily extensive increments to or other forms of improvement of our information" (Wright, 1992, 48). But now we can draw a Euthyphro contrast: is p true because it is superassertible, or is it superassertible because it is true? Taking the second horn marks the truth predicate for discourse as more substantial than the minimal notion, and thus qualifies the discourse as a realist (at least to a degree). The notion of superassertibility (which is Wright's improvement upon the Peircean understanding of truth as what is agreed upon at the ideal end of inquiry) has an obvious affinity with Husserl's view that truth and being are the correlates of an ideally harmonized progression of experience among an intersubjective community. What Wright's framework for adjudicating (anti-)realism disputes shows is that attributing this view to Husserl falls short of fully answering the question of whether he is a realist or anti-realist; Husserl could hold that the coherence of experience is grounded in reality, rather than vice-versa. Hopp makes a similar point:

> If ideal verificationism is correct, then a necessary condition of every object's existence is that it is ideally knowable on the basis of an originary intuition of it… That, however, does not by itself entail that there is any grounding relation between existence and intuitability, or, if there is, the direction in which that grounding relation runs. (Hopp, 2018, 632)

My intention here is not to settle this Euthyphro question, but only to suggest that the literature on Husserl's ideal verificationism and transcendental idealism has been hampered by insensitivity to the finer-grained distinctions among forms of realism and anti-realism drawn by contemporary theorists like Tennant and Wright.

Husserl scholarship could also benefit, I think, from distinguishing ideal verificationism as a global thesis from more local theses about particular discourses. Consider mathematical discourse, for example. On Richard Tieszen's view, Husserl endorses "constituted platonism," which Tieszen distinguishes both from Fregean mathematical platonism and Brouwerian mathematical anti-realism. Against the Fregean platonist, the constituted platonist holds that mathematical objects are not mind-independent in the sense of lying outside all possible experience; against the Brouwerian anti-realist, the constituted platonist holds that mathematical objects are mind-independent in a different sense: they are constituted as transcendent to consciousness (Tieszen, 2011, Ch. 4). Mark van Atten (2017), in contrast, argues for an interpretation of Husserl as a Brouwerian constructivist about mathematics. I have doubts about both interpretations, but the important point for present purposes concerns the distinction between global and local questions about (anti-)realism. Ideal verificationism is a global thesis—all truths are ideally verifiable—but there is room for different answers to realism-relevant questions for different discourses: Husserl could be an ontological anti-realist, or at least a less robust realist, about mathematical discourse, or discourse about ideal objects more generally, than about physical-objects discourse. Similarly, it would be fruitful for Husserlians to explore local realism questions about moral, modal, secondary quality, and other discourses from a phenomenological perspective.

My goal in this section has been fairly modest. Rather than defending a view on which particular forms of (anti-)realism Husserl endorses, I have made a plea for situating Husserl's transcendental idealism within the richer frameworks for adjudicating (anti-)realism disputes developed by contemporary theorists like Tennant and Wright. For all its merits, Zahavi's interpretation, which attempts to steer a middle course between metaphysical neutrality interpreters, on the one hand, and metaphysical realist and idealist interpreters, on the other hand, is an example of the unclarity about the distinctions between semantic and ontological (anti-)realism and various forms of each that is common in Husserl scholarship. In addition to introducing Tennant's and Wright's frameworks, I also argued that

ideal verificationism, which is the primary target of the Church-Fitch proof, should be distinguished from four other theses: the knowability thesis, platonism about propositions, the effability thesis, and transcendental idealism. In the next section, I return to the primary goal of this article—assessing the severity of the threat that the Church-Fitch proof poses to ideal verificationism—though Tennant's and Wright's frameworks will remain relevant throughout.

3 | LOGICAL REVISIONISM AND THE KNOWABILITY PARADOX

In this section, I explore whether Husserlians can avoid the threat of the knowability paradox by rejecting classical logic in favor of intuitionistic logic. Semantic anti-realists who are also logical revisionists avoid the absurd conclusion of the Church-Fitch proof because its final step—from ¬(p & ¬Kp) to p⊃Kp—is intuitionistically invalid. For an intuitionist, ¬(p & ¬Kp) implies only p⊃¬¬Kp, which is acceptable to the semantic anti-realist when negation is construed constructively:

> '¬A' may be read as 'It is in principle impossible for us to be in a position to assert that A' or 'There is an obstacle in principle to our being able to assert A', where 'in principle' is to be glossed by "in the light of all that we already know". Hence '¬¬A' means 'There is an obstacle in principle to our being able to deny that A', where denying that A is asserting that ¬A. It follows that '¬¬KA' means "There is an obstacle in principle to our being able to deny that A will ever be known", in other words "The possibility that A will come to be known always remains open". That this holds good for every true proposition A is precisely what the justificationist believes. (Dummett, 2009, 52)

As Williamson (1982) argues, the omniscience thesis should be construed as shorthand for $\forall p(p \supset \exists t K_t p)$, that is, all truths are such that there is a time (past, present, or future) at which they are known. Intuitionists can consistently deny the omniscience thesis without thereby accepting $\exists p \neg(p \supset \exists t K_t p)$, which classically but not intuitionistically follows from $\neg\forall p(p \supset \exists t K_t p)$ and, given the intuitionist's constructive interpretation of the existential quantifier, would require one to produce, per impossibile, an instance of an unknown truth. The situation here is analogous to that of the Law of Excluded Middle (LEM): intuitionists deny $\forall p(p \vee \neg p)$ without thereby endorsing $\exists p \neg(p \vee \neg p)$, which would require one to produce an instance where LEM fails (an intuitionistic contradiction).

Let us grant that semantic anti-realists who are also logical revisionists have a stable response to the knowability paradox. Even so, a Husserlian who wants to take the intuitionistic way out needs independent motivation for her revisionism. First, as Tennant and Wright argue, the argumentative route from the manifestation requirement to logical revisionism is more complex than Dummett recognizes in his initial formulation of semantic anti-realism. Second, the Church-Fitch argument shows that the following claims form an inconsistent triad: (i) all truths are knowable, (ii) not all truths are, have been, or will be known, and (iii) classical logic is the correct logic. Of these three claims, the semantic anti-realist claim (i) has the least prima facie plausibility. To develop a dialectically powerful defense of ideal verificationism, then, the Husserlian needs to proffer independent reasons for rejecting classical logic in favor of intuitionistic logic.

There are two major intuitionistic traditions: those of Brouwer and Dummett. Let us consider whether Husserlians can appropriate arguments from either tradition in defense of revisionism. In L.E.J. Brouwer's view, mathematics is an originally languageless activity wherein mathematical entities are constructed from the "primordial intuition" of the "two-ity" emerging out of the division of the empty flow of time (see, for example, Brouwer, 1998). Because of the constructive nature of mathematical truth on Brouwer's view, unsolved mathematical problems like Goldbach's Conjecture constitute "weak counterexamples" to the Law of Excluded Middle, thus calling for a weakening of classical logic that was given its first axiomatic presentation by Brouwer's student Arend Heyting (Heyting, 1998). Mark van Atten (2002, 2017) has argued, based on a systematic comparison of Brouwerian construction and Husserlian constitution, that Husserl ought to have been a mathematical and logical revisionist. For

example, van Atten expresses skepticism that even the existence of the power set of the natural numbers could be established on phenomenological grounds. Hill (2010) has challenged van Atten's comparison between Brouwer and Husserl, arguing that Husserl's views are far more sympathetic to Brouwer's formalist opponent David Hilbert. Now while Husserl in the *Crisis* expresses reserved appreciation for the "intuitionistic deepening" for its attempt to move beyond the "life of the plane" to the "life of depth" (119–20), and while two of Husserl's acolytes, Hermann Weyl and Oskar Becker, were converts to intuitionism,[12] Husserl himself never saw any reason to doubt classical logic or mathematics (as van Atten recognizes).

Husserl was surely a "mathematical intuitionist" in the sense defined by Berghofer (2020): he held that all mathematical judgments are ultimately justified on the basis of a sui generis form of a priori intuition with a distinctive phenomenal character. But I doubt that Husserl's "intuitionism" requires, or is even compatible with, Brouwerian constructivism. The primary reason for my doubt is how central I take Husserl's platonism to be not only to his philosophy of mathematics but also to his transcendental idealism more generally. Even after the transcendental turn, Husserl takes the recognition of ideal objects, including mathematical objects, meanings, and universals, to be absolutely central to his phenomenology (see, for example, Id §22). The full story is too long to be told here, but I suggest that just as the recognition of ideal in addition to real entities is central to the case against logical psychologism in the *Prolegomena* to the *Logical Investigations*, throughout his career Husserl takes platonic "idealism" to be essential to a successful, transcendental response to the thoroughgoing skepticism that Humean naturalism makes inevitable. For this reason, I tentatively conclude that the Brouwerian ontological wing of intuitionistic revisionism does not give us a promising route to a phenomenological case for revisionism.

Let us see if we can do better by following the Dummettian semantic wing instead. Wright's Basic Revisionary Argument focuses on three claims:

$$\text{NKD} \quad \neg K \forall p(\Diamond Kp \vee \Diamond K \neg p)$$

$$\text{KT} \quad p \supset \Diamond Kp$$

$$\text{LEM} \quad p \vee \neg p^{13}$$

NKD is the claim that it is not known that all propositions are decidable; KT is the knowability thesis; and LEM is the classically valid Law of Excluded Middle. LEM and KT entail $\forall p(\Diamond Kp \vee \Diamond K \neg p)$, so it cannot be the case that all three claims are known. The semantic anti-realist endorses KT, and NKD is justified by examples of unsolved mathematical propositions and vagueness; thus the anti-realist must reject LEM.[14] Tennant's revisionary argument also turns on issues of decidability; indeed, both Tennant and Wright note that the anti-realist has no objection to LEM/bivalence[15] as applied to decidable discourses. Tennant distinguishes two versions of the manifestation requirement. On the strong, active version, a competent user of an expression p must be able to recognize the truth of p when it obtains; on the weak, passive version, she merely needs to be able to recognize that it obtains if presented with a truthmaker (1997, 202, 11). He also distinguishes two versions of bivalence: one where truth is interpreted neutrally and another where it is interpreted constructively. Tennant presents two versions of the revisionary argument. On the one hand, the strong, active manifestation requirement and neutral bivalence for a discourse entail the decidability of the discourse; on the other hand, the weak, passive manifestation requirement and constructive bivalence for a discourse entail the decidability of the discourse. An anti-realist, Tennant argues, should be drawn to the weak, passive manifestation requirement and a constructive notion of truth, so in the presence of an undecidable discourse she must deny bivalence.

The question at hand is whether Husserl or latter-day Husserlians should feel pressure to convert from Gödelian optimism (¬T & B) to moderate anti-realism (¬T & ¬B). Tennant claims that Gödelian optimism rests on "an article of faith, that any sentence of arithmetic that happens to be true in the intended model of the natural numbers will be able to be shown to be so… within some future formal system all of whose fundamental principles will have been

recognized as certain and compelling" (234). Williamson (2016) suggests an alternative picture that may appeal to the Husserlian/Gödelian optimist. Williamson asks us to imagine some creatures for whom some true mathematical formula not provable with the resources of current human mathematics counts as "primitively compelling." He argues that these creatures' grasp of this formula does not differ in any significant way from our knowledge of axioms and infers from this thought experiment that the formula is provable (a point which generalizes). Although Williamson is a vocal opponent of anti-realism in both its semantic and logical aspects, I see no reason why a Husserlian could not appeal to something like his picture of absolute provability in defense of their Gödelian optimism.

The issues here are enormous and the dialectic subtle, but so far we have not found any decisive reason for Husserl to weaken his logic. At least we have not found a decisive reason why Husserl should have gone intuitionistic in response to the undecidability of arithmetic. One final route to revisionism with a Husserlian pedigree appeals to Tennant's (1996) claim that LEM, as applied to some discourse, is not a logical but a metaphysical principle amounting to a commitment to the determinacy of the domain of the discourse. In other words, LEM is synthetic a priori, not analytic a priori as logical principles must be. Husserl distinguishes formal logic and ontology, which are analytic a priori and topic neutral, from regional ontology, which is synthetic a priori and concerns essential features specific to highly general kinds or "regions" like nature, consciousness, and culture (Smith 2013, 157). For Husserl LEM belongs to formal logic (FTL §77–9), but latter-day Husserlians could take a cue from Tennant and make a case for relocating it to regional ontology. A promising reason for doing so could be to make room for the *open future*; indeed, the phenomenon of future contingents is one of the main reasons for developing logic like Łukasiewicz's three-valued paracomplete logic. This strategy is promising because of our interpretation of Kp as quantifying overtimes. If we deny that LEM holds statements concerning the open future, we also deny that its equivalent double negation elimination holds of the open future, and we can retain the core of the intuitionistic strategy for responding to the knowability paradox by blocking the slide from $p \supset \neg\neg Kp$ to $p \supset Kp$.

In this section, I have tentatively mooted Brouwerian and Dummettian revisionist responses to the threat that the Church-Fitch proof poses to Husserl's ideal verificationism, while briefly sketching a revisionist response with a slightly more Husserlian pedigree. In the next section, I pursue another, more promising strategy for defending Husserl against the threat of the knowability paradox: a version of the "restriction strategy."

4 | A PHENOMENOLOGICAL RESTRICTION STRATEGY

In this section, I sketch a phenomenological version of the *restriction strategy* for responding to the knowability paradox. Proponents of the restriction strategy attempt to motivate a principled restriction of the knowability thesis that blocks the substitution of $(p \,\&\, \neg Kp)$ into it. Two prominent versions of the restriction strategy are those of Tennant and Dummett. Tennant (1997) restricts the knowability thesis to "Cartesian" propositions, where p is Cartesian when Kp is consistent. Tennant's restriction strategy has been accused of being ad hoc (Hand and Kvanvig, 1999; Williamson, 2009). Dummett (2001) restricts the knowability thesis to basic statements. Tennant (2002) argues that Dummett's restriction undermines his case against classical logic.

Before I sketch the phenomenological restriction strategy, let me note that there are reasons independent of the knowability paradox to restrict Husserl's ideal verificationism. Hopp (2018) presents an argument for restricting ideal verificationism from the *inadequacy* of perception. For Husserl perception is essentially inadequate: transcendent objects are given only in "profiles" or "adumbrations" (*Abschattungen*) (see, for example, Id §44). Hopp has us imagine the following scenario:

> Suppose I am indoors during a hailstorm. I look at my front windows at t1 to determine if any have broken, and see that they have not. I run to the back of the house, arriving there at t2, to check those windows. They're also fine. Assuming… that my experience at t1 is still retained at t2, do I now, at t2,

> know that none of the windows are broken on the basis of an originary intuition? No, since a front window might easily have broken in the interim. (Hopp, 2018, 636)

Hopp points out that perception is not only inadequate because of the richness of its objects' "manifolds," that is, the set of experiences in which they are given. Rather, perception is inadequate because "one cannot take up multiple perspectives at once, and things might change by the time I take up a new one" (Hopp, 2018, 638). Now notice that this argument from the inadequacy of perception applies primarily to ideal verificationism, understood as the thesis that all consistent propositions have a fulfilling sense—where the fulfilling sense of a proposition is the set of (contents) of all originary experiences that would confirm it—and not the knowability thesis. This is because originary intuition (for simplicity, perception) is not the only source of knowledge, even if it is the most fundamental for Husserl; I can know that the front windows have not broken on the basis of testimony (Eden calls out "not broken!" as I check the back windows) or image consciousness (I view the front windows on a security camera), and in more mundane cases like perceptually investigating the color of a table, I can know that the front of the table has not changed its color since I last saw it in virtue of my background knowledge of the relative stability through the time of such an objects' properties. Hopp's argument sets out a criterion on a successful restriction on ideal verificationism: it must not be vulnerable to counterexamples based on the phenomenon of inadequacy. I will show that my proposed restriction meets this criterion at the end of this section.

My strategy for motivating a restriction of ideal verificationism is the following:

1. Identify a consistent expression that lacks a fulfilling sense. In the terminology to be introduced shortly, this is an expression that is "inaccessible to perception."
2. Isolate the intentional feature that explains this lack of fulfilling sense.
3. On the basis of 2, restrict ideal verificationism to acts to which the expression is accessible.
4. Argue on independent grounds that propositions of the form (p & ¬Kp) lack fulfilling senses in virtue of the identified intentional feature.

1. The expression on which I will focus is an example of a *blindspot*.[16] A blindspot is a consistent sentence that is inaccessible to some propositional attitude. The most famous blindspot is Moore's paradox: "It's raining and I don't believe it." Moore's paradox is a belief blindspot in the sense that it cannot be rationally believed, but there are blindspots for other propositional attitudes. For example, on one analysis of the surprise examination paradox, the teacher's announcement is a knowledge blindspot (Chow, 1998; Sorensen, 1988). Moreover, the Church-Fitch argument relies on the substitution of the knowledge blindspot (p & ¬Kp) into the knowability thesis.

My proposal is to expand the notion of a blindspot beyond propositional attitudes to include other intentional acts, and in particular *intuitive* acts like perception. Drawing upon Husserl's analyses of the kinds and structure of intuitive acts, I will explain the inaccessibility of a particular blindspot to perception in terms of the essential involvement of the subject in perceptual acts.

The blindspot I will analyze is involved in Berkeley's master argument:

> *Phil*: I am willing to let our whole debate be settled as follows: If you can conceive it to be possible for any mixture or combination of qualities, or any sensible object whatsoever, to exist outside the mind, then I will grant it actually to be so.
>
> *Hyl*: By that test, the point will soon be decided. What is easier than to conceive a tree or house existing by itself, independently of and unperceived by any mind whatsoever? I conceive them existing in that way right now…
>
> *Phil*: Is it not [a] great contradiction to talk of conceiving a thing which is unconceived (Berkeley 1972, 35)

Berkeley's argument for immaterialism turns on the inaccessibility of the sentence "There is an unperceived tree," where "there is" can be construed either demonstratively or existentially, to the imagination. Call this sentence the "Berkeley blindspot." Analyzing the Berkeley blindspot will be instructive for two reasons. First, everyone should agree that the Berkeley blindspot is inaccessible to perception. There is no possible perceptual experience that would count as a confirmation or "fulfillment" of the sentence; equivalently, there is no possible perceptual experience that would count as recognizing an unperceived tree; and yet the sentence is not only consistent but true (on the existential reading). Note that this does not mean that the Berkeley blindspot is unknowable; it is just not knowable by perceptual means. Second, contra Berkeley, the Berkeley blindspot is *not* inaccessible to the imagination. This suggests that we should look for a salient difference between perception and imagination that explains why the Berkeley blindspot is inaccessible to the former but not the latter.

As Williams (1973) argues, the master argument fails because the self plays no essential role in imagination: "I as perceiver do not necessarily belong inside the world that I visualize, any more than I necessarily do so in the world that I imagine; or the painter in the scene that he paints; or the audience in the world of the stage" (1972, 34–5). In imagination, I can imagine myself, or some other self, as the occupant of the imagined perspective, but I need not. This marks an essential contrast with perception: the self is essential, though implicitly, involved in perception. My goal is to identify the intentional features of perceptual and imaginative acts that explain this important contrast. To do so, I must first sketch Husserl's complex account of the types and structures of intentional acts.

2. Husserl's work contains rich analyses of a variety of types of intentional acts, including thought, perception, imagination (phantasy[17]), memory, image consciousness, phenomenological reflection, "eidetic intuition," empathy, and emotion. Husserl distinguishes phenomenological characters along the following axes: intuitive/empty, originary/non-originary, positing/non-positing, and direct/indirect. The classification of perception, imagination, (imagistic) memory, image consciousness, and thought along these dimensions is represented in the following chart, where perception and memory are assumed to be veridical.

	Intuitive	Originary	Positing	Direct
Perception	✓	✓	✓	✓
Imagination	✓			✓
Memory	✓		✓	✓
Image consciousness	✓		Depends	
Thought			Depends	✓

Perception, imagination, memory, and image consciousness are distinguished from "empty" thought in virtue of their intuitive character. This distinction is phenomenologically discoverable by imaginatively contrasting the experiences of seeing a tree, imagining a tree, remembering seeing a tree, and looking at a picture of a tree, on the one hand, with simply thinking about a tree, on the other hand. One salient difference between the intuitive acts and empty thought is that the intuitive acts are perspectival: I must see or imagine the tree from a particular perspective; not so for mere thought. Moreover, intuitive acts share a distinctive kind of sensory phenomenal character that is missing in mere thought (even if there is a distinctive kind of cognitive phenomenology).

Among the intuitive acts in the above chart, perception is marked off from the others by being originary. Originary acts *present* their objects, or in Husserl's terms give them "in the flesh" (*leibhaftig*); non-originary intuitive acts, on the other hand, are representations (*Vergegenwärtigungen*). Consider the difference between perceiving a tree and imagining, remembering, or seeing a picture of a tree. Whereas all four acts have a distinctive sensory phenomenology, only perception gives its object as literally present. Perception is not the only kind of originary intuition for Husserl; for example, phenomenological reflection is originary with respect to immanent objects, "eidetic" or a priori intuition is originary with respect to ideal objects, and emotion is originary with respect to values.

Positing acts are those with a "belief-like" character; they present their objects as existing/obtaining (at some time). Consider the difference between perceiving a tree and imagining a tree. The former act presents its object as actually existing, whereas the latter lacks this existential import. Image consciousness can be either positing or non-positing with respect to the "image subject" (depicted subject); consider, for example, the difference between watching a performance of *Othello* and looking at a photograph of your mother. Husserl actually recognizes a wider range of "doxic modalities": acts can give their objects not only as existing, but also as possible, probable, or doubtful (Husserl, 2014, Id §§103–5). It is important to note that these are features and modifications of intuition, not cognition or judgment.

Finally, image consciousness is unique among intentional acts in being indirect. In perception, imagination, and memory, I am immediately conscious of the perceived, remembered, or imagined object rather than some representational intermediary. In image consciousness, on the other hand, I am indirectly conscious of the "image subject" (depicted subject) in virtue of my direct consciousness of the "image object" (depicting object).

With these distinctions in tow, let us return to the Berkeley blindspot. The Berkeley blindspot is inaccessible to perception but not imagination. Perception and imagination differ in two respects: the former is originary and positing, whereas the latter is non-originary and non-positing.

Recall Williams's objection to the master argument: the Berkeley blindspot is imaginable because imagination does not essentially involve the self. Positing character entails an involvement of the subject in the following sense: when an intuitive act posits its object, it presents it as *actual*, where actuality is understood as bearing some relation to the subject of the act. Perhaps, then, the Berkeley blindspot is accessible to imagination because imagination is non-positing: it does not present its object as actual, and thereby does not present its object as bearing any relation to the imagining subject. Even in imaginative acts that do involve the self, there is a splitting of the self into imagining self and imagined self, and only the imagining self is relevant to positing character. Similarly, consider the analogy Williams draws between imagination and image consciousness:

> The audience at such a play are spectators of a world they are not in. They see what they may well describe as, say, Othello in front of a certain palace in Venice; and they see that what they are presented with is a certain view of that palace, e.g., a view of its front. But they are not themselves at any specifiable distance from that palace; unlike Othello, who may be (thus he may be just about to enter it). (35)

When I watch a performance of *Othello*, my experience is positing with respect to the actors: they are presented as actual. But it is non-positing with respect to the depicted characters and events: they are not presented as bearing any relation to me. Because image consciousness, like imagination, can be non-positing, the following is conceivable: a play or movie about an unperceived tree. Thus, the Berkeley blindspot is accessible to image consciousness. In contrast to both imagination and image consciousness, perception is positing and thus presents its object as bearing some relation to the perceiving subject.

Despite the foregoing considerations, I think the inaccessibility of the Berkeley blindspot to perception is better accounted for by perception's originary character. This is because there are originary but non-positing acts to which the Berkeley blindspot is inaccessible. Consider cases of hallucination and illusion. Originary character, I claim, is independent of veridicality; when Macbeth hallucinates the bloody dagger, his experience presents the dagger "in the flesh," as literally present at a determinate distance from him. It seems to me that it is no more possible to hallucinate an unperceived tree than it is to perceive one. This does not yet show that originary character alone is responsible for the inaccessibility of the Berkeley blindspot to perception since hallucination can also be positing. But it need not be: a known hallucination or illusion can lose its positing character without losing its originary character.

The suggestion that the inaccessibility of the Berkeley blindspot is due to perception's originary character is compatible with Williams's analysis of the master argument. Recall Williams's example of watching a performance of Othello. As Williams points out, the "image subjects"—the depicted characters, settings, and events—are not

presented in image consciousness as standing at any specifiable distance from me. The actors, on the other hand, are so presented. Now imagine that partway through the performance I realize that I am undergoing an extremely vivid hallucination, and in virtue of this recognition my experience loses its positing character. Importantly, nothing changes about the involvement of the self in the experience: the actors are still presented as a certain distance from me, even if they are not presented as actual. This suggests that originary character and positing character are both sufficient for the involvement of the self Williams analyzes, but neither is necessary.

3. The Berkeley blindspot is a counterexample to ideal verificationism, if ideal verificationism is understood as the claim that all consistent propositions have a fulfilling sense, where the fulfilling sense of a proposition is the set of (contents) of all originary experiences that would confirm it. But the analysis of the master argument also suggests a natural modification of ideal verificationism. The Berkeley blindspot is incapable of fulfillment, but it is nonetheless capable of what Husserl calls "intuitive illustration." Husserl describes the role of intuitive illustration as follows: "To make a thought clear to oneself means, primarily, to give epistemic fulness to the content of one's thought" (LI v. 2, 228). As an intuitive act, imagination is a means by which to clarify one's thoughts.

Ideal verificationism as Husserl understands it is the thesis that all consistent propositions have a fulfilling sense. The Berkeley blindspot, as well as Hopp's argument from the inadequacy of perception, shows that ideal verificationism so construed is false. But the Berkeley blindspot is capable of intuitive illustration: I can make intuitively clear to myself what it would take for there to be an unperceived tree, even if I cannot perceptually confirm that there is an unperceived tree. This suggests the following revision of ideal verificationism: all consistent propositions have an *illustrative sense*, where the illustrative sense of a proposition is the set of (contents of) all intuitive, though not necessarily originary, acts through which the propositions attains what Husserl calls "epistemic fulness."

This revised version of ideal verificationism does not entail the knowability thesis. This is because for Husserl originary intuition via perception is a defeasible source of empirical knowledge but imagination is not. Imagination is a way of bringing "epistemic fulness" to a thought insofar as it can aid understanding by clarifying what it would take for the thought to be true, distinguishing its truth conditions from those of other thoughts, and so on, but I cannot gain empirical knowledge by imagination alone. Imagination does play a crucial role in a priori knowledge for Husserl, but this is beside the point: the Berkeley blindspot is contingent and a posteriori.

Let me mention two more examples of expressions that lack originary fulfilling senses but have illustrative senses: "I do not exist" and "I am not here." Descartes noticed the following peculiarity about the denial of the cogito: despite being contingent, it is false every time it is uttered. The same goes for "I am not here" in Kaplan's indexical logic. "I am here" is valid because true in every context but nevertheless contingent—and moreover, an example of the contingent a priori as introduced by Kripke (Kaplan, 1989; Kripke, 1980). In the Husserlian framework I have sketched, the validity and a priority of "I exist" and "I am here" correlate with their denials lacking originary fulfilling senses; their contingency correlates with their denials' possession of illustrative senses (which inconsistent propositions like "There's a square circle" lack).

It is plausible that this weakened version of ideal verificationism is all that Husserl, and semantic anti-realists more generally, need to commit themselves to. Grasping the illustrative sense of an expression, and thereby bringing some sort of "epistemic fulness" to one's grasp of its meaning, strikes me as sufficient for manifesting competence with the expression. What blindspots show is that some consistent expressions are capable of intuitive illustration despite being "structurally unknowable" (Williamson, 2000, Ch. 12). In Husserl's view, the capability of fulfillment marks out an important distinction in the sphere of meaning: that between authentic and inauthentic meaning. The sphere of meaning is wider than that of intuition since there are meaningful expressions like "square circle" that is nevertheless "absurd" or "countersensical" (*widersinnig*) in that they are incapable of fulfillment (LI v. 1 67–8). Authenticity and inauthenticity can also be ascribed to a subject's grasp of a concept: Hopp (2020) defines semantic authenticity as "a capacity to recognize or know on the basis of fulfillment" (108). The notion of semantic authenticity is important and has an obvious affinity with the semantic anti-realist manifestation requirement. Husserl's version of the manifestation requirement is that all consistent expressions can be grasped with semantic authenticity, and given the connection between fulfillment and knowledge this leads him to adopt the knowability thesis. But in

light of the recognition that some consistent expressions are capable of intuitive illustration but not fulfillment, Husserl should instead understand semantic authenticity as a capacity to intuitively illustrate an expression, for example by imagining a state of affairs that would make it true.

So far I have argued (a) that there are reasons independent of the knowability paradox—the inadequacy of perception and the Berkeley blindspot—to revise ideal verificationism and (b) that the ensuing form of ideal verificationism is sufficient for meeting the semantic anti-realist manifestation requirement. It still remains to be shown that propositions of the form (p & ¬Kp)—call them "Fitch blindspots"—possess illustrative but not fulfilling senses. First, it should be obvious on the basis of the Williams-inspired discussion of the structure of imagination that Fitch blindspots have illustrative senses: there are innumerable consistent propositions p such that I can imagine a world in which p is true but never known. The key here is that, because imagination is non-originary and non-positing, it does not essentially involve the self in the way originary and positing states do. Now there is a simple argument that Fitch blindspots lack fulfilling senses: if a Fitch blindspot had a fulfilling sense, it would be knowable; but by the first half of the Church-Fitch proof, Fitch blindspots are not knowable; so Fitch blindspots lack fulfilling senses. But a satisfying phenomenological defense of ideal verificationism cannot stop here; we need an explanation appealing to the intentional structures of perception and imagination for why Fitch blindspots necessarily lack fulfilling senses.

My explanation for the Berkeley blindspot's inaccessibility to perception appealed to perception's originary character. Fitch blindspots are likewise inaccessible to perception because of its originary character. Consider the connection between originary intuition and knowledge encoded in Husserl's Principle of All Principles.

> *…each intuition affording [something] in an originary way is a legitimate source of knowledge… whatever presents itself to us in "Intuition" in an originary way* (so to speak, in its actuality in person) *is to be taken simply as what it affords itself as, but only within the limitations in which it affords itself there.* (Id 43)

Originary intuition is a source of knowledge. Suppose there was an originary intuition of a Fitch blindspot O. By the Principle of All Principles, O is a source of knowledge of (p & ¬Kp), and thus a source of knowledge of each conjunct. But then in cases where p is true, O renders ¬Kp false. O thus has a contradictory epistemic profile: it is a source of knowledge of ¬Kp despite making ¬Kp false. Because knowledge is factive, this is impossible. Thus O is impossible. Fitch blindspots lack fulfilling senses.

A final question for the revised form of ideal verificationism is whether it is compatible with the lesson of Hopp's argument from the inadequacy of perception. That is, do Hopp's counterexamples to ideal verificationism apply also to revised ideal verificationism? One might worry that the answer is affirmative. This is because, as Hopp (2015) points out following Husserl, all intuition—not only perception—is inadequate: "even in phantasy we cannot represent a house from the front and the back at the same time" (TS 47). Imagination is a modification of perception—what Husserl calls a representation (*Vergegenwärtigung*)—and thereby inherits perception's perspectival nature. Thus it appears that Hopp's counterexamples lack illustrative senses, whether imaginative or originary (fulfilling). But I think the representational character of imagination actually saves the proposed form of ideal verificationism from a Hopp-style counterexample. Hopp's counterexample depends on the impossibility of originarily experiencing the front and back of the house, say, at the same time; the kind of proposition that serves as a counterexample to ideal verificationism is of the form "The front of the house is F at t1 and the back of the house is F at t1." Now because imagination is a representation, I can imaginatively return to the same time in multiple imaginative acts. The inadequacy of imagination shows that I cannot undergo an imaginative representation of the front of the house and simultaneously undergo an imaginative representation of the back of the house; but I can undergo a complex imaginative act in which I represent the front of the house as it appears at t1 then represent the back of the house at it appears at t1. This marks an important disanalogy with perception; a continuous originary intuition of the house presents me with the front of the house as it appears at t1 and the back of the

house as it appears at t2. It seems to me, then, that Hopp's counterexample is capable of intuitive illustration even if it is not capable of fulfillment.

In this section, I have argued that there are reasons independent of the knowability paradox for revising ideal verificationism, understood as the claim that all consistent propositions have a fulfilling sense: the inadequacy of perceptions and blindspots. On the basis of a phenomenological analysis of the differences between perception and imagination, I proposed a revision of ideal verificationism: all consistent propositions have illustrative senses, though not necessarily fulfilling senses. I then argued that Fitch blindspots lack fulfilling senses, and given the link Husserl draws between originary intuition and knowledge, they need not be knowable. Husserl, then, should not endorse a full knowability thesis. Where and how this revision affects his transcendental idealist program more generally is a question for another time.

5 | CONCLUSION

What I hope to have begun to show here is that Husserlians have much to gain, both as interpreters of Husserl's texts and as defenders of Husserlian phenomenology as a contemporary metaphilosophical approach, by situating Husserl's transcendental idealism with respect to contemporary anti-realism. This is important not only because the Church-Fitch proof threatens the characteristically anti-realist knowability thesis that Husserl accepts, but also because the framework afforded by the contemporary anti-realist literature may help us make some headway on understanding just why Husserl thought phenomenology *just is* transcendental idealism—a claim that his sympathizers have struggled with for over a century.[18,19]

ORCID

James Kinkaid https://orcid.org/0000-0003-4834-7647

ENDNOTES

[1] Williamson (1993; 2000, 275–285) shows how to run the proof without DIST.

[2] I follow Williamson in holding that the Church-Fitch proof constitutes a refutation of a naïve version of semantic anti-realism. Kvanvig (2009) disagrees: "…the paradox should disturb us all, antirealists and realists alike" (222). I am persuaded by Jenkins's (2009) analogy to Russell's paradox: "Understood correctly, Russell's 'paradox' is not really paradoxical. It's just a proof that the seemingly innocent claim that every property determines a set is in fact false, and less innocent than it seemed… Similarly, the Church-Fitch proof is not really paradoxical. It's just a proof that the seemingly innocent claim that every true proposition is knowable is in fact false (assuming, that is, that not all true propositions are known), and less innocent than it seemed" (315). In response to Russell's paradox set theorists reject naïve set theory in favor of ZFC; similarly, in response to the Church-Fitch proof semantic anti-realists ought to reject the naïve knowability thesis in favor of a non-adhoc, restricted version of the thesis.

[3] Andrew Stephenson (2015, 2018) offers two distinct Kantian responses to the knowability paradox.

[4] The term "ideal verificationism" is due to A.D. Smith (2003, 186), though my use of the term is somewhat idiosyncratic; I use "ideal verificationism" to refer specifically to the ideal correlation between truth and experience, whereas Smith uses it more loosely to capture Husserl's commitment to epistemic accessibility.

[5] Throughout I will use "consistent" to mean metaphysically, and not merely logically, possible.

[6] Hopp (2018) reconstructs an argument that, on my terminology, derives the effability thesis from ideal verificationism and platonism about propositions (631–2).

[7] "As numbers—in the ideal sense that arithmetic presupposes—neither spring forth nor vanish with the act of enumeration, and as the endless number-series thus represents an objectively fixed set of general objects… which no one can either add to or take away from, so it is with the ideal unities of pure logic, with its concepts, propositions, truths, or in other words, with its meanings. They are an ideally closed set of general objects, to which being thought or being expressed are alike contingent. There are therefore countless meanings which, in the common, relational sense, are merely possible ones, since they are never expressed, and since they can, owing to the limits of man's

cognitive powers, never be expressed" (LI v.1 233). Merricks, 2015 defends a similar form of platonism about propositions.

[8] This is precisely how he understands "idealism" in the *Logical Investigations*: "To talk of 'idealism' is of course not to talk of a metaphysical doctrine, but of a theory of knowledge which recognizes the 'ideal' as a condition for the possibility of objective knowledge in general, and does not 'interpret it away' in psychologistic fashion" (LI v.1 238).

[9] Though see Redding 2009, which argues that this kind of idealism (Berkeley's immaterialism) is a historical outlier.

[10] See Shieh, 2018 for an interpretation of this claim.

[11] Tennant's preferred logic is also weaker than Dummett's: it is both constructive and relevant.

[12] See Webb, 2017 for a fascinating discussion of Weyl and Becker's phenomenological versions of intuitionism.

[13] I have slightly modified Wright's presentation for stylistic consistency. Wright calls the knowability thesis EC for "epistemically constrained" and uses the Feas (feasibility) operator in place of the diamond.

[14] Wright, 2001 sets out to resolve an "awkward wrinkle" in the Basic Revisionary Argument concerning the compatibility of EC and NKD that has implications for the attempt to formulate a coherent relativism and for an intuitionistic solution to the Sorites paradox.

[15] The distinction between the logical principle LEM and the semantic principle of bivalence complicates matters here, since classical logic can be given semantic justifications that do not appeal to bivalence (e.g., supervaluationistic and fuzzy semantics).

[16] See Sorensen, 1988 for a thorough analysis of blindspots and their relevance to, inter alia, the Sorites and surprise examination (prediction) paradoxes.

[17] Hopp (2020) distinguishes two types of imagination that Husserl recognizes: presentifications (visualizations), which can be positing, and phantasy, which is never positing (19). Hereafter I will use "imagination" to refer only to phantasy.

[18] "Carried out with this systematic concreteness, phenomenology is *eo ipso 'transcendental idealism'*, though in a fundamentally and essentially new sense" (CM 86).

[19] I am grateful to Philipp Berghofer, Andrew Butler, Walter Hopp, Zach Joachim, Guy Schuh, Michi Wallner, and two referees for this journal for helpful comments and discussion on previous drafts of this article. I also benefitted from discussion at a meeting of the Boston Phenomenology Circle Workshop Series in November 2020.

REFERENCES

Berghofer, P. (2020). Intuitionism in the philosophy of mathematics: Introducing a phenomenological account. *Philosophia Mathematica*, *28*(2), 204–235.

Berkeley, G. (1979). *Three dialogues between Hylas and Philonous*. Indianapolis, IN: Hackett.

Brouwer, L. E. J. (1998). Mathematics, science, and language. In P. Mancosu (Ed.), *From Brouwer to Hilbert: The debate on the foundations of mathematics in the 1920s* (pp. 45–53). Oxford: Oxford University Press.

Carr, D. (1999). *The paradox of subjectivity: The self in the transcendental tradition*. Oxford: Oxford University Press.

Chow, T. (1998). The surprise examination or unexpected hanging paradox. *The American Mathematical Monthly*, *105*, 41–51.

Crowell, S. (2001). *Husserl, Heidegger, and the space of meaning: Paths toward transcendental phenomenology*. Evanston, IL: Northwestern University Press.

Dummett, M. (1978). The philosophical basis of intuitionistic logic. In *Truth and other enigmas* (pp. 186–201). Cambridge, MA: Harvard University Press.

Dummett, M. (2001). Victor's error. *Analysis*, *61*(1), 1–2.

Dummett, M. (2009). Fitch's paradox of Knowability. In J. Salerno (Ed.), *New essays on the Knowability paradox* (pp. 51–52). Oxford: Oxford University Press.

Gurwitsch, A. (1967). Husserl's theory of the intentionality of consciousness in historical perspective. In E. N. Lee & M. Mandelbaum (Eds.), *Phenomenology and existentialism* (pp. 25–57). Baltimore, MD: The Johns Hopkins Press.

Hand, M., & Kvanvig., J. (1999). Tennant on Knowability. *Australasian Journal of Philosophy*, *77*(4), 422–8.

Heyting, A. (1998). The formal rules of intuitionistic logic. In P. Mancosu (Ed.), *From Brouwer to Hilbert: The debate on the foundations of mathematics in the 1920s* (pp. 311–327). Oxford: Oxford University Press.

Hill, C. O. (2010). Husserl on axiomatization and arithmetic. In M. Hartimo (Ed.), *Phenomenology and mathematics* (pp. 47–71). Dordrecht: Springer.

Hopp, W. (2015). Empty intentions and phenomenal character: A defense of inclusivism. In T. Breyer & C. Gutland (Eds.), *Phenomenology of thinking: Philosophical investigations into the character of cognitive experiences* (pp. 44–61). New York, NY: Routledge.

Hopp, W. (2018). Ideal Verificationism and perceptual faith: Husserl and Merleau-Ponty on perceptual knowledge. In D. Zahavi (Ed.), *The Oxford handbook of the history of phenomenology* (pp. 623–649). Oxford: Oxford University Press.
Hopp, W. (2020). *Phenomenology: A contemporary introduction*. New York, NY: Routledge.
Husserl, E. (1969). *Formal and transcendental logic [FTL]*. D. Cairns (trans.). Martinus Nijhoff.
Husserl, E. (1970). *Logical investigations [LI]* (Vol. 2 vols. J. N. Findlay (trans.)). Routledge.
Husserl, E. (1997). *Thing and space [TS]*. R. Rojcewicz (trans.). Dordrecht: Springer.
Husserl, E. (1999). *Cartesian meditations: An introduction to phenomenology [CM]*. D. Cairns (trans.). Dordrecht: Springer.
Husserl, E. (2014). *Ideas I [Id]*. D. O. Dahlstrom (trans.). Indianapolis, IN: Hackett.
Ingarden, R. (1975). *On the motives which led Husserl to transcendental idealism*. A. Hannibalsson (trans.). Oxford: Martinus Nijhoff.
Jenkins, C. S. The mystery of the disappearing diamond. In: J. Salerno Paradox (Ed.), *New essays on the knowability*. (pp. 302–19). Oxford: Oxford University Press.
Kaplan, D. (1989). Demonstratives: An essay on the semantics, logic, Metaphysics and epistemology of demonstratives and other Indexicals. In J. Almog, J. Perry, & H. Wettstein (Eds.), *Themes from Kaplan* (pp. 481–563). Oxford: Oxford University Press.
Kripke, S. (1980). *Naming and necessity*. Cambridge, MA: Harvard University Press.
Kvanvig, J. (2009). Restriction strategies for Knowability: Some lessons in false Hope. In J. Salerno (Ed.), *New essays on the Knowability paradox* (pp. 205–222). Oxford: Oxford University Press.
Merricks, T. (2015). *Propositions*. Oxford: Oxford University Press.
Philipse, H. (1995). Transcendental Idealism. In B. Smith & D. W. Smith (Eds.), *The Cambridge companion to Husserl* (pp. 239–322). Cambridge, MA: Cambridge University Press.
Redding, P. (2009). *Continental Idealism: Leibniz to Nietzsche*. New York, NY: Routledge.
Shieh, S. (2018). Truth, objectivity, and realism. In M. Glanzberg (Ed.), *The Oxford handbook of truth* (pp. 433–476). Oxford: Oxford University Press.
Smith, A. D. (2003). *Husserl and the Cartesian meditations*. New York, NY: Routledge.
Smith, D. W. (2013). *Husserl*. New York, NY: Routledge.
Sorensen, R. (1988). *Blindspots*. Oxford: Clarendon Press.
Stephenson, A. (2015). Kant, the paradox of Knowability, and the meaning of 'experience'. *Philosopher's Imprint*, *15*(27), 1–19.
Stephenson, A. (2018). How to solve the Knowability paradox with transcendental epistemology. *Synthese*, *198*(13), 3253–3278.
Tennant, N. (1987). *Anti-realism and logic: Truth as eternal*. Oxford: Clarendon Press.
Tennant, N. (1996). The law of excluded middle is synthetic a priori, if valid. *Philosophical Topics*, *24*(1), 205–229.
Tennant, N. (1997). *The taming of the true*. Oxford: Oxford University Press.
Tennant, N. (2002). Victor vanquished. *Analysis*, *62*(2), 135–142.
Tieszen, R. (2011). *After Gödel: Platonism and rationalism in mathematics and logic*. Oxford: Oxford University Press.
Van Atten, M. (2002). Why Husserl should have been a strong revisionist in mathematics. *Husserl Studies*, *18*, 1–18.
Van Atten, M. (2017). Construction and constitution in mathematics. In S. Centrone (Ed.), *Essays on Husserl's logic and philosophy of mathematics* (pp. 265–315). Dordrecht: Springer.
Webb, J. (2017). Paradox, harmony, and crisis in phenomenology. In S. Centrone (Ed.), *Essays on Husserl's logic and philosophy of mathematics* (pp. 353–408). Dordrecht: Springer.
Willard, D. 2011. Realism sustained? Interpreting Husserl's progression into idealism. Paper Presented at the Early Phenomenology Conference, Franciscan University of Steubenville, April, 29–30, 2011.
Williams, B. (1973). Imagination and the self. In *Problems of the self* (pp. 26–45). Cambridge, MA: Cambridge University Press.
Williamson, T. (1982). Intuitionism disproved? *Analysis*, *42*(4), 203–207.
Williamson, T. (1993). Verificationism and Non-Distributive Knowledge. *Australasian Journal of Philosophy*, *71*(1), 78–86.
Williamson, T. (2000). *Knowledge and its limits*. Oxford: Oxford University Press.
Williamson, T. (2009). Tennant's Troubles. In J. Salerno (Ed.), *New essays on the Knowability paradox* (pp. 183–204). Oxford: Oxford University Press.
Williamson, T. (2016). Absolute provability and safe knowledge of axioms. In L. Horsten & P. Welch (Eds.), *Gödel's disjunction: The scope and limits of mathematical knowledge* (pp. 243–253). Oxford: Oxford University Press.
Wright, C. (1987). *Realism, meaning, and truth*. Hoboken, NJ: Wiley-Blackwell.
Wright, C. (1992). *Truth and objectivity*. Cambridge, MA: Harvard University Press.
Wright, C. (2001). On being in a quandary. Relativism vagueness logical revisionism. *Mind*, *110*(437), 45–98.
Zahavi, D. (2003). Phenomenology and Metaphysics. In F. Metaphysics, D. Interpretation, S. H. Zahavi, & H. Ruin (Eds.), *Metaphysics, Facticity, Interpretation* (pp. 3–22). Dordrecht: Kluwer Academic Publishers.

Zahavi, D. (2010). Husserl and the 'absolute'. In C. Ierna, H. Jacobs, & F. Mattens (Eds.), *Philosophy, phenomenology, sciences: Essays in commemoration of Edmund Husserl* (pp. 71–92). Dordrecht: Springer.

Zahavi, D. (2017). *Husserl's legacy: Phenomenology, Metaphysics, and transcendental philosophy*. Oxford: Oxford University Press.

How to cite this article: Kinkaid, J. (2022). Phenomenology, anti-realism, and the knowability paradox. *European Journal of Philosophy*, *30*(3), 1010–1027. https://doi.org/10.1111/ejop.12762