



Smashing Husserl's Dark Mirror: Rectifying the Inconsistent Theory of Impossible Meaning and Signitive Substance from the *Logical Investigations*

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Abstract

This paper accomplishes three goals. First, the essay demonstrates that Edmund Husserl's theory of meaning consciousness from his 1901 *Logical Investigations* is internally inconsistent and falls apart upon closer inspection. I show that Husserl, in 1901, describes non-intuitive meaning consciousness as a direct parallel or as a 'mirror' of intuitive consciousness. He claims that non-intuitive meaning acts, like intuitions, have substance and represent their objects. I reveal that, by defining meaning acts in this way, Husserl cannot account for our experiences of counter-sensical, absurd, or impossible meanings. Second, I examine how Husserl came to recognize this 1901 mistake in his 1913/14 Revisions to the Sixth Logical Investigation (Husserliana XX-1/2). I discuss how he accordingly reformulates his understanding of non-intuitive meaning acts from the ground up in those Revisions, where this also allows for him to properly account for the experience of impossible meanings. Instead of describing them as mirrors of intuitions, Husserl takes non-intuitive meaning acts to be modifications of intuitions, where they have no substance and do not represent their objects. Finally, in the conclusion to this essay, I demonstrate how this fundamental change to his understanding of meaning consciousness forced Husserl to revise other central tenets of his philosophy, such that the trajectory of his thought can only be properly understood in light of these revisions to his theory of non-intuitive meaning consciousness.

Keywords Empty intentions · Husserl · Ideas I · Logical Investigations · Meaning · Phenomenology · Pure logical grammar · Representation · Signitive intentions

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1 Introduction

A central goal of Edmund Husserl's 1901 *Logical Investigations* (Hua = Husserliana XIX/1970. Hereafter, *Investigations*)¹ is to discover how we, subjective and temporal creatures, can discover the truth or falsity of atemporal and ideal meanings. Husserl ultimately comes to reveal how I can know the truth of meanings by describing the 'fulfilling' relationship between two kinds of meaning acts, which can intend the same state of affairs in distinct ways. First, when I perceive expressive signs, I can execute a *signitive* meaning giving intention, which represents a meant state of affairs that does not appear in person via perception or imagination. Husserl writes that "[a] signitive intention merely points at its object ... A signitive presentation does not present analogically, it is 'in reality' no presentation, in it nothing of the object comes to life" (Hua XIX, p. 670/1970, p. 192). When I execute this signitive intention, I merely mean the state of affairs, without any seeing, validation, or knowledge that the state of affairs is the way that I mean it. In Husserl's terminology, this meaning intention remains 'unfulfilled'. Second, I may (while still performing a signitive meaning act) execute an intuitive intention, which intuitively represents an apparent state of affairs. My intuitive act, such as a perception or an imagination, represents an object that "can either be actually present through accompanying intuitions, or at least appears in representation, e.g. in a mental image" (Hua XIX, p. 44/1970, p. 192). According to the Husserl of 1901, when I am intuitively representing that which I still signitively represent,² this intuition of the state of affairs can 'fulfil' the signitive meaning intention of that same state of affairs, whereby I also experience the verification of the meaning of the signitive act.

Husserl's insight, which is important for the purposes of this paper, is that I am able to meaningfully signitively intend much more than I can intuit.³ The sphere of meaning acts is larger than the domain of that which can be given. I can not only execute meaning intentions that could potentially be fulfilled via perception, such as 'Barack Obama is six feet one inches tall', or imagination, for example, 'Barack Obama is twenty feet tall'. Rather, I can also perform meaning intentions that could never be fulfilled by any intuition, with the literal meanings such as, 'Wooden iron', 'round square', and 'All squares have five angles'. This is to say that I can mean countersensical and logically contradictory meanings via signitive meaning intentions. These are, as Husserl writes, "names or sentences as genuine as any" (Hua XIX, p. 335/1970, p. 67), that can yet never be fulfilled even by intuitive imagination. In chapter four of the Sixth Investigation, Husserl terms those meaning

¹ I provide references to the corresponding English translation where available, following a slash after the Husserliana page number. Quotes from the *Logical Investigations* always come from the First Edition.

² In *Investigations*, Husserl concludes that the signitive intention is still executed during fulfilment and is not replaced by the intuition. He states, "We must; therefore, maintain that the same [signitive] act of meaning-intention, ... is also part of the complex act of recognition, but that a [signitive] meaning-intention that was 'free' is now 'bound' and 'neutralized' in the stage of coincidence" (Hua XIX, p. 571/1970, p. 209).

³ Husserl writes, "It is *not* possible to fit intuitive acts to every signitive intention" (Hua XIX, p. 632/1970, p. 250).

acts, which can be fulfilled “possible”, and those that cannot ‘impossible’ (Hua XIX, pp. 632–638/1970, pp. 250–254).⁴

While Husserl’s conclusions about possible and impossible meanings are themselves mostly correct,⁵ I demonstrate in this paper that his insights concerning that distinction are ultimately contravened by other conclusions he arrives at in the Sixth Investigation. Specifically, because of the way Husserl describes the substances of signitive intentions as representing their objects, he inadvertently excludes the possibility that I could execute a signitive meaning intention, which does not have a corresponding fulfilling intuition. In other words, Husserl’s account of the substance of signitive acts entails that I could not execute a meaning intention with an impossible meaning.

Importantly, this mistake was not permanently lost to Husserl. When he returned to revise his Sixth Logical Investigation in 1913/14 (Hua XX-1/2. Hereafter, *Revisions*), Husserl extensively reexamined his account of the substances of non-intuitive intentions, which he no longer calls ‘signitive’ intentions, but instead simply terms, ‘empty’ acts.⁶ Indeed, as Ullrich Melle writes, “Nowhere else has Husserl analyzed empty intentions in such detail” (2002, p. 116). During his lengthy descriptive analysis of the substances of empty acts, Husserl does come to recognize that his previous account of them was wantonly misguided. Husserl writes, in *Revisions*, that if his descriptions of non-intuitive intentions in 1901 were correct, “then there would be no counter-sense, no absurd speech and no logically contradictory speech” (Hua XX-1, p. 146). As Husserl sees that his description of

⁴ Husserl, in that chapter four, describes that I can recognize a meaning intention as ‘possible’, when I experience a categorical intuition, which fulfils the relevant signitive meaning act (Hua XIX, pp. 632–633/1970, pp. 250–251). Impossibility; however, cannot “merely be defined as a negation of possibility, but should be realized by way of peculiar phenomenological fact” (Hua XIX: 634/1970: 251). We realize the impossibility of a meaning when we “attempt to unite contents ... and [during] our attempted removal of their ‘rivalry’, we experience a peculiar relationship of contents, again grounded in their specific being... It is the relationship of conflict” (Hua XIX, p. 637/1970, p. 253). Mohanty further explains this point by writing, “A compound concept is consistent if the meaning intention sustaining it has a ‘fulfilling sense’; in other words, if the partial intuitions of the component meanings can be combined into a total intuition. In that case, the compound objectivity is *conceivable*, the essence has an ideal *existence*, it is a pure possibility. These *three* locutions amount to the same” (1999, p. 172). Carlo Ierna also discusses how Meinong’s Graz school dealt with many of these same issues in his (2019) article.

⁵ It must be noted that Husserl’s analysis of possible and impossible meanings from the Sixth Investigation has distinct goals from his pure logical grammar from the Fourth Investigation. In the latter, Husserl is not concerned with describing the fulfillment or conflict of meaning intentions, but is instead ontologically and mereologically examining the ways in which meanings themselves can be combined to form whole sensical and consistent meanings. For more information on Husserl’s 1901 pure logical grammar, see Byrne 2017c, 2018; Drummond 2007; Edie 1977; Hanna 1984. In the conclusion to this paper, I address the relationship between Husserl’s pure grammar and his study of the conscious recognition of possible and impossible meanings.

⁶ Ursula Panzer—in her introduction to *Investigations*—explains that Husserl employed the term ‘signitive’ to cover all different empty acts, and that “Husserl only turned against the use of the term signitive or symbolic intentions, as the term to label the whole class of ‘empty intentions’ in his lectures in Gottingen. See Ms. FI 5/IIb and 13a (1908)” (1984, p. LXI n. 1).

the substances of non-intuitive acts was bankrupt, as it clashes with our actual experiences of meaning, he radically reimagines his theory of these acts from the ground up.⁷

*The objective of this paper is to trace this evolution of Husserl's theory of impossible meanings and non-intuitive meaning acts from 1901 to 1913/14. Specifically, I uncover the mistake in Husserl's descriptions of the substance of signitive acts in the *Investigations*, which contradicts his theory of impossible meanings, and I explore Husserl's reconception of non-intuitive acts in *Revisions*, which allows for him to properly describe the meaning intentions for impossible meanings.*⁸ By doing so, I hope to demonstrate that Husserl's descriptions of non-intuitive meaning acts are more complex, philosophically interesting, and important than has often been accounted for.

To accomplish this goal, the following analysis is broken down into three further sections. In Sect. 2.1, I begin by examining Husserl's 1901 descriptions of non-intuitive substances, as they are present in simpler single rayed acts. These are intentions such as simple perception and imagination. The study of single rayed acts serves as necessary preparation for the examination, found in Sect. 2.2, of Husserl's

⁷ In 1901, Husserl defines the meaning as the intentional essence of the meaning act. The intentional essence is the species of the apprehending matter and the quality of the intention (Hua XIX, pp. 431–435/1970, pp. 122–125). For more information on this idea, see Byrne 2017a, b; De Palma 2008, pp. 51–54; Soldati 2008, pp. 64–66; Urban 2018. In contrast, in his Lectures concerning the theory of meaning (Hua XVI 1973, pp. 30–38) and Ideas I (Hua III-1, pp. 56/1982, p. 51), Husserl adopts a noematic theory of meaning (Cf. Drummond 2003, pp. 126–128). I will not further discuss this shift in Husserl's thought, from a noetic to a noematic conception of meaning, as that transition does not materially affect any of the conclusions of this paper.

⁸ To be noted is that Husserl's descriptions of non-intuitive intentions have not been properly addressed in the literature. On the one hand, there are many scholars, who have simply misinterpreted what Husserl meant by that term. For one of the more egregious examples, Sean Kelly asserts that, for Husserl, the signitive intended sides of objects are “hypothesized but sensibly absent” (2004, 2005, p. 79). According to Kelly's Husserl, the signitive intending of the hidden sides of objects is more cognitive than perceptual. Kelly writes, “On Husserl's account [...] I know or believe or hypothesize or expect that the object has certain hidden features, but I do not properly speaking see it as such” (2005, p. 80). The fact that such conclusions could be published speaks to the state of the scholarship on Husserl's descriptions of non-intuitive acts.

On the other hand, it is common for scholars to accurately, but only briefly pass over Husserl's account of non-intuitive acts. For three examples, in his text from 2019, Maxime Doyon, in passing, comments on Husserl's gradual transition away from his views concerning signitive intentions from *Investigations*, by examining passages from *Perception and Attention* and *Thing and Space*. Second, the volume *La représentation vide*, edited by Jocelyn Benoist and Jean-Francois Courtine, is ostensibly meant to address Husserl's theory of empty representations from the *Investigations* and *Revisions*. However, as Guillaume Frechette notes in his review of the book, only Melle's text from that edition discusses Husserl's theory of empty representations from *Revisions* in detail (Frechette 2004, p. 262). Indeed, of the few scholars who have discussed Husserl's theories of signitive and empty intentions at any length, Melle has provided the most rigorous analyses (1998, 2002). I develop my own interpretation of Husserl, in some parts, by critically engaging with Melle's reading. For example, my discussion of Husserl's theory of dark intentions, from Sect. 3.1, is formulated in juxtaposition to Melle's interpretation of those acts.

These points in mind, it can be said that by accomplishing the outlined goals of the essay, I hope to fill a gap in the literature: I seek to present a most extensive account of Husserl's conclusions about non-intuitive acts, which have often been incorrectly or insufficiently addressed in the scholarship.

1901 observations about the substances of categorial acts, which can give (possible or impossible) meanings to expressions or verify such meanings via fulfillment.⁹ In Sect. 3.1, I investigate how Husserl, by introducing and examining a new kind of empty intention in the *Revisions*—which he calls ‘dark’ (*dunkel*) acts—is able to recognize how his old account of non-intuitive substance and representation was mistaken. In Sect. 3.2 I spell out how Husserl resolves this problem with impossible meanings by entirely reformulating his account of non-intuitive acts, now asserting that empty intentions are modifications of intuitions, which do not have substance and do not represent their objects.

Finally, I emphasize that this study of Husserl’s theory from 1901 and 1913/14 is not executed just because his observations are philosophically rich and interesting. Rather, in the concluding Sect. 4, I cash out this dense textual analysis to demonstrate how Husserl’s changes to his theory of non-intuitive acts and meanings can shed new light on the trajectory of Husserl’s philosophy. I show that his transformations to his account of impossible meanings should inform how we understand the development of his formal and transcendental logic and I reveal how his alterations to his descriptions of non-intuitive acts impels him to totally reconstruct his account of the fulfillment of meaning intentions.

2 Logical Investigations

2.1 Signitive Substance and Representation in Single Rayed Intuitions

In 1901, Husserl concludes that a single rayed intuitive act such as the perception of a bar of gold (the metal) before me is composed of partial intuitive intentions, which represent the apparent front side of the gold bar, that is, the side facing me, and partial signitive intentions, which represent the non-apparent occluded backsides and insides of the gold bar. Important for the purposes of this paper is that Husserl accounts for the difference between these partial intentions by uncovering the differences in their substances. Specifically, he asserts that the partial intuitive intentions are composed of ‘intuitive substance’, while the signitive partial intentions are composed of ‘signitive substance’ (Hua XIX, pp. 606–610/1970, pp. 233–238). The intuitive substance is that which is responsible for intuitively

⁹ In *Investigations*, Husserl claimed that both single rayed and categorial intentions could endow expressions with meaning or sense, where he treated those latter two terms as largely interchangeable. In 1913/14; however, Husserl observes that only categorial intentions have meaning and can give meaning to expressions and that, in contrast, single rayed acts only have sense and cannot endow words with their referential power (Hua XX-2, pp. 139–145; Melle 2002, p. 115). In his 2008 text, Vandeveldt suggests that Husserl made a mistake when arriving at this conclusion. He claims that Husserl’s largely interchangeable use of sense and meaning was a ‘felicitous’ ambiguity, which allowed for Husserl’s descriptive psychology to more accurately account for our experiences of meaningful expressions (2008, pp. 45–47). I certainly disagree with this evaluation of Husserl’s evolution. In observing that only categorial acts can give meaning to expressions and by separating meaning from sense, I believe that Husserl correctly realized that our expressions and their meanings are always of a categorial or intellectual nature. I do not further address Husserl’s conclusions about single rayed acts as meaning giving or fulfilling intentions here, but have done so extensively in Byrne 2020a, b.

representing the front-side of the object facing me and the signitive substance is that which represents the occluded backsides and insides.

For Husserl, the intuitive substance has two components, the ‘content’ (*Inhalt*) and its ‘apprehension’ (*Auffassung*). Contents are unique, unrepeatable elements of experience. They are not intended or perceived, as they rather belong to the stream of consciousness, as its real (*reell*) moments (Hua XIX, p. 397/1970, p. 104). The apprehension is that which takes up, interprets, or forms the contents. For example, during a perception, the contents—which Husserl terms sensations (*Empfindungen*)¹⁰—are apprehended to intuitively represent the perceived front side of the gold bar before me. Husserl further divides apprehension into two parts. On the one hand, the apprehending matter is, “*that element in an act which first lends it reference to an object, and reference so wholly definite that it not merely fixes the object meant in a general way, but also the precise way in which it is meant*” (Hua XIX, pp. 429–430/1970, p. 121). On the other hand, the apprehending form determines how the content is to be interpreted, such that it dictates whether the object is represented in an intuitive (either perceptual or imaginative), signitive, or mixed fashion (Hua XIX, p. 624/1970, p. 245). The intuitive substance of the act is thus the contents in their apprehension, which intuitively represents the apparent part of the object.¹¹

The signitive substance of the perceptual act is that “which corresponds to the sum total of the remaining, subsidiarily given properties of the object, which do not themselves become apparent” (Hua XIX, p. 610/1970, p. 236). The signitive substance possesses no content in itself. There is nothing that the partial signitive intention per se apprehends to represent the intended backsides and insides of the gold bar.¹² The signitive substance of the perception is yet still composed of the apprehension of the act—more specifically, the apprehending matter of the act—which determines how I intend and represent the occluded parts of the gold bar with these or those properties (Hua XIX, p. 610/1970, p. 236).

2.2 Signitive Substance and Representation in Categorical Acts

In the Sixth Investigation, Husserl infamously did not construct a new theory to account for the internal structure and representation of categorical meaning acts, which can give or fulfill meaning (Cf. note nine). Instead, he simply reapplies his insights about substances (that is, about apprehension and content), which he arrived at during his analysis of single rayed intentions to describe the representation of categorical acts. Before beginning to discuss those insights; however, it is first

¹⁰ In contrast, the contents of imagination are termed by Husserl, “sensuous phantasms” (*sinlichen Phantasmen*) (Hua XIX, p. 610/1970, p. 235).

¹¹ Husserl writes, “We call the presentative or intuitive representing content [*Inhalt*] in and with its pertinent apprehension, the intuitive substance [*Gehalt*] of the act” (Hua XIX, p. 610/1970, p. 235).

¹² According to the Husserl of 1901, no meaning intention can be executed without a corresponding intuition, or at least corresponding intuitive content. Husserl writes, “A purely signitive act ... indeed if it could exist by itself at all, i.e., be a concrete experiential unity ‘on its own’. This it cannot be: we always find it clinging to some intuitive basis” (Hua XIX, p. 619/1970, p. 241). In contrast, in 1901, Husserl does assert that it is possible to execute an entirely intuitive act; namely, during internal perception.

necessary to elucidate how these categorial and single rayed acts differ from each other. Specifically, Husserl asserts that these intentions are dissimilar with regards to the structure of their apprehending matters.

A single rayed intention has a simple matter, such that its object confronts me in “one blow” (Hua XIX, p. 674/1970, p. 282). For example, a single rayed perception is directed at a gold bar, where that bar is not categorially ascribed a predicate or relation to another object. The bar sits there before me directly and immediately. In contrast, a categorial intuition has a categorially structured matter and is directed at a categorially structured correlate, which Husserl calls a ‘state of affairs’. For example, while I can straightforwardly perceive the gold bar before me during single rayed intuition, I can intend the whole complex state of affairs, ‘The gold is yellow’, via a categorial act. Husserl importantly concludes that categorial acts cannot be executed independently from single rayed intentions. Categorial intentions presuppose the execution of single rayed acts, because I execute a categorial act by structuring, shaping, or folding the objects of single rayed intentions (Hua XIX, pp. 658–661, 681–685, 704/1970, pp. 272–273, 286–289, 301. Cf. Sokolowski 1974, pp. 57–71). Properly stated, to execute a categorial act, I do not structure the whole objects of the single rayed intentions. I instead only form the correlates of the matters of single rayed intentions.

Husserl clarifies the intricacies of how categorial intentions add structures to unstructured objects by introducing and defining two new terms; “stuff” and “categorial form” (*Stoff und kategoriale Form*) (Hua XIX, pp. 663–665/1970, pp. 275–276). He defines stuffs as the objects and properties, which are intended by the matters of single rayed intentions. They are the so-to-speak raw materials, which the categorial intention will introduce structure into or will form (Hua XIX, pp. 664–665/1970, p. 275). In the case of the state of affairs, “The Gold is yellow”, the gold bar and its yellow color, which were intended by single rayed acts, would be considered the stuffs. Categorial forms, in contrast, are themselves the structures that are injected into or added to those stuffs by the categorial forming. It is a function of the categorial intention to introduce categorial forms into the stuffs, so as to establish the categorially structured state of affairs. The categorial form for the example expressed by “The Gold is yellow”, is the predicative categorial form, which is expressed by the “is”. The predicative form unites the gold stuff to the yellow stuff as its property. Husserl’s key insight is that, during a categorial meaning-fulfilling act, when I categorially intuit a state of affairs, I do not just intuit the stuffs and introduce forms into them. Instead, the forms also become apparent: the categorial forms too are intuited (Hua XIX, pp. 698–700/1970, pp. 298–299). By categorially intuiting the forms and the stuffs, I categorially intuit the whole state of affairs.

Despite the fact that categorial meaning acts and single rayed intentions are different concerning the structures of their matters, Husserl concludes that they do not differ with regards to the ways in which they intuitively or signitively represent their object. He asserts that categorial acts, like single rayed acts, are composed of intuitive and signitive substance and he claims that fulfillment happens when

signitive substance is filled up by intuitive substance (Hua XIX, pp 670–676/1970, pp. 280–283).¹³

Concerning the substance of entirely signitive meaning acts, Husserl claims that just like a single rayed act, the signitive substance for the categorial meaning act has no contents to interpret, but is instead just the apprehending matter, which represents the non-apparent state of affairs in just this or that way (Hua XIX, pp. 681–685/1970, pp. 286–289). For example, for the signitive intention that is expressed, ‘Gold is yellow’, this signitive meaning act has no contents, which could respectively represent the gold with its yellow color or the predicative categorial form. Accordingly, the stuffs and the categorial form that connects them to each other are signitively, but not intuitively represented.

During the categorial intuition of a state of affairs, which can fulfill the signitive meaning act, the apprehension does interpret certain contents to intuitively represent the gold subject, the yellow color, and the predicative categorial form, which predicatively relates them to each other. On the one hand, the content for the intuition of the stuffs is the sensorial contents, which are apprehended to represent the side of the object facing towards me. On the other hand, Husserl concludes that the contents, which can represent the categorial predicative form, are what he calls, the “contents of reflection” (*Reflexionsinhalte*, Hua XIX, p. 708/1970, p. 304). Like sensorial contents, these contents of reflection are also *reelly* experienced and lived through. Specifically, the contents of reflection—for the predicative form¹⁴—are the overlap of certain apprehending matters, which I can experience via a three-step procedure. It is not; however, necessary to extensively describe this three-step procedure or to completely elucidate what Husserl means with the contents of reflection here.¹⁵ Instead, the important point to be revealed by this analysis and the exploration of this whole Sect. 2.2 is that Husserl fully commits to the analogy

¹³ To be noted is that, according to the Husserl of 1901, meaning giving intentions are completely unintuitive, that is, they are composed of only signitive substance. While Husserl does conclude that meaning fulfilling intentions are often intuitive, he surprisingly admits that they can also be of a signitive nature. Husserl demonstrates this point by discussing how the signitive intending of the numerical concept $(5^3)^4$ can be fulfilled—whereby that concept is also clarified—by means of other signitive intentions, which uncover the sense of that concept. He writes, “We clarify the concept $(5^3)^4$ by having recourse to definitory presentations” (Hua XIX, p. 601/1970, p. 229). The first step of this process would be to signitively unpack or simplify $(5^3)^4$ as $5^3 \times 5^3 \times 5^3 \times 5^3$. I could then further clarify the number 5^3 as $5 \times 5 \times 5$. I can continue this clarifying process via signitive intentions until “we should at last come to the completely explicated sum of ones of which we should say: ‘This is the number $(5^3)^4$ itself’” (Hua XIX, p. 601/1970, p. 229). Via the experience of these signitive presentations, which unpack $(5^3)^4$ into its simplest form, we experience “an act of fulfillment not only correspondent to this final result, but to each individual step” (Hua XIX, p. 601/1970, p. 229).

¹⁴ According to Husserl, there is not one kind of content, which can represent all categorial forms. Instead, “there is a unique representing content for each sort of founded act” (Hua XIX, p. 699/1970, p. 298). In other words, there are different contents for the intuitive representation of the different categorial forms.

¹⁵ Husserl describes how we can reelly experience the overlap of matters, which he alternatively calls the “psychic bond” [*das psychische Band*] on Hua XIX, pp. 676–682, 696–709/1970, pp. 283–288, 296–304. For more information on how and why Husserl conceived of the overlap of matters as the contents that can intuitively represent the predicative categorial form, see Byrne 2020b; Cobb-Stevens 1990; Lohmar 1990, 2002, 2008; Sokolowski 2004.

between the substances—the apprehension of content—of single rayed acts and categorial meaning intentions.

3 Revisions

3.1 Husserl's 1913/14 Discovery of Problem with the Logical Investigations

Husserl's 1901 descriptions of signitive intentions—both single rayed and categorial—have been somewhat explored in the literature (Cf. note eight). What has; however, been missing from the scholarship is an in-depth examination of Husserl's 1913/14 discovery of the critical error with his account of those non-intuitive acts, which ultimately debars his theory of impossible meanings. Before engaging in an analysis of how Husserl recognizes that mistake in the *Revisions*, I must again emphasize that he makes an important change to his terminology in those 1913/14 manuscripts. He no longer calls non-intuitive acts 'signitive' acts, but instead, 'empty' intentions.¹⁶ I follow this terminological alteration throughout the rest of the paper where appropriate.

Husserl comes to realize the error of his 1901 descriptions of non-intuitive intentions by introducing and examining a new kind of non-intuitive or empty act in the *Revisions*; namely, "dark" (*dunkel*) acts.¹⁷ These empty intentions constitute objects in so-to-speak total occlusion. To clarify this curious kind of empty intention, Husserl provides two examples. First, I can experience empty dark 'perceptual' intentions when the lights in a room go out. In that case, the objects and the room do not simply vanish, such that I take myself to be in a void. Rather, I am still 'perceptually' aware of those objects via empty dark intentions. Husserl describes these experiences by writing: "In the often used example of the extinguishing of the light ... in full darkness the object stands there, we are still perceptually directed at it, it is still there, but we do not 'see' it" (Hua XX-1, p. 141). As there is no light shining off of these objects, they are perceptually presented in so-to-speak total occlusion. Second, dark 'phantasy' occurs during the intermitting of a phantasy, where the phantasied object does not—at least for a moment—intuitively appear, but is yet still intended (Hua XX-1, p. 142).

A difficulty Husserl faces is that an empty dark perception or phantasy seems to represent its object perspectivally. He writes that in the case where the light goes out, "We know very well from which side, in which orientation, one could almost say in which manner of appearance [the object] comes before us—even though it is entirely and truly not 'seen'" (Hua XX-1, p. 142). The relevant question for Husserl

¹⁶ Hua XX-2, p. 90. Cf. note six. Husserl does indeed employ the term, "empty", in the *Investigations*, but he uses that term primarily to describe signitive acts as 'empty' of intuitive content. For further discussion of Husserl's use of the term 'empty' in the *Investigations*, see Byrne 2017b and 2020b.

¹⁷ In contrast to his claims from 1901 (Cf. note twelve), Husserl concludes, in *Revisions*, that one can execute an entirely empty act, but not an entirely intuitive act. He now asserts that a totally empty act can be a meaning intention or a fully dark act, whereas a completely intuitive act is not possible, because, as a result of temporal extension, even internal perceptions have empty retentive components. Cf. Section 3.2 for more information on this point.

is thus, are there substances of a dark perception, which represent a perspectively given non-apparent object? And if so, what are these substances?

In *Revisions*, Husserl first responds to these questions by assuming his interpretation of substances from the *Investigations*. Specifically, Husserl shows that, if his conclusion from the *Investigations* were accepted—that non-intuitive acts are composed of non-intuitive substance—then it would be the case that dark completely empty perceptions would naturally be composed wholly of non-intuitive substance, which represents the non-apparent object.

Yet, Husserl realizes, in 1913/14, that this observation leads to a curious implication. We remember that, in a normal perception of the perspectively given object, the intuitive substance is responsible for the representation of the front side of the object and that the non-intuitive substance represents the non-apparent backside. If a dark perception also represented a perspectively given non-apparent object, per the definition of perspectivity, that darkly perceived object would also have to be represented with a non-apparent front-side and a non-apparent backside. If—as would be assumed on the 1901 interpretation—the dark perception were only composed of non-intuitive substance, then it would accordingly have to be composed of empty substance that represented the side of the object facing me (which would, during normal perception, be given intuitively). And the dark perception would have to possess empty substance, “which would correspond to the co-meant [backside]” (Hua XX-1, pp. 144–145).

Husserl hereby observes in *Revisions* that if one accepted his 1901 description of the substances of non-intuitive acts, then one must also conclude that non-intuitive perception is simply a dark mirror or dark double of the intuitive perception (Hua XX-1, pp. 140–146). Just as the intuitive perception is divided into intuitive and empty substance, so also, there would be a division in the dark perception between, non-intuitive substance that is, “Quasi-Fülle”, and non-intuitive substance that is, “Quasi-Leer” (Hua XX-1, p. 240). Moreover, the emptily perceived *object* would also be a dark mirror or double of the intuitively perceived object: It would have the same “phenomenological structure, that of its ‘core’ and its ‘halo’ as full intuitions” (Hua XX-1, p. 142). The dark perception would represent the object, in just the same way (with the same Gestalt) that the intuitive perception does, only emptily: All of the pieces and moments of the object would be represented as belonging to the darkly perceived object.

However, if a fully empty perception, with its quasi-full and quasi-empty substances represents the object in just the same way as an intuitive perception, then it would be the case that every empty act would have a corresponding intuition, which could fulfill it. As a dark mirror, the empty presentation would always be a reflection of a possibly fulfilling intuition. Husserl writes that, “If the empty presentation were a mere reproduction of intuitions with precisely the same *reellem* structure ... then principally every empty presentation must be able to go over into a corresponding intuition” (Hua XX-1, p. 146). From this, Husserl further sees that this position necessitates that the limits of dark empty acts would be the limits of intuitions. In other words, the dark perception, as a dark mirror, could only reflect (emptily represent) that which can be intuitively represented. For example, when the lights in the room go out, assuming Husserl’s 1901 theory, I would not be able to

darkly perceive a square circle. This is because this empty dark perception would be composed of substances, which represent its object with the same Gestalt as the perception. Yet, there can be no substances, which represent the circle and represent it with its squareness to me. Indeed, such a circle cannot be represented with that property at all.

Husserl still maintains, in 1913/14, that categorial intentions are analogical to single rayed acts with regards to their fullness, substances, and representation. Accordingly, these above discussed conclusions (which result from Husserl's 1901 theory) about single rayed acts, if correct, would also have to transfer to categorial intentions. As such, the Husserl of 1913/14 observes that, if his account from the *Investigations* were adopted, then non-intuitive categorial meaning acts would also be dark mirrors of categorial intuitions. We know that the categorial intuition of the state of affairs, expressed, 'Gold is yellow', would have intuitive substances for the gold, the yellow, and the predicative form. If an empty categorial act were a dark mirror of a categorial intuition (in a similar manner to how the dark perception is the mirror of the perception), then that non-intuitive categorial act, would have to have non-intuitive substances for the gold subject, the yellow property, and the predicative categorial form.

If the empty categorial act as such were a dark double of a categorial intuition, then; however, every categorial meaning act would be fulfillable. As a dark double, the empty categorial act would always be a reflection of a fulfilling intuition, which could, at any moment, be executed via imagination.¹⁸ As a result, every meaning act would have a possible meaning and no meaning act could ever have an impossible meaning. Husserl writes that if this interpretation were accepted, "then there would be no counter-sense, no absurd speech and no logically contradictory speech" (Hua XX-1: 146). For example, if I sought to execute an empty meaning act with the impossible meaning, 'The square has five angles', I would have to emptily represent the square, the five angles, and the categorial form that unites them in the same way that a categorial intuition would represent them, but only emptily, that is, as a dark double. Yet, Husserl writes that this is "Nothing less than impossible, as can be seen a priori" (Hua XX-1, p. 146). I cannot emptily intend or represent that state of affairs, 'The square has five angles', in a similar way to how an intuition would, because such a state of affairs could never be intuitively represented or indeed, represented at all. There can be no such empty substances, that could emptily represent that state of affairs. This categorial meaning act, with its impossible meaning, and indeed, any categorial meaning act with an impossible meaning could principally not be performed.

Yet, these conclusions obviously and naturally clash with our everyday experiences. I obviously can and do mean countersensical, absurd, and logically contradictory meanings via empty categorial intentions. I do execute meaning intentions with impossible meanings. I can mean 'The square has five angles'. Indeed, Husserl here in *Revisions* clarifies that I am not only able to execute empty meaning intentions with impossible meanings, but that I can recognize their

¹⁸ For a clear discussion of Husserl's understanding of the interrelationships between perception and imagination, see Plotka (2020, pp. 35–40).

impossibility by attempting to bring them to intuition. He writes, “Incompatibility is not discovered in emptiness, where the union [of the meanings] is executed, but rather incompatibility is realized in the sphere of intuition, which cashes out [the meaning]” (Hua XX-1, p. 146). In other words, it is phenomenologically evident that I can unite incompatible meanings to form an impossible meaning via empty intentions and that the impossibility of that meaning can be discovered via the conflict experience during intuitive acts. This in mind, Husserl’s 1901 account of the substances and representation of signitive acts is thus revealed as wantonly incorrect; It is inaccurate, because it cannot account for my intending of impossible meanings. It disbars the possibility that I could ever perform an empty meaning act, which has an impossible meaning, despite the fact that I obviously can and do execute such meaning acts.

3.2 Husserl’s Solution: A New Theory of Non-intuitive Acts

If Husserl’s 1901 theory of non-intuitive acts and non-intuitive substance falls apart upon closer inspection, how then must he reconceive of those intentions and their substances in such a way that allows for the execution of meaning acts with impossible meanings? Husserl certainly does not attempt to alter his theory of non-intuitive intentions in minor ways here and there. Instead, he executes a revision, which upends his previous account and reveals an entirely new way to conceive of these empty intentions.¹⁹ Specifically, Husserl concludes that empty intentions are not acts that have been drained of intuitive substance and are composed of only empty substance. Instead, *he now asserts that empty intentions are modifications of intuitive intentions.*

I first look at Husserl’s new descriptions of dark acts as empty modifications. Melle, in his analysis of Husserl’s *Revisions*, simply points out that the emptiness modification is “peculiar” and that it is analogous to the phantasy and imaginative modifications, which Husserl discussed in his *Ideas I* (2002, p. 118. Cf. Hua III-1 1950, pp. 240–245/1984, pp. 251–255). Yet, I contend that even though the emptiness modification is to some degree similar to those other modifications, it is very different, such that it necessitates a more rigorous and considerable investigation.

Memorial or imaginative modifications, in contrast to the emptiness modification, do not alter the composition of the perceptual intention that they modify. When I imaginatively or memorially modify a perception, that act still possesses an intuitive substance and an empty partial intention. The remembered or imagined object is still represented. When a perception becomes an empty dark act via the emptiness modification, in contrast, Husserl writes, “The representing contents disappear and

¹⁹ To be clear, Husserl’s thought concerning non-intuitive acts did not undergo a radical shift in 1913/14, as if he immediately jumped from his 1901 theory at that later date. Instead, his philosophy evolved slowly over time. The current article’s juxtaposition of *Investigations* and *Revisions* is a presentation of the results of Husserl’s decade-long endeavor to attain clarity with regards to non-intuitive experience, rather than an extended analysis of each individual step on that path of reconsideration. For the reader interested in the gradual evolution of Husserl’s thought from 1901–1913/14, I must recommend Doyon’s article from 2018 and Summa’s (2014) monograph. See also note twelve.

with this, the apprehension disappears, thus the entire intuitive substance disappears—and by virtue of the non-independence of the intuitive substance, that is, its essential togetherness with the supplementing empty substance—then also the latter disappears” (Hua XX-1, p. 145). In other words, *the empty dark intention does not have intuitive substance or empty substance*, such that there is naturally no structural division between them. Husserl writes that the dark perception is executed “without any of the *reellen* internal divisions and distinctions” which the normal perceptual act has (Hua XX-1, p. 144). The empty act does not have a division between its quasi-full and quasi-empty substances, as it has no substance at all. The ultimate result of these observations is that, for the Husserl of 1913/14, the dark perception does not represent its object as the intuitive act does, but just darkly. The object of the empty dark act is emptily intended but is not emptily represented. An empty dark intention has a fundamentally different structure than an intuitive act. *All of this means that Husserl no longer takes empty intentions to be dark mirrors of intuitions.*²⁰

Husserl transfers these conclusions about empty single rayed intentions to empty categorial acts, asserting that an empty categorial act is not composed of empty substance, but rather has no substance at all. Empty categorial acts are not dark doubles of categorial intuitions, but instead modifications of those intuitions. The empty categorial intention does not represent its state of affairs in the same way that a categorial intuition does, but only emptily. Instead, as it does not possess any substance, the empty categorial intention does not represent its state of affairs at all (Hua XX-1, pp. 144–146).²¹

This new description of the structure of non-intuitive categorial intentions cleanly and easily removes the problem with Husserl’s 1901 account, which disbarred the possibility of meaning acts with impossible meanings. As empty categorial acts are not dark mirrors or doubles, it is not the case that such empty acts would be a reflection of a categorial intuition, which could always fulfill that empty intention. This 1913/14 account allows for one to understand why empty categorial acts are not always fulfillable. That is, Husserl’s new theory of the structure of empty intentions sets the stage for him to properly clarify how meaning acts could also have impossible meanings. As the empty categorial act does not represent its state of affairs, when I execute such an act, I can combine meanings, which could not be brought together in (intuitive) representation (Hua XX-1, pp. 145–146). In other words, the fact that empty acts do not have substances that represent their objects expands the realm of meaning intentions beyond the domain of intuitions. Husserl’s new account can thus be employed to show how I execute acts with the impossible meaning, expressed as, ‘The square has five angles’. Because I am not representing that square and its angles to myself, but instead simply emptily intending it, no problem arises in understanding

²⁰ Melle adopts a different interpretation of Husserl’s theory. He writes, “A difference has to be made between empty representation and an obscure [dark] intuition, i.e., an intuition emptied of intuitive content. Otherwise we are faced with an infinite regress” (2002, p. 118). In this quote and in several other passages, Melle concludes that Husserl differentiates between dark and empty intentions, which, as has been shown by the above citations and through close analysis, is certainly not the case. For further discussion of why Melle is misguided in this reading, see Byrne 2020b.

²¹ Doyon also briefly touches upon this shift in Husserl’s thought writing, Husserl “now asserts that the [emptily intended] parts of objects are simply not represented at all” (2019, p. 188).

how such a meaning act could be executed. In sum, this new account provides an accurate phenomenological description of empty intentions, which allows for Husserl to clearly elucidate how one can perform meaning acts with impossible meanings. The 1913/14 theory thus constitutes an important step forward in Husserl's philosophy of both consciousness and meaning.

4 Conclusion

As Husserl's descriptions of non-intuitive acts and (impossible) meanings stand as core tenets of his philosophy as a whole, his radical 1913/14 alterations to his understanding of them inspire if not require him to make equally radical changes to many other elements of his thought. In this conclusion, I step back from dense textual analysis, to address just two of these necessitated overarching transformations. In doing so, I demonstrate that by understanding Husserl's total overturning of his account of non-intuitive acts and impossible meanings from the *Revisions*, one can correctly grasp the trajectory of his thought.

First, on the basis of his novel conclusions about empty acts, Husserl transforms not only his understanding of the experience of fulfillment, but also his descriptions of meaning intentions. We remember that, in 1901, Husserl believed that fulfillment occurs when the signitive substance of the signitive intention is 'filled up' by the intuitive substance of the intuition. Yet, because Husserl, in *Revisions*, denies that non-intuitive acts have substance, he sees that there is no empty 'container' (no empty substance), which the intuitive act could 'pour' its intuitive substance into. For this reason and others, Husserl concludes that his conception of fulfillment as happening via filling up was inaccurate. How then should he describe the experience of fulfillment? Straightforwardly stated, Husserl concludes, in *Revisions*, that during fulfillment the intuition simply replaces the empty act. Husserl clarifies this new conception of fulfillment primarily within the context of a discussion of meaning acts. He states that the empty meaning act, which gave words their meaning is, during fulfillment, simply discharged of its duties and replaced by the categorial intuition. Husserl writes that, during fulfillment, "the word-consciousness is directly related to intuitive consciousness, the empty intention is replaced (*ist abgelöst*) by the intuitive consciousness, which now itself, and without any mediation from an enduring empty act, [functions] as the meaning" (Hua XX-2, p. 151).

This conclusion not only totally changes Husserl's theory of fulfillment,²² but also overturns his previous conception of meaning acts. In 1901, Husserl observed

²² Husserl further alters his position concerning fulfillment in other significant ways in the *Revisions* (Hua XX-1, pp. 128–139). He states that, in addition to his *reel* or noetic understanding of fullness from LU, there is a *real* or noematic fullness. Moreover, Husserl develops a more complex and nuanced theory of fullness by modifying some of his observations from the first edition of Sect. 23 of the Sixth Investigation. He claims that fullness is to be measured according to different ranks or continuums (*Rangestufe*). On the one hand, as Husserl had inchoately recognized in 1901, he now claims that fullness concerns the series of extent (*Umfang*) or richness (*Reichtum*), and liveliness (*Lebendigkeit*). On the other hand, Husserl discovers that fullness is also ranked according to clarity (*Klarheit*) or distinctness (*Deutlichkeit*), favorability (*Gunst*), and determinacy (*Bestimmtheit*). For further information on these alterations, see Melle (2002), p. 119.

that signitive meaning acts had to continue to be performed during fulfillment, as these were the only intentions that could give words their meaning (Cf. note two). As Husserl has now claimed that categorial intuitions can replace non-intuitive meaning intentions, he must also assert, as he does, that such intuitions can give words their meaning (Hua XX-2, pp. 151–153). Melle correctly explains the novelty of this point by writing, “Linguistic consciousness is always two-tiered, either intuitive or not. Intuition, which, since all linguistic signs are categorial signs, can only be a categorial intuition, can be directly expressed, that is, it can itself function as a meaning giving act” (2002, p. 179). In sum, Husserl’s solution to the central question of the *Investigations*—how do we come to intend and know about meaningful states of affairs?—is entirely upended in *Revisions* as a result of his new conclusions about the nature of empty acts.

Second, the rectified account of possible and impossible meanings serves as the germ of Husserl’s ‘truth logic’ as he develops it in the 1929 Formal and Transcendental Logic (Hua XVII 1974, pp. 131–151/1969, pp. 130–148). This is the case, despite the fact that Husserl’s study of the realization of the possibility or impossibility of meaning, via fulfillment or conflict, cannot be mixed up with his consequence logic (Cf. note five). Mohanty summarizes the difference between consequent and truth logic, by writing, “A logic of non-contradiction treats [meaning] as *propositions*, as mere unities of meaning, as ideal, abstract entities. A logic of truth considers them as contents of cognitions, as *judgments* (affirmations or denials) with claims to truth, but with the possibility of turning out to be false” (1999, p. 198). Husserl’s consequence logic excludes meanings on the basis of their formal analytic composition. A meaning is determined to be consistent if it avoids violating analytic laws of formal absurdity, such as the law of contradiction, double negation, or *modus ponens*. Husserl writes that these laws show us “what can be said regarding the objective validity of a meaning on the basis purely of the meaningful form” (Hua XIX, p. 344/1970, p. 72). In contrast, truth logic, as developed in 1929, is interested in determining if a judgment is identifiable as the same judgment and if it is decidable as true or false (Hua XVII, pp. 36–39, 131–150/1969, pp. 31–33, 130–148. Cf. Sokolowski 1974, pp. 221–225).

To begin to discover which meanings are decidable as true or false, one must first determine whether such meanings are possible or impossible. Indeed, only a meaning that could ideally be fulfilled is one that could actually be fulfilled and recognized as true. Just as is done in Husserl’s later truth logic, meanings can only be determined as possible or impossible when those meanings are treated as judgments or as categorial meaning intentions—as Husserl does in the Sixth Investigation and its *Revisions*. Mohanty explains that after a meaning has been determined to be non-contradictory, one begins to execute truth logic, when it is realized that, “although the unity of the meaning has been distinctly grasped, the intended objective state of affairs has not been either intuitively grasped or intuitively anticipated. When this last is achieved, the judging has become ‘clear’. Such clear judgments alone can be established to be either true or false” (1999, p. 186). From this quote, it is clear that the first stage of truth logic is the determining if a meaning is possible or impossible—via the experience of fulfillment or conflict—where this will allow for one to subsequently discover if a

meaning is decidable as true or false. This is to say that Husserl evolves his 1913/14 corrected and tenable theory of the possibility or impossibility of meanings to develop the foundation of his truth logic.

This brief analysis suffices to demonstrate that Husserl's establishment of a description of non-intuitive acts, which is coherent with his theory of impossible meanings, informs other important shifts in his philosophy. He fundamentally alters his observations about fulfillment and meaning and he employs his novel account of possible and impossible meanings to formulate his truth logic. To be clear, Husserl's 1913/14 alterations, which have been outlined in the body of the current text, are even more important than can be shown here. Those changes inspire revisions to many other tenets of Husserl's philosophy, including his understanding of transcendental idealism,²³ perceptual occlusion, and the connection between expressions and their meaning acts. A more comprehensive investigation into all of Husserl's transformations of his philosophy, which he executes on the basis of his new theory of empty acts and impossible meanings would; however, be the task of a much larger project. It was rather the more modest goal of this paper to clearly elucidate how Husserl works from his *Investigations* to discover a tenable and coherent phenomenology of empty acts and impossible meanings. In doing so, I hope to have shown that Husserl's descriptions of empty meaning intentions with impossible meanings are more complex, philosophically interesting, and important than has previously been accounted for.

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References

- Benoist J, Courtine JF (2003) La représentation vide suivi de Les Recherches logiques, une oeuvre de percée. Presses universitaires de France, Paris
- Bernet R (2004) Husserl's transcendental idealism revisited. *New Yearb Phenomenol Phenomenol Philos* 4:1–20
- Byrne T (2017a) Husserl's early semiotics and number signs: philosophy of arithmetic through the lens of 'on the logic of signs (semiotic)'. *J Br Soc Phenomenol* 48(4):287–303
- Byrne T (2017b) Surrogates and empty intentions: Husserl's on the logic of signs as the blueprint for the first logical investigation. *Husserl Studies* 33(3):211–227

²³ Rudolf Bernet, in his article from 2004, discusses how Husserl works from his insights about possible and impossible *meanings* to develop a new theory of ideally possible, really possible, and actual *objects* (Hua XX-1, pp. 171–220). This, as Bernet claims, allows for Husserl to present a more coherent form of transcendental idealism than had been proposed in *Ideas I*. Bernet writes, "In successively investigating the phenomenological consciousness in which ideally possible, really possible, and actually real objects are given ... Husserl is not only brought to distinguish between a broad versus a strict sense of phenomenological idealism, but will also show that the transcendental consciousness that assures us of the actuality of the world must be a consciousness that is at once both embodied and intersubjective" (2004, p. 4).

- Byrne T (2017c) The dawn of pure logical grammar: Husserl's study of inauthentic judgments from 'on the logic of signs' as the germ of the fourth logical investigation. *Studia Phaenomenologica* 17:285–308
- Byrne T (2018) The evolution of Husserl's semiotics: the logical investigations and its revisions (1901–1914). *Bull d'Anal Phénoménologique* 5(14):1–23
- Byrne T (2020a) Husserl's 1901 and 1913 philosophies of perceptual occlusion: signitive, empty, and dark intentions. *Husserl Studies*. <https://doi.org/10.1007/s10743-019-09255-5>
- Byrne T (2020b) Husserl's theory of signitive and empty intentions in *Logical Investigations* and its revisions. *J Br Soc Phenomenol*. <https://doi.org/10.1080/00071773.2020.1743953>
- Cobb-Stevens R (1990) Being and categorial intuition. *Rev Metaphys* 44(1):43–66
- De Palma V (2008) Husserl's phänomenologische Semiotik. In: Mayer V (ed) *Edmund Husserl: Logische Untersuchungen*. Akademie Verlag, Tübingen
- Doyon M (2019) Kant and Husserl on the (alleged) function of imagination in perception. *New Yearb Phenomenol Phenomenol Philos* 17:80–203
- Drummond J (2003) Pure logical grammar: anticipatory categoriality and articulated categoriality. *Int J Philos Stud* 11:125–139
- Drummond J (2007) Pure logical grammar: Identity amidst linguistic differences. In: Lau KY, Drummond J (eds) *Husserl's Logical Investigations in the new century: western and Chinese perspectives*. Springer, New York
- Edie J (1977) Husserl's conception of 'the grammatical' and contemporary linguistics. In: Mohanty JN (ed) *Readings on Edmund Husserl's logical investigations*. Martinus Nijhoff, Den Haag
- Frechette G (2004) Review of *La représentation vide suivi de Les Recherches logiques, une oeuvre de percée. Poincaré et la théorie de la connaissance* 31(1):262–266
- Hanna R (1984) The relation of form and stuff in Husserl's grammar of pure logic. *Res* 44(3):323–341
- Hua III-1. Husserl E (1950) *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie. Erstes Buch, Allgemeine Einführung in die reine Phänomenologie*. Biemel W (ed). Martinus Nijhoff, Den Haag
- Hua XVI. Husserl E (1973) *Ding und Raum*. Claesges U (ed). Martinus Nijhoff, Den Haag
- Hua XVII. Husserl E (1974) *Formale und transzendente Logik. Versuch einer Kritik der logischen Vernunft*. Janssen P (ed). Martinus Nijhoff, Den Haag
- Hua XIX. Husserl E (1984) *Logische Untersuchungen. Zweiter Teil. Untersuchungen zur Phänomenologie und Theorie der Erkenntnis*. Panzer U (ed). Martinus Nijhoff, Den Haag
- Hua XX-1. Husserl E (2002) *Logische Untersuchungen. Ergänzungsband. Erster Teil*. Melle U (ed). Kluwer, Den Haag.
- Hua XX-2. Husserl E (2005) *Logische Untersuchungen. Ergänzungsband. Zweiter Teil*. Melle U (ed). Kluwer, Den Haag
- Ierna C (2019) Thinking the impossible: the Gestalt of a round square. *Meinong Stud* 10:47–60
- Kelly S (2004) Seeing things in Merleau-Ponty. In: Carman T (ed) *Cambridge companion to Merleau-Ponty*. Cambridge Press, Princeton
- Lohmar D (1990) Wo lag der Fehler kategorialen Repräsentation? *Husserl Stud* 7:179–197
- Lohmar D (2002) Husserl's concept of categorial intuition. In: Zahavi D, Stjernfelt F (eds) *One hundred years of phenomenology*. Springer, Dordrecht
- Lohmar D (2008) *Kategoriale Anschauung*. In: Mayer V (ed) *Edmund Husserl: Logische Untersuchungen*. Akademie, Berlin
- Melle U (1998) Signitive und Signifikative Intentionen. *Husserl studies* 15(3):167–181
- Melle U (2002) Husserl's revisions of the sixth logical investigation. In: Zahavi D, Stjernfelt F (eds) *One hundred years of phenomenology*. Springer, Dordrecht
- Mohanty JN (1999) *Logic, truth, and the modalities: towards a phenomenological perspective*. Springer, New York
- Panzer U (1984) Introduction by the editor. In: Panzer U (ed) *Logische Untersuchungen Zweiter Teil*. Martinus Nijhoff, Den Haag
- Plotka W (2020) A controversy over the existence of fictional objects. *J Br Soc Phenomenol* 51(1):33–54
- Sokolowski R (1974) *Husserlian meditations*. Northwestern, Evanston
- Sokolowski R (2004) Husserl's concept of categorial intuition. In: Moran D, Embree L (eds) *Phenomenology: critical concepts in philosophy*. Routledge, London
- Soldati G (2008) Husserl's phänomenologische Semiotik. In: Mayer V (ed) *Edmund Husserl: Logische Untersuchungen*. Akademie Verlag, Tübingen
- Summa M (2014) *Spatio-temporal intertwining*. Springer, London

- Urban P (2018) Revisiting Husserl's account of language in Logical Investigations. *Horizon Stud Phenomenol* 7(2):263–272
- Vandavelde P (2008) An unpleasant but felicitous ambiguity, Sinn and Bedeutung in Husserl's revisions of the Logical Investigations. In: Mattens F (ed) *Meaning and language, phenomenological perspectives*. Springer, Dordrecht

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