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# The Dawn of Husserl's Pure Logical Grammar: Husserl's Study of Inauthentic Judgments from "On the Logic of Signs" as the Germ of the "Fourth Logical Investigation"

# **Thomas Byrne**

Husserl Archives, KU Leuven

**Abstract**: This paper accomplishes two goals. First, I elucidate Edmund Husserl's theory of inauthentic judgments from his 1890 "On the Logic of Signs (Semiotic)." It will be shown how inauthentic judgments are distinct from other signifive experiences, in such a manner that when Husserl seeks to account for them, he is forced to revise the general structure of his philosophy of meaning and in doing so, is also able to realize novel insights concerning the nature of signification. Second, these conclusions are revealed to be the foundation of Husserl's pure logical grammar, found in the 1901 "Fourth Logical Investigation." In his analysis of inauthentic judgments, Husserl already recognized, albeit in a problematic way and for entirely different reasons, many of the central tenets of the 1901 work concerning categoremata and syncategoremata, matter and form, and the isomorphism between them.

Keywords: Husserl, phenomenology, semiotics, grammar, judgment.

## 1. Introduction

In his 1890 "On the Logic of Signs (Semiotic)" (Hua XII: 340–373/1994: 20–51. Hereafter, LZ),<sup>1</sup> Edmund Husserl executes a rigorous psychological

<sup>&</sup>lt;sup>1</sup> Concerning further citations, I reference the Husserliana Edition (= Hua) prior to the slash. While all translations will be mine, the number after the slash points the reader to the

and logical investigation of signitive experience. He examines how signs operate generally and differentiates them according to their genetic origins, degrees of necessity, and associative functions. In this paper, I focus on Husserl's descriptions of one most curious kind of signitive experience; "inauthentic judgments" (*uneigentliche Urteile*).

Husserl's elucidations of these judgments in LZ are of historical and philosophical importance for two interconnected reasons. By clarifying his descriptions of inauthentic judgments, it will be revealed, in the first half of this paper, how they prompt a shift in the current interpretation of Husserl's early philosophy. As inauthentic judgments are unlike other signitive experiences, they frustrate Husserl's attempt to account for them by utilizing the methodology and terminology he had already established. Not only his understanding of the notions of "authentic" (*eigentlich*) and inauthentic, but also of matter and form, and of categorematic and syncategorematic signs are transformed during this examination. Concerning methodology, I lay out the "standard" schema of signification Husserl constructed in LZ and then show how his theory of inauthentic judgments so-to-speak flips those tenets on their head. As a close reading of LZ reveals these remarkable twists in Husserl's early philosophical development, it is surprising to learn that the text has been largely overlooked in the literature.<sup>2</sup>

The second and more critical reason why this theory of inauthentic judgments should garner an important place in Husserl's *oeuvre* is because it serves as the embryo of a central strain of his thought: The 1890 analysis provides Husserl with all of the philosophical reasons and tools for the construction of his pure logical grammar. To reveal how this is the case, I juxtapose LZ to what is generally considered to be Husserl's first systematic execution of pure grammar; namely, his 1901 "Fourth Logical Investigation" (Hua XIX/1970. Hereafter, LU). It will be shown that Husserl had already in LZ realized many of the main doctrines of his pure logical grammar; for example, that there is an isomorphic relationship between categorematic and syncategorematic linguistic signs and their matter and form meanings and also that different material meanings can have the same form.<sup>3</sup>

English translation. All quotes from the Logical Investigations come from the First Edition, unless otherwise explicitly stated.

<sup>2</sup> To the best of my knowledge, there are eight articles that discuss the tenets of LZ in some detail. These are: Byrne 2017a, 2017b; D'Angelo 2013; Ierna 2003; Majolino 2010, 2012; Zuh 2008, 2012.

<sup>3</sup> To be emphasized: Husserl's thought did not undergo a radical shift in 1901, as if he immediately jumped from his 1890 theory at that later date. Instead, his philosophy evolved slowly over time. The following juxtaposition of these two works is a presentation of the results of Husserl's decade-long endeavour to attain clarity with regards to signitive experience, logic, and grammar. I refer the reader to two texts in particular, within which Husserl's new philosophy of signification, as a reaction to LZ, began to crystalize: "Anschauung und Repräsentationen (1893—94)" (Hua XXII: 406–411/1994: 452–458), and "Psychologische Studien zur

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## 2. Signitive Experience<sup>4</sup>

Husserl's standard examination of signitive experience in LZ is dedicated to clarifying the function of two kinds of signs; associatively motivating signs and signs that serve as replacements or surrogates. I examine these two signs here and demonstrate in the next sections, how Husserl works beyond these descriptions when he examines the operation of inauthentic judgments.

A central tenet of Husserl's investigation of motivating signs is that when I am presented with these signs, two different operations can occur. The sign can motivate me to execute an authentic presentation of the signified or to present a surrogate for it and in either case, to recognize the presented object as that which the sign signifies. Both kinds of motivation occur via the two steps of association; linking and reawakening.

I utilize the simple case, where I go to buy a pen, to clarify these two experiences. When I go to the store, I perceive, for the first time, the orange pen I will buy. This is the authentic presentation<sup>5</sup> of the pen: I see it, in person, in robust detail. Husserl claims that to any authentically presented object, there can become associatively tied a manifold of different psychic or physical objects or determinations, which are also given via authentic presentations (Hua XII: 354/1994: 31–32). For example, the orange pen may have a particular image of the King of the Greek Pantheon, Zeus, on its side. This determination of the pen can be associatively linked to the pen itself. Importantly, the authentically presented written or spoken sign "pen" can also become so linked to the perceive pen (Hua XII: 352–353/1994: 32).

When I arrive home and call a friend, when my pen is sitting on the desk in front of me, I could tell her about my new purchase and she may ask me: "What colour is your pen?" Husserl states that I can answer this question because the link between the motivational (in this case, vocal) sign "pen" and the presentation of the pen is reawakened. When I hear those words, I am impelled or associatively motivated to authentically present the pen that is before me and recognize it as that which corresponds to the sign: It is taken as

*Elementaren Logik* (1894)" (Hua XXII: 92–123/1994: 139–170). For further information on the gradual transformation of Husserl's philosophy during this time, *cf.* Schuhmann 1990/91.

<sup>4</sup> The discussion of section 2 is a revision and expansion of a small part of the analysis I present in my forthcoming article; see Byrne, 2017a In that text, the examination of LZ is placed in a different context; namely, I demonstrate how one can read it as the palimpsest for Husserl's "First Logical Investigation," thereby revealing the further historical and philosophical importance of LZ.

<sup>5</sup> Properly considered, all perceptions are judgments for the early Husserl, as he was still a believer in Franz Brentano's tripartite division of psychic phenomena at this time. *Cf.* Rollinger 1999: 33–43.

the sign's meaning.<sup>6</sup> I see it as the object that my friend is inquiring about. By doing so, I am able to see, know, and state to her "The pen is orange."

Not only linguistic signs can perform this motivational and signitive operation. All objects or characteristics that have been previously associatively tied to another can reawaken their link. Husserl writes: "The word 'sign' in our definition is to be taken in the widest conceivable sense" (Hua XII: 340/1994: 20). For example, after having lost my pen, if I were to walk into the library and see someone that is writing with an orange pen, which has an image of Zeus on it that is identical or similar to the one on my pen, that image could arouse the associative link. The image of Zeus would serve as a motivating sign, which impels me to recognize the signified authentically presented pen as mine.<sup>7</sup>

Husserl's explanation of the second operation of motivating signs, that is, their impelling me to execute an inauthentic presentation, derives from his understanding of the function and purpose of thought. He explains that thinking can be divided into higher and lower level psychological activities. Higher activities are those that are more difficult to execute, that is, they require more strenuous mental effort, whereas the lower level performances are easier. The significance of this division comes to the fore when Husserl states that thinking is oriented towards expending less mental energy: Thought has the *telos* of becoming more efficient (Hua XII: 353/1994: 31).

Inauthentic presentations comprise one way through which this goal of economized thinking can be achieved. In these cases, my consciousness executes another mental process subsequent to the linking of the pen to the word. With regards to the direction of my interest at the time, I passively<sup>8</sup> construct

<sup>6</sup> Husserl treats the terms "meaning" and "signified" as largely equivalent in LZ. With regards to direct signs, which are of primary interest for this paper, he defines them as identical (Hua XII: 343–344/1994: 23–24). See also Majolino 2010. To see how Husserl distinguishes these two concepts in 1901, see section six below.

<sup>7</sup> Husserl provides the example where the characteristic, of having a particular metallic shine, is associatively tied to the element, aluminium. When I come across an object that has this specific kind of metallic shine, but do not yet know what kind of metal it is, that characteristic can serve as a sign, which reawakens the associative link and motivates me to recognize the authentically presented metal as aluminium. He writes: "At one time we are interested, for example, in the characteristics of aluminium as such, so far as they enrich our knowledge of this metal. But at other times, just those very same properties, confirmed as belonging to an as of yet unknown body, can serve as the signitive mark to determine that that body is, precisely, aluminium" (Hua XII: 341/1994: 21).

<sup>8</sup> The use of the term "passive" throughout this essay is not the result of an anachronistic reading of Husserl's later genetic work back into this most early text, but is instead implemented as that word best captures many of the ideas Husserl puts forward in LZ. At several points in the work, Husserl talks about operations of consciousness, which the subject neither actively executes, nor is actively aware of. His most conspicuous claim can be found in his discussion of the function of surrogates. He states that they operate as replacements for their signified objects even though the subject is normally oblivious to this. He writes: "The signs and rudiments substitute *[vertreten]* for the actual concepts; however, that they do so, goes unnoticed by us" (Hua

a presentation that is a poor facsimile of the pen, that is, one that requires less mental energy to be executed. This simpler presentation, for instance, of an orange rectangle (not an idealization, but rather an imagined sketch) is then also tied to the word "pen." The institution of this second link promotes efficiency because when I again hear that word, that tie can be reawakened instead of the one between the word and pen. Rather than being impelled to authentically present the pen as the signified, which requires a great deal of mental effort, the link between the word and the simple presentation of the rectangle can be aroused.<sup>9</sup> To be emphasized is that Husserl describes these cases by stating that the sign motivates a "reproducing" (*reproduzieren*) or a "memory" (*Gedächtnis*) (Hua XII: 353/1994: 32) of the rectangle.

Once presented, the orange rectangle serves as the surrogate for or replaces the pen. It is this replacement process that Husserl terms inauthentic presentation. The rectangle serves as a second sign (in addition to the linguistic motivating sign), which inauthentically presents (via replacement) the pen. In being directed at this surrogate, I am conscious of the rectangle, which has roughly the same colour as the pen, and I am thereby not only able to correctly answer my interlocutor's question concerning that colour,<sup>10</sup> but have also saved a great deal of mental energy (Hua XII: 354–355/1994: 33–35; *cf.* Byrne 2017a).

It is helpful to chart out the three kinds of signitive relationships Husserl identifies in LZ. The first two elements of Figure 1 map out the experiences just described. Element one represents the example where the word sign "pen" associatively impels me to recognize the authentic presentation of the pen as the signified. Element two depicts the case where the word sign motivates me to authentically present the orange rectangle. The latter then replaces or

XII 352/1994: 31). As far as I am aware, the most accurate way to describe mental operations, which the subject has no active participation in or active knowledge of, is to state that they are passively experienced.

<sup>9</sup> Husserl describes this process by using the example where the presentation of the word "sphere" associatively motivates me to present a ball, which functions as the sphere's surrogate (Hua XII: 353/1994: 32–33). The reason I have instead chosen to use the example of the rectangle surrogating for the pen is because the case where the ball replaces the sphere is of great complexity, as this concerns a genetically primary and principally necessary surrogate. It would only be after a thoroughgoing analysis of how Husserl develops and applies these latter differentiating terms, which cannot be executed here, that this ball and sphere example could be properly explicated.

<sup>10</sup> Husserl elucidates how I come to a correct understanding by means of inauthentic presentations by assigning variables to the correlates of the replacement experience. To apply this schema to my example, the pen is to be labelled as G, the rectangle as X, and the orange colour as  $\alpha$ . With this in mind, it is possible to understand what Husserl means when he writes: "A judgment is tied exclusively to X, provided that it possesses feature  $\alpha$ ; G possesses feature  $\alpha$ ; thus, the judgment is also valid of G in this regard" (Hua XII: 352/1994: 32). As the pen is in fact orange (G $\alpha$ ), the presentation of the rectangle (X $\alpha$ ) can serve as an appropriate replacement because it also possesses the single feature pertinent here; the orange property ( $\alpha$ ). inauthentically presents the pen. In case three, the surrogate appears without the help of a motivating sign and executes its function of replacement. To be noted is that Husserl's conclusions in 1890 indicate that element three depicts the structure of the majority of our judgments (Hua XII: 358/1994: 37).





I not only experience authentic or inauthentic presentations, but also authentic or inauthentic judgments. Husserl adopts Brentano's theory of judgment, according to which I can relate or connect one object to another, yet so long as I do not affirm or deny those contents, this experience remains a presentation. The defining feature of a judgment is that I accept or reject the neutrally presented object or relation and thereby come to a decision concerning its existence (*cf.* Ierna 2008: 260–262; Rollinger 1999: 259–261). An authentic judgment, in this standard sense, is the acceptance or rejection of the existence of an object when that object is authentically presented and an inauthentic judgment is the execution of those psychic activities when a surrogate is given for the signified.

#### 3. Inauthentic Judgments

What Husserl calls inauthentic judgments in LZ are not these kind of just outlined judgments. Despite this fact, in his discussion of these novel judgments, he uses the same terms, authentic and inauthentic. This introduces an equivocity into his descriptions in LZ. In order to avoid any confusion, I denote the above-discussed application of authentic and inauthentic with the subscript "s," as this is his standard interpretation of these notions and I assign the anomalous use of the term inauthentic the subscript "a". The distinction between these two will now begin to be clarified.

There is one similarity between inauthentic, judgments and inauthentic, judgments, which reveals why Husserl chose to use this identical term to label these distinct experiences: Inauthentic, judgments, like inauthentic, judgments are both executed to save mental energy. This is, however, where the similarity between them ends. The signs of inauthentic, judgments do *not* 

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replace (they do not inauthentically<sub>s</sub> present) their signified objects. At one point, Husserl does write that the signs of inauthentic<sub>a</sub> judgments "surrogate *[surrogiert]* for the actual *[wirklich]* judgments" (Hua XII: 361/1994: 40). Yet, his use of the term "surrogiert" here is ambiguous. An inauthentic<sub>a</sub> judgment only replaces authentic<sub>s</sub> and inauthentic<sub>s</sub> judgments, in that the operation of the former can be executed instead of the latter two. By no means does this entail that the signs of inauthentic<sub>a</sub> judgments replace their signifieds. Instead, it is one of the purposes of this paper to demonstrate that the signs of inauthentic<sub>a</sub> judgments function as a peculiar kind of motivating sign. Husserl is explicit that these signs do not replace, but instead, motivate a "reproduction"<sup>11</sup> (*reproduzieren*) of the signified (Hua XII 362/1994: 41). While they operate by means of the same mechanism of associative linking and reawakening, the signs of inauthentic<sub>a</sub> judgments do so in a distinct manner.

Husserl begins his descriptions of the peculiar operation of inauthentic<sub>a</sub> judgments, by noting that their signitive function can only occur in a very limited number of cases. Inauthentic<sub>a</sub> judgments can be executed when I am presented with signs that could motivate me to perform a syllogism, that is, a chain of deductively or inductively interconnected judgments. When Husserl seeks to disclose how inauthentic<sub>a</sub> judgments operate within that context, he utilizes the example of a formal syllogism "a = b, b = c, c = d, d = e; thus a = e" (Hua XII: 361/1994: 40). His point in providing this example is not that inauthentic<sub>a</sub> judgments have formal-signitive content, but instead that they have this kind of formal-signitive structure.<sup>12</sup> As Husserl frequently makes clear throughout the text, inauthentic<sub>a</sub> judgments normally concern cases where I judge not about formal, but rather about material content. For clarity, I introduce and apply Husserl's insights to the example where I am given the materialized signs "Socrates is a bachelor, bachelors are men, men are humans, and humans are mortal; thus Socrates is mortal."

Husserl describes and highlights how the signs of inauthentic<sub>a</sub> judgments function within the context of a syllogism by contrasting their operation to the function of the signs of inauthentic<sub>s</sub> judgments within those same conditions. Concerning the first premise, when presented with the word "Socrates," I inauthentically judge if that word impels me to present a surrogate for

<sup>12</sup> Concerning this distinction between formal and material, cf. section 4 below.

<sup>&</sup>lt;sup>11</sup> While the process of inauthentic<sub>a</sub> judging will continue to be examined below, I here provide three most relevant quotes, so as to begin to justify this interpretation that the signs of the inauthentic<sub>a</sub> judgment impel me to reproduce the signified and do not replace it. First, Husserl writes that the inauthentic<sub>a</sub> judgment is performed "in order to *reproduce [reproduz-ieren]* the conclusion" (Hua XII: 362–363/1994:41). Second, he states that "The systematic positions <of the words> function as *reproductive* moments *[reproduktive Momente]* [...]" (Hua XII: 363/1994: 41). Finally, he claims that the execution of inauthentic<sub>a</sub> judgment results in "[...] a *reproduction [Reproduktion]* of the conclusion on the basis of the premises alone" (Hua XII: 363/1994: 364). Emphasis in these quotes is mine.

Socrates, which then replaces him (as depicted in element two of Figure 1) or when that sign itself serves as the surrogate for Socrates (as shown in element three) (Hua XII: 361/1994: 39–40) and I then affirm or deny the existence of Socrates and his "being a bachelor" (*cf.* Ierna 2008: 52–55, 58–65). For the whole syllogism, the inauthentic<sub>s</sub> judgment is executed when some replacement for Socrates, bachelors, men, and so on, are presented before me, such that I also must reason through each step of the syllogism to come to the correct answer (Hua XII: 361/1994: 39–40).

The process of inauthentic<sup>a</sup> judgments is different from that of inauthentic<sup>s</sup> judgments in that, by executing them, I am no longer required to think through each step of the syllogism in order to correctly conclude. These judgments allow for me to save a great deal of mental energy, as they so-to-speak open a backdoor route by means of which the true answer can be reached.

Husserl claims that this is possible because, when I inauthentically judge, I am directed at the words, but do not experience them as signs. During an inauthentic judgment, the signitive function of the "words" of the syllogism has been expunged, such that they no longer motivate nor do they replace. As such, I do not read the "words" of the syllogism. If I did so read them, they would be performing one of their normal signitive operations. Instead, Husserl asserts that I simply look or more appropriately stare at the written "words" (correctly considered, physical scribbles [Schriftzeichen]). My eyes skim over the scribbles and Husserl states it is this experience that allows for me to inauthentically judge and come to the answer "Socrates is mortal." He asserts this in no uncertain terms, writing: "[...] an external advancing [ein äußerliches *Fortschreiten* | along the chain of signs surrogates for *[surrogiert*] the authentic conclusion [das wirkliche Schließen]," and adds: "We deal [...] neither with the authentic and full contents, nor with the surrogative partial-contents, but rather simply with the names or written scribbles [Schriftzeichen], so that then eo ipso there can be no talk of authentic [eigentlichen] judgments or conclusions" (Hua XII: 361/1994: 40).

## 4. Matter and Form in LZ

This description of inauthentic<sub>a</sub> judgments seems confused. How could I ever realize a correct or even any conclusion by simply looking to the nonsignitive "words"? Husserl's response is that inauthentic<sub>a</sub> judgments can be executed because another and novel kind of associative tie can be established and awakened. It is the forms of the premises and the form of the conclusion that can become associatively tied to each other and it is this link that is aroused during the inauthentic<sub>a</sub> judgment. He writes: "The reproduction follows indirectly, under the mediation of the form" (Hua XII: 362/1994: 41). As forms of the premises function as the motivating sign and as the form of the conclusion operates as the signified for these judgments, this section is dedicated to the task of revealing exactly what Husserl means with the term form and with its counterpart, matter.

To begin, it should be noted that Husserl cannot immediately jump into a discussion of how form executes its signitive function in inauthentic<sup>a</sup> judgments for reasons that shall soon become clear. Instead, he must first examine how form and matter serve as the structures of signitive experience for authentic<sup>a</sup> and inauthentic<sup>a</sup> judgments. During that investigation, Husserl primarily, but not exclusively, discusses the distinction between matter and form within the context of one particular kind of signitive experience; namely, where *linguistic* signs *motivate* an *authentic*<sup>a</sup> presentation of the signified object, which was depicted by element 1 in Figure 1 above. To reiterate: as the experiences of inauthentic<sup>a</sup> judgments cannot yet be examined (where words do not function as signs), in the cases that are now being investigated, the words are operative as signs; namely, motivating signs. Following Husserl's lead, I clarify his insights by applying them to the example where I perceive the words "The pen, as being orange" which motivate me to authentically, present and then judge about the relationship between my pen and its colour.

When Husserl does execute this investigation of matter and form, his insights are confounding from the start, as he applies these concepts in two ways. On the one hand, he introduces these terms by implementing them to distinguish different elements of the *signified objects* of linguistic signs. On the other, he goes on to apply them, in an extended sense, so as to differentiate parts of the *linguistic signs* themselves. I first address the former and standard usage before showing how Husserl twists these concepts such that they pertain to the language signs.

Concerning his standard interpretation of matter and form, Husserl is clear that the matters of that signified relation are the *determinate* objects that are shaped by the different psychic activities; here the pen and the orange colour. Husserl also calls these matters "relation-fundaments" (*Relationsfundamente*) or the "substrates" (*Substrate*) (Hua XII: 347–349/1994: 36–39). The forms are the fashionings of the fundaments, resultant from the psychic activities, which Husserl terms "the relating activity" or simply an "apprehending" (*auffassen*) (Hua XII: 347/1994: 27).

The complexity of even this standard theory, which frustrates a simple reading of both terms even with regards to the signified relation alone, is that Husserl believes that a relating experience involves two psychic performances. The fundaments are shaped in two ways. The fact that these psychic activities are themselves different entails that the forms they install are equally so distinguishable.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> At the same time, Husserl emphasizes that these activities are intimately intertwined, as they are moments and not pieces of a relating process. Both must be executed for any relation

The first psychic activity, which can be introduced without further explanation, is the abstractly considered relating of the one fundament to the other. Husserl pinpoints the second performance by drawing the reader's attention to the fact that the matters are not given in a presentation in an interchangeable manner. The pen is presented as the "primary-fundament" (*Hauptfundament*) and the colour as the "secondary-fundament" or "other-fundament" (*anderen Fundament*) (Hua XII: 347/1994: 36). These matters or fundaments do not simply lay themselves out before me in those positions. I have to perform a psychic activity where I "choose" one matter to serve as primary and another as secondary. Husserl writes: "By means of the relating activity, the relation-fundament [*Hauptfundament*] or subject, which is ascribed the standing-in-relation to the other fundament [*anderen Fundament*] [...]" (Hua XII: 347/1994: 26). As this positioning of the matters occurs via a psychic performance, it injects the matters themselves with form.

All of this becomes substantially more complicated when Husserl applies the distinction between matter and form to the linguistic signs. This is because he also introduces a second division between those signs, which cuts across the former. He appropriates and revises the scholastic division between categorematic and syncategorematic signs.<sup>14</sup> It is necessary to address that latter bifurcation first.

Husserl's discussion of categoremata and syncategoremata is grounded in the doctrine that there is an isomorphism between language signs and their signified objects. He writes: "In fact, the uniformity *[Einförmigkeit]* found in the construction of statements, which gives rise to distinct classes of statements, is linked together almost always with relation-forms *[Beziehungsformen]*" (Hua XII: 346/1994: 26). Grammatical classes of linguistic expressions, for example, questions, commands, hypothetical statements, etc. possess an isomorphism with the presented or judged objects that they signify. This isomorphism obtains between the whole statement and the presentation precisely because it also does so for each of their parts. The words of the expression, which are ranked under certain categories, correspond directly to certain moments of the presented or judged (Hua XII: 346/1994: 26).

In line with the above discussion, there are three moments of a signified relation that have to be structurally mirrored by the signs: (1) The matters,

<sup>14</sup> Husserl does not use the words categorematic signs or categoremata in LZ, but instead claims that the relevant distinction persists between names and syncategoremata. This terminology is; however, misleading because Husserl continually contrasts syncategoremata not only to names, but also to predicates and attributes, amongst others (for example, Hua XII: 347/1994: 26). It is therefore appropriate to take him as adopting that scholastic distinction wholesale.

to be presented. I emphasize the difference between these psychic performances here, as this needs to be fully appreciated for one to grasp Husserl's theory of inauthentic<sub>a</sub> judgments and moreover, his pure logical grammar.

(2) the form resultant from the relating, and (3) the forms that arise from the positioning of the matters. We already know that, the signs that correspond to our signified affirmed relation are "The pen, as being orange." For this particular example (which, to be remembered, is structured in line with element one of Figure 1), Husserl would assert that it is the categorematic signs "pen" and "orange" that motivate me to present (1) the relation-fundaments or matters (Hua XII: 346/1994: 26). The syncategorematic words "as being" are those that impel me to execute the synthesizing and present (2) the relation or form between the substances. The defining feature of these syncategoremata, which are isomorphic to the (2) relating forms, is that they do not directly refer to the matters (Hua XII: 346/1994: 26). While "as being" motivates me to relate the fundaments, such that the form has a mediated connection to them, in itself that form does not signify the matters and in fact, has no immediate relation to them at all. It is, in other words, a pure form. The (3) forms arising from the positioning are mirrored not in the addition of words, but rather in the categorematic words' grammatical placement. The categoremata, by being situated in certain grammatical positions, do not just refer to the fundaments, but rather those fundaments as having certain forms. The word "pen" by assuming the nominal grammatical category, signifies that matter as being the main-fundament and the word "orange" when given in the predicative position, corresponds to that matter as being the secondary-fundament. Husserl writes: "The distinction of position [Unterschied der Stellung], which indicates the subject- or predicate-fundament of the relation, also belongs to the form [zur Form gehört]" (Hua XII: 347/1994: 26-27).

An appreciation of these conclusions allows for one to understand the distinction between a materialized and a formalized expression. A materialized expression is one that refers to determinate matters in their relationship to each other (Hua XII: 347-348/1994: 28). "The pen, as being orange" is a material expression as it signifies the determinate object, the pen, as having the determinate property, orange. The formalized expression can be realized by abstracting from the elements that signify the determinate matters, such that the signs refer only to the forms. The syncategorematic signs "as being" already refer to the pure form that arises from the relating of the two matters and as such, requires no direct alteration during formalization (Hua XII: 347-348/1994: 28). The categorematic words "pen" and "orange," in contrast, do refer to determinate matters. These can be formalized by supplanting the word "pen" with the letter "S" and "orange" with "p". In doing so, the signs' reference to any determinate matter is excluded. These variables signify indeterminate matters, or more appropriately, the form of indeterminate matters; namely, their position-form as main or secondary. In conclusion, the form or formalized expression of "The pen, as being orange" is "S, as being p." The latter refers only to the form of the signified correlate and leaves the matters that can be referred to indeterminate, but determinable by means of materialization.

#### 5. The Execution of Inauthentic Judgments

We remember that this above explication of form was necessary because Husserl asserts that inauthentic<sub>a</sub> judgments are possible when the forms of the premises of a syllogism are associatively linked to the form of the conclusion. If that coupling between the forms occurs, the forms of the premises serve as the motivating sign, which impels me to present the form of the conclusion. The consciousness of the form of the material premises "Socrates is a bachelor, bachelors are men, etc." reawakens an awareness of the form of the conclusion in such a way that I am motivated to present and then affirm the material conclusion "Socrates is mortal."

To elucidate these admittedly perplexing conclusions, Husserl begins by affirming that, if the forms of the premises are to serve as motivating signs for the form of the conclusion, the link between these forms must be installed and aroused in a manner that is different from the one between the pen and its sign. For me to be capable of authentically, judging about the pen by means of a motivational sign, in the manner described above (element 1 of figure 1), the associative link between that pen or the rectangle and the words must first be established and *this was only possible when both were presented*. It was when I saw the pen or presented the rectangle and heard or read the words that the associative coupling happened, which subsequently allows for the execution of the motivation.

It seems that the forms of the premises and the conclusion could only be given when I authentically, or inauthentically, judge about the syllogism; that is, reason through it. Yet, neither the motivating sign nor the signified of the inauthentica judgment, that is, the forms of the premises and of the conclusion, are perceivable in those cases. During those judgments, I do not perceive the pure forms "a = b, b = c, etc." I rather come across, present, and judge about the materialized premises "Socrates is a bachelor, bachelors are unmarried men, etc."

As the motivating sign and signified of the inauthentic<sub>a</sub> judgment are not directly presented to me when I authentically<sub>s</sub> or inauthentically<sub>s</sub> judge, one may think that the tie between them could be established and reawakened by means of formalization. Husserl rejects this interpretation, as it would contravene the goal of inauthentic<sub>a</sub> judgments: They are executed to save mental energy. Concerning the performance of this inauthentic<sub>a</sub> judgment, when presented with the material premises "Socrates is a bachelor, etc.," if I had to formalize the premises, be motivated by those forms to present the form of the conclusion, and then appropriately materialize that latter form, inauthentic judgments would require a great deal more psychical effort than authentic, and inauthentic, judgments.

The associative tie for inauthentic judgments can rather be instituted and aroused because the forms of the syllogism, even though they are not directly *present*, are not entirely *absent*. Whenever I present or judge about something, I am not only conscious of the intended, but, according to Husserl, am also experiencing some kind of awareness of the form: I am passively conscious of the form of the words. He writes: "It is once more the power of idea-association that is the *hidden motor [unsichtbares Motor]* behind this process, which clearly functions here in an entirely peculiar manner [...]" (Hua XII: 362/1994: 40–41, emphasis mine).

It is because this awareness of the form is particular that the establishment of the associative connection also occurs in a distinct manner. It is by reasoning through a great number of syllogisms (via authentic<sub>s</sub> or inauthentic<sub>s</sub> judgments) that have differing materials, but are uni-form, that the pertinent link can be installed. As I am passively aware of the forms of the premises and the form of the conclusion when I authentically<sub>s</sub> or inauthentically<sub>s</sub> execute a syllogism, it is by repeating different syllogisms with that single form many times that the tie becomes established between these two. When I am then confronted with a syllogism with this form once more, I become passively aware of the form of the premises such that I am associatively motivated to an awareness of the form of the conclusion. Husserl states this straightforwardly,

If we have executed an inference often enough of a determinate form, and actually *[wirklich]* executed it, then this form is stamped on our memory *[dem Gedächtnis einprägen]*, and as a further consequence, it is now the case that a conforming sequence of premises is alone sufficient for us to reproduce *[reproduzieren]* the conclusion. (Hua XII: 362–363/1994: 41)

As it is the case that the forms become associatively linked, by repeating material syllogisms with the same form, Husserl sees that if his study is to be complete and understandable, he has to explicate what it means for *many* different material expressions to have *one* form.<sup>15</sup> I simplify Husserl's conclusions

<sup>15</sup> At this point, the broad strokes of Husserl's descriptions of inauthentic<sub>a</sub> judgments have been disclosed, such that it is possible to pause and critically engage with his theory. The experiences Husserl is trying to account for here certainly do occur and are of a most interesting sort. Most have had such an experience where they only read the first several premises of a syllogism and are able to arrive at the conclusion, seemingly without having reasoned through the syllogism. Yet, it is to be acknowledged that Husserl's descriptions of these experiences are off the mark. Even if one concedes that it is possible to passively identify the form of a syllogism, this could only ever happen when the signs execute their signitive function. When I read "The pen is orange" it may be the case that I could passively recognize the form as "S is p," but this could only ever be possible if I experienced the words as referring to the relationship between positioned fundaments. If the signs did not refer, I would experience them only as mere physical here by utilizing "S is p" as the one form for these cases.<sup>16</sup> The first criterion for a materialized sentence to have this form is that the material words, which occupy the places indicated by the variables, must refer to certain relation-fundaments. They must be categorematic. The sentence "Is orange pen" does not have the form "S is p," but "is p S" (Hua XII: 363/1994: 41). Second, the word or symbol that fills the place of the "is" must refer to the given relation. It is to be syncategorematic. For example, "pen computer orange" would have the contrasting form "S S p" (Hua XII: 363/1994: 41). All of this is to say that the materialized categoremata and formal syncategoremata cannot be substituted for one another if the form is to be maintained (Hua XII: 362–363/1994: 41–42).

Husserl further claims that not just any categorematic words can replace the variables. The material categorematic words found in the S and p position must respectively signify a nominal- or main-fundament and a predicative- or secondary-fundament if the associative tie between the forms of the premises and of the conclusion is to be reawakened, such that the motivation can occur. By being positioned in their respective places, the material words materialize the form and thereby participate in the passive presentation of that form. This placing of the material words thus also helps to arouse the associative tie. Husserl writes,

Each name [read: categoremata, *cf.* n. 14 above] has its systematic position, and in the conclusion sentence, names with determined characteristic positions are brought together, ... it is thus the case that the positions serve as reproductive moments *[reproduktive Momente]*, which call back up *[hervorrufen]* the appropriate names and in this way make possible a complete reproduction of the entire conclusion sentence. (Hua XII: 363/1994: 41)

To summarize Husserl's conclusions about inauthentic<sub>a</sub> judgments, it is once again helpful to chart out his descriptions. As shown in Figure 2, once the associative link between the forms has been established, when I am again presented with a syllogism with that form, my passive awareness of the forms of the premises reawakens an awareness of the form of the conclusion in its materialization. The forms of the premises serve as motivating signs, which associatively impel me to realize the form of the conclusion. The material words of this conclusion then once more assume their signitive function. They can

objects. I could not recognize any structure or form of these "words." Yet, this is precisely what Husserl says happens during inauthentic<sub>a</sub> judgments. While it is important to recognize that Husserl inaccurately describes the execution of inauthentic<sub>a</sub> judgments, this in no way changes the fact that this theory serves as the groundwork and inspiration for his pure logical grammar, as shall be proven in what follows.

<sup>16</sup> Naturally, an inauthentic<sub>a</sub> judgment cannot be executed on the basis of this form, as it is not a syllogism. I have chosen this example, as it allows for easier access not only to Husserl's insights here, but also their connection to the "Fourth Logical Investigation".

motivate me to authentically, present the conclusion-relation or they can serve as replacements for it, such that I inauthentically, present and judge about that relation.

#### Figure 2: The structure of inauthentic, judgments



Finally, Husserl mentions one further point concerning the operation of matter and form (of the signified and not of the signs), which will play a significant role in his later development. He writes: "The distinction between matter and form is clearly relative [offenbar relativer]" (Hua XII: 347/1994: 27). He elucidates what he means by this, expressing: "Every presented content can, on occasion, serve as the relation-fundament. Thus a presented relation, a judgment of relation, a series of conclusions, etc. can also belong to the matter" (Hua XII: 347-348/1994: 27). The distinction between whether something serves as a relation-fundament or as a form concerns only whether it is that which is related or is that which is the result of a psychic activity in this particular presentation or judgment. For example, a form of one presentation can be a matter in another, as when I name the form and ascribe a predicate to it. I can express "And' is a connector." Moreover, the relation of the primary- and secondary- fundament, composed of both matter and form, can become the matter for another presentation or judgment, as when I form a deduction of which this relation is merely one part.

## 6. Matter and form in LU

While Husserl's 1901 "Fourth Logical Investigation" is inspired by the insights from his examination of inauthentic<sub>a</sub> judgments, that text represents a substantial improvement over LZ. First and foremost, this is because the terms of his discussion have shifted as a result of his new theory of meaning, which he introduces in the "First Logical Investigation." Husserl there abstractly distinguishes the sign's meaning from its reference (*cf.* Bernet *et al.* 1993: 166–180; Mohanty 1976: XV–XVIII; Sokolowski 2002; Urban 2010). This section briefly addresses three alterations to Husserl's philosophy of matter and form that are the direct effect of this novel meaning theory, as these tenets lay the foundation for his pure logical grammar.

(1) Husserl no longer conceives of the isomorphism between the sign and the signified to be direct: Meaning mediates the isomorphism between the sign and the signified and can do so because it has a structural parallelism to both. There is a chain of isomorphic layers, where the linguistic structures are aligned with the different parts of meanings and these are also mirrored in the signified state of affairs. He writes,

It is clear: if "authentic" presentations ["eigentlichen" Vorstellungen] are to be faithfully [getreu] mirrored in the sphere of meaning intentions (in the "symbolic" presentations ["symbolischen" Vorstellungen]), then it must be the case, as it is so a priori, that each form on the side of the presentation (that of the possible fulfillment) corresponds [entsprechen] to a form on the side of the meaning (that of the intention). And further, if language in its verbal composition [verbalen Material] is to faithfully mirror all of the *a priori* possible meanings, then language must have at its disposal grammatical forms, which lend distinguishable "expression" to all distinguishable forms of meaning. (Hua XIX: 316/1970: 55)

(2) This new philosophy of meaning opens the door for Husserl to apply the terms matter and form not to the signified relation or to the signs, but rather to the meanings. He differentiates form-meaning from matter-meaning, which he alternatively calls stuff-meaning (Hua XIX: 658–658/1970: 272).

(3) When one connects these two insights, it becomes clear that if this trilateral isomorphism is to obtain, then both the linguistic signs and the states of affairs must be composed of two elements that parallel the matter and the form of meanings. It is in this discussion of these bifurcations that the influence of LZ on LU is nakedly disclosed. Roughly stated, Husserl again adopts the scholastic division, asserting that word-signs can be categorematic or syncategorematic and they respectively are endowed with matter-meanings and form-meanings.<sup>17</sup> He also asserts that the matter-meanings correlate to the

<sup>17</sup> Husserl not only applies the terms categorematic and syncategorematic to linguistic signs in LU, but also to meanings. He writes: "We must not merely distinguish between categorematic and syncategorematic expressions, but also between categorematic and syncategorematic meanings" (Hua XIX: 314/1970: 55). Simply stated, Husserl defines categorematic meanings as those that are independent and syncategorematic meanings as those that are dependent (Hua XIX, 310–316/1970: 53–56. *Cf.* Drummond 2007; Mohanty 1976: 87–93). This use of those terms creates an equivocity in Husserl's text, as categorematic meanings can either be mattermeanings or complete propositions, composed of both form and matter meanings. In order to avoid confusion, I limit the use of the notions categorematic and syncategorematic: They will be applied only to the signs that correspond respectively to matter and form meanings. Concerning the autonomy of a meaning or lack thereof, I use the terms self-sufficient or non-selfsufficient and independent or non-independent, as these communicate the ideas Husserl wants to convey in those contexts. *Cf.* Benoist 2008. In particular, I recommend 125–127, as Benoist there expertly reveals the complexity of this division. He shows that Husserl does not simply apply the distinction between moment and piece from the "Third Logical Investigation," to either fundaments of the relation and that form-meanings correspond to the relating of these fundaments (Hua XIX: 310–325/53–61. *Cf.* Hanna 1984: 329–330; Soldati 2008: 61–75).

## 7. Pure Logical Grammar

From within this new philosophy of meaning, Husserl can recognize the possibility and necessity of pure logical grammar by revising and emphasizing a tenet he had already recognized in 1890. He reiterates that the matters (here: matter-meanings) and the forms (form-meanings) are moments and not pieces of the meaning of expressions (not the signified). When I express "The pen is orange," this meaning is composed of the matter-meanings of the words "pen" and "orange," and the pure form-meanings of the words "The" and "is." These are not four separate or separable meanings that are intended consecutively; rather, as moments, they are co-dependent and co-determine each other, such that they belong to one concrete whole. It follows from this that these meanings are not only necessarily related to each other, but they are and can only be so connected in accordance with a number of a priori laws (Hua XIX: 325–329/1970: 61–64). Husserl makes it one of the tasks of his grammar to identify these laws, which will serve as the foundation for all formal logic.

As John Drummond (2003, 2007: 53–55, 60–62), J. M. Edie (1977: 138– 143 n. 4), and Robert Hanna (1984: 324–327) have revealed, one should not take this to mean, as Yehoshua Bar-Hillel (1956–1957) had, that Husserl is defining these laws as those which govern the formation of meanings of factical or empirical languages. He is not laying out the grammatical categories and laws of the German language or even of all Indo-European languages, as he is instead concerned with discovering the *a priori* laws that govern the formation and transformation of meanings as such and which the grammar of particular languages would realize in distinct ways. It is surprising that Bar-Hillel could have come to his contrary conclusion, considering the fact that Husserl spells this out explicitly. He writes: "[Pure logical grammar] must lay bare an ideal framework, which each factical language will fill out and clothe with empirical material in different ways, where this difference is due sometimes to general human motives and sometimes to fluctuating empirical motives" (Hua XIX: 347/1970: 74).

Husserl develops his theory of these *a priori* laws in a straightforward manner. He states that when I execute the materialized meaning "This tree is green," I am able to have the apodictic insight, that this meaning makes or has

meanings or signs when he establishes his division between categoremata and syncategoremata in the "Fourth Logical Investigation".

sense (*Sinn*). It is not nonsensical (*unsinnig*): I see that one can understand the (categorial) meaning of this expression (Hua XIX: 325–329/1970: 61–64). More importantly, it is also possible for me to have the apodictic intuition that any meaning that materializes this form, "S is p," will have sense. I know that any materialization of that form will be independent or self-sufficient, in that it will require no further supplementation or alteration to be sensical (Hua XIX: 325–329/1970: 61–64). It is these meaning-forms, which have corresponding sensical materializations, that are the *a priori* laws of meaning. So long as a material meaning abides by a valid form, it will have sense, and to the extent that it does not, it may not.

This conclusion entails that these formal and *a priori* laws, par the definition of law, do not hang in the air, but rather govern materialized meanings, segregating them into sensical and non-sensical. For Husserl's theory to make sense, he therefore has to disclose how one materialized meaning can be classified as having this particular form and not some other. It is not only the case that this task clearly parallels the study of the forms of inauthentic<sub>a</sub> judgments from LZ, but also that his initial conclusions concerning this point are nearly identical.

First, Husserl reiterates his claim from LZ, that if a meaning is to have this form then the form-meanings must not replace matter-meanings and vice versa. The form "S is p" can be materialized by the meaning "The tree is green," but not by "if is green." He writes: "The expression 'if is green' is, for example, a meaning-less [bedeutungsloser] expression, and by having the insight into this, we also recognize that it is universally the case that a sense-less expression [Sinnlosigkeit] results when any arbitrary syncategoremata replaces the S" (Hua XIX: 329 n. 1). Furthermore, he revises his 1890 doctrine, asserting that matter-meanings have to fall under the meaning-classes or categories denoted by their forms. The variable "S" must be materialized by a meaning that is a member of the nominal-meaning category. If I were to replace "S" with a meaning that falls under the adverbial meaning-category, so as to formulate the "sentence" "Slowly is green," I could have the immediate apodictic insight that this meaning formulation is nonsensical. Not only this "meaning," but also all "meanings" that materialize the form of this "meaning" "Slowly is green" are disqualified as unsinnig and can be so recognized via apodictic insight (Hua XIX: 362/1970: 62).

These conclusions make it incorrectly appear as if Husserl's pure grammar is irrelevant to logical studies today. This is for two reasons. First, nonsensical "meanings" and their forms stand immediately revealed as such. They thus pose no threat to logicians, as they would never be tempted to utilize such meaning-forms in their calculations. Second, even if this pure logical grammar were completed, no claims regarding truth or falsity could be made, as Husserl is here only concerned with distinguishing the forms of meanings that have sense from those which are nonsensical. Husserl's pure grammar can and should still be recognized as invaluable to logical studies, because he never conceived of his project as a replacement for, but rather as anticipatory of a robust and complete logic. The way in which it does so serve only becomes evident when Husserl engages in what he says is the third stage of pure grammar. The first two, which have already been addressed above, concern the delineation of the meaning-categories (subject, predicate, adjective, etc.) and the uncovering of the simplest meaning-forms that regulate meaning (predicative, hypothetical, conjunctive, etc.).<sup>18</sup> In the important tertiary stage, Husserl examines how such *a priori* forms and their meanings can be combined, compounded, and transformed.

While Husserl discusses many different kinds of meaning transformations in 1901, he is particularly interested in two types, both of which he groups under the new heading, "nominalization" (Nominalisierung). Even though he does work out these modifications in innovative ways, they are not entirely novel discoveries. Husserl is able to recognize that meanings can undergo these alterations because he maintains his 1890 doctrine that matter and form are relative notions. If he did not see that meanings were so adaptable, he naturally would not have been able to discuss these transformations. Moreover, these two cases of nominalization were already introduced, but not developed in LZ (of course, they there concerned the signified and not the meaning). The first kind of nominalization concerns those experiences where whole meaning-propositions become matters for other judgments and the second involves cases where one meaning is endowed with a different meaning category. Husserl further develops the latter kind of nominalization in a relatively new manner. Whereas he grasped that form-meanings can become matters in 1890, he now arrives at the insight that matter-meanings, which belong to one category (for example, the predicative) can be nominalized such that they are then ranked under another class (the nominal).

Although these 1890 insights concerning nominalization are imported and revised in LU, Husserl realizes, as a result of the fact that they are now contextualized within his 1901 theory of meaning, that they introduce a novel and critical problem. He must uncover and elucidate the relationship between the "original" and the nominalized meanings. Specifically, he seeks to understand what constitutes the *difference* and the *sameness* between these two.

This question is not even mentioned in LZ for the reason that the answer is self-evident. According to Husserl's 1890 standard theory, motivating signs associatively impel me to present the correlates. The matters (the object and characteristic) can be concretely distinguished as the identities, which may undergo different psychic activities and thus be transformed and endowed

<sup>&</sup>lt;sup>18</sup> Husserl lays these steps out in an admittedly inchoate manner in section 13 of the "Fourth Logical Investigation"; Hua XIX: 336–341/1970: 68–71. As such, I refer the reader to Mohanty's most transparent explication of these levels, found in 1976: 106–109.

with distinct forms. Husserl cannot accept this conclusion in 1901, as he is searching to find the identity not of the signs' signified correlates, but rather of their meanings.<sup>19</sup>

Husserl addresses this issue in LU by first asserting that the nature of the identity and difference of the meanings changes depending upon which of the two kinds of nominalization are executed. It is in this discussion of these two nominalizations in 1901 that the value of Husserl's project, as a supplement for formal logic, is laid bare. He shows how logicians have not appreciated both the sameness and the variance at play here, as they have privileged the former over the latter.

Looking first at how Husserl addresses the nominalizations of whole propositions into matter-meanings for other propositions, he claims that the former "provides the soil" (stellt den Boden her) (Hua XIX: 487/1970: 153), for the nominalization. The nominalized meaning, as it so-to-speak springs from the original proposition, also contains a reference back to it. This pointing back is not a psychological, but rather a logical and genetic dependency (Hua XIX: 487/1970: 153. Cf. Lampert 1995: 88-124). It is not only possible to recognize that one meaning points back to another, but also to allow oneself to follow that signpost to the original meaning. I ascertain the meaning's "history" by tracing it back to its source. As a meaning may have been constituted not only via one nominalization, but may rather be the result of several compoundings, this meaning-excavation can also consist of an uncovering of numerous layers of meaning. Husserl explains that if I wish to completely clarify the meaning of an expression, then I must exhaustively dig back into that history, such that no further complexity is hidden or obscured. With regards to these clarifications, he writes: "Evidently fulfillment is executed via a chain of acts which guide us down the echelons (Stufenfolge) of foundations" (Hua XIX: 712/1970: 306).

This meaning-exhuming is not possible in formal logic, because logicians formalize all meanings, such that they deal only with purely formal variables. Husserl will, of course, never contest the necessity of such a procedure, as it is only thereby that logicians can make universally valid claims (*cf.* Hanna 1984: 326). This formalization; however, also opens up the opportunity for logicians to forget that a meaning in one proposition may have a very different history from the "same" meaning used in another. These meaning-shifts, resultant from these nominalizations, are neither detectable nor indicated in formal propositions, as the same variable is used for that meaning in different cases. Husserl is thus advocating that this study of the sign's material history, which he later terms a "co-syntactical logic," can augment formal logic by serving a remedial function. It will allow scholars to account for the sign's history and

<sup>&</sup>lt;sup>19</sup> Properly considered, in LU, Husserl understands meanings as act-species of meaningintentions. This tenet has been thoroughly discussed in the literature. *Cf.* Bernet *et. al.* 1993: 166–194; Mohanty 1974, 1977; Simons 1995; Smith 1994; etc.

for these meaning-shifts, such that they will be able to use their variables in a more accurate manner and attain more precise results.

Husserl's study of the second kind of nominalization has equally important consequences for formal logic. As stated, these concern cases where form or matter meanings are nominalized. While Husserl does mention the former, he is more interested in the latter cases, where predicative or adjectival matter-meanings are transformed into nominal matter-meanings. For example, the meaning of "orange" has the predicative-form in the expression "The pen is orange," but can be nominalized such that it is ranked under the nominal meaning-category in the sentence "Orange is a colour." The orange, which has the subject form and the orange with its predicative form are not two entirely different oranges. These meanings share an identity and Husserl once more seeks to discover what constitutes this sameness, while also not ignoring the difference.

It is with regards to this difficulty that Husserl arrives at a most seminal insight; namely, that it is a meaning "core" (*Kern*) that is maintained throughout these transformations. He writes: "There are *a priori* laws in the realm of meaning, according to which meanings are converted into new meanings, yet maintain an essential core" (Hua XIX: 334/1970: 66). This core is not a matter, which is given with a form, nor is it even a (categorial) meaning. It cannot be intended or experienced in any syntactically meaningful way. The *Kern* rather serves as the basement or bedrock upon which meanings become established. Husserl later introduces terminology to illuminate this fact, asserting that the cores are members of the "sub-syntactical" level of meaning (*cf.* Drummond 2007: 62–66; Hanna 1984: 338–441; Mohanty 1976: 110–114).

In the first edition of LU, this is all that Husserl states about these cores. Yet, he does go on to develop important conclusions on the basis of this insight both in the second edition and in his later writings. To briefly summarize, Husserl makes it clear that the formalization necessary for logic also brushes over the meaning-shifts resultant from these nominalizations of predicative, adjectival, etc. meanings. When I formalize "The pen is orange" and "Orange is a colour," I could achieve "X is Y" and "Y is Z". The fact that the same variable "Y" is used in both cases obscures the differences between these two meanings. It is only by remembering the sign's pre-formal history that those nuances of meaning can be accounted for. In doing so, I see that the two meanings have an identity in that they possess the same core, but are different because the latter has been nominalized and thus has a different form.

## 8. Conclusion

As LZ is an exceptionally rich text, there are many other insights to be found in that work that are either adopted by Husserl in 1901 or inspire the composition of LU (*cf.* Byrne 2017a, 2017b). The above analysis suffices to

expose some of the most significant links between the two texts, while laying the foundation for future research. In line with this, one should remember that Husserl does not terminate his study of the grammatical with the "Fourth Logical Investigation," but rather dedicates great efforts to further developing this pure grammar in a more precise and appropriately formalized manner. In particular, the 1929 *Formal and Transcendental Logic* (Hua XVII/1969) and the 1939 *Experience and Judgment* (1948/1973) are acclaimed for continuing these analyses. As LZ has been disclosed as the progenitor of the logical grammar of the "Fourth Logical Investigation," so also is it then revealed as the embryo of this entire strain of his thought. LZ is the inception of one of the main and continuous arteries of Husserl's philosophy, which can now be said to stretch from his earliest philosophical works all the way up until his death.

A comprehensive examination of the evolution of these ideas from 1890– 1938; however, would be the task of a much larger project. It was instead the goal of this work to simply provide one of the first expositions of "On the Logic of Signs (Semiotic)," and thereby demonstrate why it deserves to be recognized as a historically and philosophically important work, not only because it contains Husserl's most thorough explication of inauthentic<sub>a</sub> judgments,<sup>20</sup> but also as it introduces and examines those themes and terms, in the absence of which, the composition of the "Fourth Logical Investigation" appears inconceivable.

#### **Thomas Byrne**

Katholieke Universiteit Leuven Husserl-Archives: Centre for Phenomenology and Continental Philosophy, Kardinaal Mercierplein 2 - box 3200, 3000, Leuven, Belgium Thomas.byrneiii@kuleuven.be

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