# **METAFÍSICA Y PERSONA** Filosofía, conocimiento y vida Año 12 — Número 23

Enero-Junio 2020





## Información general

### **Objetivos científicos**

*Metafísica y Persona* es una revista de difusión internacional y carácter académico, cuyo objetivo principal es la transmisión y discusión de los resultados de las últimas investigaciones en el ámbito que reflejan su título y subtítulo, mediante la publicación de Artículos y Notas inéditos y de contrastado valor científico.

Pretende ser un lugar de encuentro y difusión de estudios que ahonden en las relaciones entre filosofía, conocimiento y vida, y que, por su calidad, originalidad y rigor, representen un claro avance en el saber y una contribución de relieve en el campo científico de las materias que abarca.

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### Datos generales (edición, difusión, identificación y contacto)

*Metafísica y Persona* es coeditada entre la Universidad de Málaga (UMA) y la Universidad Popular Autónoma del Estado de Puebla (UPAEP). Nació como revista electrónica, pero hoy se ofrece a los lectores tanto en formato digital como en papel.

En su versión impresa, la revista se distribuye, con alcance internacional, mediante intercambio, donaciones e inscripciones (ver Suscripciones).

### Identificación esencial

*Título*: Metafísica y Persona *Subtítulo*: Filosofía, conocimiento y vida *Carácter*: Revista filosófica *Periodicidad*: Semestral *Difusión*: Internacional ISSN en línea: 1989-4996 ISSN impreso: 2007-9699

### Lugar de edición, año de edición y entidad editora

• Málaga (España), Universidad de Málaga (Grupo PAI, Junta de Andalucía, HUM-495)

• Puebla (México), Universidad Popular Autónoma del Estado de Puebla (Facultad de Filosofía y Humanidades, y Departamento de Investigación) Año de fundación: 2009

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# Artículos

## In which sense (if any) can it be said that Hegel's Logic is formal?

¿En qué sentido (si lo hay) se puede decir que la lógica de Hegel es formal?

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#### Abstract

According to some commentators, Hegel's Logic is not a kind of formal logic, but a material one. Such statement has documental support, because Hegel says formal logic is empty, never the less, there are some texts in Hegelian Opus, which suggests that Hegel thinks of logic as a formal subject. Because of that, also, there are commentator which say Hegel's logic is a formal system. In this paper I propose that it must be realized that the term "formal" has had several senses along the history of philosophy. According to some of these senses, it can be said that Hegel's Logic is formal.

### Keywords: Hegel, logic, logic form, hylemorfism

#### Resumen

Según algunos comentaristas, la lógica de Hegel no es un tipo de lógica formal, sino material. Dicha declaración tiene soporte documental, porque Hegel dice que la lógica formal está vacía, sin embargo, hay algunos textos en el Opus hegeliano, lo que sugiere que Hegel piensa en la lógica como un tema formal. Por eso, también, hay comentaristas que dicen que la lógica de Hegel es un sistema formal. En este artículo propongo que debe tenerse en cuenta que el término "formal" ha tenido varios sentidos a lo largo de la historia de la filosofía. Según algunos de estos sentidos, se puede decir que la lógica de Hegel es formal.

Palabras clave: Hegel, lógica, forma lógica, hilemorfismo.

### 1. Introduction

According to several commentators, Hegel's scholars as well as historians of logic, there is no Hegel's logic at all. To be sure, this commentators well know that Hegel uses the name "logic" for distinguish the first part of his system. However, it seems that what Hegel calls "logic" is rather metaphysics or something else, but not logic. Recently, though, there are progressively more scholars who think that there is, indeed, a real logic established by Hegel. However, much of them think that although there is a Hegel's logic, this is not of a formal kind of logic. This state of affairs on Hegel's logic is problematic because many philosophers hold that formality is one of the features that serve as a demarcation criterion for what is to count as logic.

I will take for granted, as a nominal definition, that logic is formal; but also that that thing which is called "Hegel's logic", is logic in the current sense of the term, which implies that Hegel's logic is formal. Of course, there are several places, particularly in the *Wissenschaft der Logik* and in the first part of the *Enzyklopädie der philosophischen Wissenschaften*, in which Hegel complained about the empty formalism of the logic practiced by his contemporaries. Nevertheless, there are a number of places in his *Opus*, in which Hegel says explicitly that his logic is formal. I aim to show that this apparent disparity is removed if we realized the fact that "formal" has been said in many ways in the history of philosophy in general, but also in Hegel's texts in particular.

On the one hand, this diversity of meanings bounded to "formal" can be taken just as an accident or as a case of equivocity, and in this manner every discussion about the formal nature of logic turns out to be an issue about names. On the other hand, can formal be understood as a diversity of substantive theses about the nature of logic in general, and about the formal character of logic in particular? I believe Hegel's claim is that logic is formal according to one of these meanings, but also that this claim is a substantive one, in the very sense that only according to such meaning, the feature of formality can give an account on the essence of logic. That is, Hegel reproached his contemporaries logicians, especially the Kantians, for have not been taken the right concept of formality in order to depicting the real nature of logic.

### 2. The different ways in which logic is said to be formal

In his dissertation, J. G. MacFarlane<sup>1</sup> distinguished three senses according to which the term "formal" must be understood in order to get a demarcation criterion of logicity. Elsewhere, C. Dutilh Novaes<sup>2</sup> introduced at least eight different conceptions under the term "formal" applied to logic in the history of

<sup>&</sup>lt;sup>1</sup> MACFARLANE, J. G., "What does it mean to say that logic is formal?", PhD Dissertation, University of Pittsburg, 2000.

<sup>&</sup>lt;sup>2</sup> DUTILH NOVAES, C., "The Different Ways in which Logic is (said to be) Formal", in *History and Philosophy of Logic*, vol. 32, núm. 4, 2011, pp. 303-332.

philosophy. MacFarlane's approach is, let us say, prescriptive; in the sense that he wants to offer the right concept of formality applied to logic, such is the one by which the philosopher could tell the logical from the non-logical. Dutilh Novaes's approach, on her own part, is descriptive, in the sense that she only wants to offer a general and complete inventory of uses of the term "formal" related with logic, without having in mind any external agenda, as that of the demarcating criterion for logic. E. Dragalina-Chernaya,<sup>3</sup> following Dutilh Novaes to some extent, however offers a more economical sorting. In the next, I will follow Dutilh Novaes's, with some addenda from Dragalina-Chernaya.

According to Dulith Novaes, the mentioned eight conceptions of 'formal' can be sorted out in two kinds: the formal as pertaining to forms; and the formal as pertaining to rules. E. Dragalina-Chernaya proposes two names for each of two kinds respectively, "substantial formalism" and "dynamic formalism".<sup>4</sup> The common feature of the first kind is a certain thesis which can be interpreted as logical hylomorphism. According to this, the concept of form must be related, in order to grasp it adequately, with that of matter. What is form, then, is what remains once matter has been abstracted from. The kind of relation between form and matter will determine the kind of form which we are talking about. It's called substantial formalism because the pair form -matter is a typical metaphysical concept. As a matter of fact, 'hylomorphism' is an Aristotelian concept, used properly in the realm of metaphysics, applied afterwards to logic.<sup>5</sup>

The distinctive feature of the second kind is that the logical is formal because it has to do with doings and actions, but no *qua* objects, but insofar as they are related with rules and norms.<sup>6</sup> It is in this sense, because has to do with actions, that is called dynamic formalism.

Under substantial formalism we have: The formal as variability, and The formal as abstraction from subject-matter. In turn, 1 is divided in: Formal as schematic, and Formal as indifference to particulars. And 2 in: 2.1 Formal as topic-neutral, 2.2 Formal as total abstraction from intentional content, and 2.3 Formal as de-semantification.

<sup>&</sup>lt;sup>3</sup> Dragalina-Chernaya, Е., Нуформальные заметки о логической форме. Санкт-Ретербург, Алетейя, 2015.

<sup>&</sup>lt;sup>4</sup> Dragalina-Chernaya, Е., Нуформальные заметки о логической форме.

<sup>&</sup>lt;sup>5</sup> DUTILH NOVAES, C., "The Different Ways...", pp. 305-306.

<sup>&</sup>lt;sup>6</sup> Dragalina-Chernaya, Е., Нуформальные заметки о логической форме..., р. 103.

Dragalina-Chernaya does not take into account 2, apparently because she deems 2.1 falls under 1, and 2.2 and 2.3 under dynamic formalism, for reasons seen above.

About dynamic formalism or formalism as pertaining to rules we have:

The formal as computable The formal as pertaining to regulative rules, and The formal as pertaining to constitutive rules.

Dragalina-Chernaya proposes only 4 and 5, but notice that "from the dynamic perspective [...] any algorithmic process is included naturally in the range of logic".7

Let us come back to Hegel's issue. As I said above, on the one hand, a significant number of Hegelian scholars think that if there is something in Hegel's work which deserve been called logic, it must be not a formal logic. Let us consider some examples: J. Margolis holds that Hegel's Logic is not formal, but material.<sup>8</sup> D. Perinetti affirms that, according to Hegel's view, the logical consequence relation depends on material attributes.<sup>9</sup> Lorenzo Peña says that it is impossible to understand Hegelian philosophy under the pattern of not-formal logic, because, says Peña, given that the system is dynamic "doesn't remain in it no external or formal pattern of argumentative validity, or of soundness or acceptability [...] Every phase of the system contains its own logic, its own inference and refutation rules".10

On the other hand, though, P. Stekeler-Weithofer holds that "Hegel puts the logic as concept of form analysis in the kernel of his theoretic reflections".<sup>11</sup> M. Inwood, on his part, supposes that Hegel's logic is formal when he writes "Like any formal system<sup>12</sup>, that of the Logic may have properties which surprise its originator, but these properties are logical consequences of its essential features".<sup>13</sup>

I think that Peña makes a mistake because he does not take into account that one of the main purposes of Hegel's logic consists in giving an account of the inferential relations between one and the other phases of the system.

<sup>&</sup>lt;sup>7</sup> Dragalina-Chernaya, Е., Нуформальные заметки о логической форме..., р. 139.

 <sup>&</sup>lt;sup>8</sup> MARGOLIS, J., Pragmatism's Advantage, Stanford: Stanford University Press, 2010, p. 214.
 <sup>9</sup> PERINETTI, D., "Inferencia y racionalidad en Hegel", en Revista Latinoamericana de Filosofía, Vol. XXXV, núm. 2, 2009, p. 255.

<sup>&</sup>lt;sup>10</sup> PEÑA, L. Fundamentos de ontología dialéctica, Madrid: Siglo XXI, 1987, p. 154.

<sup>&</sup>lt;sup>11</sup> STEKELER-WEITHOFER, P., Hegels Analytische Philosophie. Die Wissenschaft der Logik als kritische Theorie der Bedeutung, München: Paderborn, 1992, p. 43.

<sup>&</sup>lt;sup>12</sup> Emphasis is mine.

<sup>&</sup>lt;sup>13</sup> INWOOD, M., Hegel, London/New York: Routledge, 1998, p. 169.

But neither of these authors bears in mind that Hegel explicitly says that this relations depends upon formal features, Hegel tells us:

In my *Science of Logic*, I have developed the nature of speculative knowledge in detail. Therefore, in this treatise, I have added only here and there some explication about the procedure and method. Given the concrete and heterogeneous sort of the subject, we may neglect to highlight, in every turn, the logical derivation [*die logische Fortleitung*]. I would like that this aspect [the logical aspect] were mainly the one considered and judged in this treatise, because in this treatise we are dealing with a science, but in the science the matter is linked essentially to the *form*.<sup>14</sup>

With regards to the thesis according to which Hegel's logic is material, I think we can find the source of the mistake in the fact that it has not been taken on account that formal has been said in many ways, as stated above. Let us consider the following case.

In an otherwise very accurate and interesting work, M. Rojas affirms, firstly, that Hegel is a harsh denouncer of the formal logic, and after that, that the Hegel's critique lies in the fact that formal logic "dispenses with the matter of the concept".<sup>15</sup> At last, Rojas clears up that he thinks Hegel's critique concerns every formal logic. Rojas's point, in general, is that, according to him, every the formal logic makes abstraction of *all content*, of *all meaning*. It is for this reason that he thinks that Hegel's logic, in turn, is material, insofar as it is a logic which depends on the meaning of concept essentially.<sup>16</sup> Hegel, it is true, holds that some philosophers argue that "logic must abstract from every content", and also that this is a mistake, that "it is foolish to say that logic makes abstraction of all content" (WL I 36).

But not everyone who thinks that logic is formal, also thinks that logic must to make abstraction of all content. As we have seen above, those who think that logic is formal according to 2.2 and 2.3, in some way accept that logic must abstract forms from every content, but not those who thinks that logic is formal according to 1. Then, if someone wants to hold that Hegel makes a critique of formal logic, she must make sure of if by any chance Hegel is only making a critique of one of the senses according to which it can be said that logical is formal, but not a critique of the formal in general. Due to this careless mistake, Rojas ends confusing some topics. For instance, he thinks that *because* logic is formal, then it becomes impossible to justify why the logical constants of some

<sup>&</sup>lt;sup>14</sup> HEGEL, Vorlesungen über Philosophie der Religion, Frankfurt: Suhrkamp, PR, p. 12. Emphasis is mine.

<sup>&</sup>lt;sup>15</sup> ROJAS, M., Der Begriff des Logischen und die Notwendigkeit universell-substantieller Vernunft, Aachen: Mainz, 2002, p. 113.

<sup>&</sup>lt;sup>16</sup> Rojas, M., Der Begriff des Logischen..., pp. 120ss.

logical calculus are what they are: "Formal logic is first of all –writes Rojas– a kind of logic without fundamental grounds [...because] Formal logic depends upon the fact that there is certain logical constants, but it is not proved why this constant and not others".<sup>17</sup> Probably, Rojas's argument goes as follows: First of all, he supposes that logical consequence relation depends on the "meanings of categories";<sup>18</sup> then, he assumes that logic which is formal, it is formal only in the sense 2.2 or 2.3, which means that logic makes abstraction of every content; and therefore that formal logic can't give an account of logical consequence relation.

Of course, it can be argued that if logic is formal as 2.2 or 2.3, then the logical constants should be defined not according to some meaning but according to some rule, and then that logic is formal as dynamic formal also; but the latter would warrant the possibility of bringing the Prior's constant "tonk" onto the logical calculus, which is absurd (cf. Prior).<sup>19</sup> And therefore, that for give an account of logical constants it has to resort to meanings. But in no way, this entails that in order to give an account of this constants shouldn't be formal, because it is possible to adopt the view according to which logic is formal in sense 1 and simultaneously trying to give an account of the logical constants appealing to meanings.

It is clear enough that Hegel has the Kantian philosophy as target when he critiques the formal interpretation of logic. But as we will see, this Kantian conception of logic takes formal in only one or maybe in only two of the eight cases put forward by Dutilh Novaes. Because of that, it is at least possible that Hegel would had thought that logic is not formal in the Kantian sense, but actually formal in another sense. Otherwise, we have seen in the text cited above, in which Hegel held that logic is formal.

### 3. The Kantian sense of 'formal'

Kant distinguishes two kinds of logic, namely logic of generality [*Logik des allgemeinen*] and the logic of particular uses of the understanding [*Logik des besondern Verstandesgebrauchts*].<sup>20</sup> The latter is that what scholastics called *logica utens*, and the former that what themselves called *logica docens*. *Logica utens* is a kind of propedeutic or methodology, while *logica docens* is a scien-

<sup>&</sup>lt;sup>17</sup> Rojas, M., Der Begriff des Logischen..., p. 114.

<sup>&</sup>lt;sup>18</sup> Rojas, M., Der Begriff des Logischen..., p. 120.

<sup>&</sup>lt;sup>19</sup> PRIOR, A., "The Runabout Inference-Ticket", en Strawson, P.F., (Edit.), *Philosophical Logic*, Oxford, Oxford University Presd, 1967.

<sup>&</sup>lt;sup>20</sup> KANT, I., Kritik der reinen Vernunft, Leipzig: Reclam, 1986, KrV A 52 B77.

ce, says Kant, in the "proper sense of the term".<sup>21</sup> Insofar as *logica docens* is a science whose *domain* is the most general, it should take care of abstraction of every particular element, and since every content of understanding is particular, hence it should provide abstraction of every content.

Kant's point is that, according to Copernican revolution, when we propose to think about the most general domain, we should think about thinking or understanding in general. But it turns out that thinking, in itself, is not an object at all, in the sense that it cannot be something thinkable by the understanding itself. That thinking as such is not an object is an idea grafted in the very kernel of Kantian philosophy. As is known, Kant try to explain how is it possible, since sensibility cannot offer any modal data and *every* knowledge we have begins with sensibility, that we could have certain judgements whose truth is necessary. Kant, then, faces up the following disvunction: the modal data entailed by every universal knowledge are got from the sensitive intuition of the objects, or from another kind of intuition of the objects, for instance an intellectual intuition, or from the subject. Given that sensitive intuition "tell us, indeed, what is the case, but not that this should be so necessarily, and not in another way" (A 1), and given that there is not any intellectual intuition, therefore it could be that our knowledge was "a compound made up from what we receive through impressions, and from what our own cognitive faculty begets by itself" (B 1). In other words, Kant gambles for the Copernican revolution, that is to say for the idea according to which the philosopher should put the subject, but not the object, in the center of the explanation of knowledge.

Nevertheless, Kant holds that it would be a mistake to think that this cognitive faculty, the subject of understanding, is the empirical self - that is to say the particular selves: me, or you, or us, etc. Why? If it were so, then the subject of understanding should be itself a possible object of understanding, which entails that the self, the subject of understanding, should be multiple, at least because it should be divided as subject and as object. However, as an object, the self should be absolutely simple.<sup>22</sup> Therefore, that subject who puts its own determinations on the known object is not another particular object, but a strange kind of "entity", namely a *transcendental* one. Then, understanding appears as a transcendental element in the knowledge of objects process, that is to say, not as an object or as an objective thing as such, but as a condition of possibility of objectivity. Kant says:

> Consciousness of self according to the determinations of our state in inner perception is merely empirical, and always changing; no fixed or permanent self can it be occurred in this flux of inner appearances. Such consciousness is

<sup>&</sup>lt;sup>21</sup> Kant, A54 B78

<sup>&</sup>lt;sup>22</sup> Kant, A443 B471.

named inner sense [inner Sinn] or empirical apperception [empirische Apperception] usually. What has *necessarily* to be represented as numerically identical connot be thought as such thorough empirical data. There must be a condition which precedes all experience, and which makes experience itself possible, in order to render this transcendental presupposition valid.23

In view of the foregoing, it can be concluded accordingly that, in Kant's opinion, logic, inasmuch as it deals with understanding in all its generality cannot have objective content. In addition, it has to be noticed that Kant uses the expression "formal" in order to distinguish the transcendental character of the unity of the self of which he talks about, from the unity of particular self.<sup>24</sup> In this same sense, MacFarlane argues that from trivial definition of logic as general, Kant concludes logic must be formal in the sense that it abstracts entirely from the semantic content of thought.<sup>25</sup> MacFarlane, taking on account more idiosyncratic features of Kantian philosophy than me, rebuilds Kant's argument in the following way:

Kant, at first, assumes that "[t]hought is intelligible independently of its relation to sensibility. Right away he add another three premises, namely that "Concepts can be used only in judgments", "Judgment essentially involves the subsumption of an object or objects given in intuition under a concept", and "Objects can be given to us only in sensibility". From which MacFarlane concludes that a concept has semantical content only insofar as it is applied to some object that could be given by sensitive intuition, and therefore that logic of generality must be formal, in the sense that it must abstract entirely from semantical content.<sup>26</sup>

Even if Frege rejects Kantian thesis about the formality of logic, which is worth emphasizing it because shows that it is possible to refuse logic is formal, for instance in a Kantian sense, without entailing the outright rejection of logic's formality; well, even if Frege does it, the Kantian heritage will be well received, through neo-kantianism, by the logical positivists, although by replacing all the transcendental idealism stuff for conventionalism. The main point, however, it is that logical positivism accepts the thesis, according to which the formality of logic lies in the fact that logic must abstract entirely from intentional content, which leads to the idea a formal as de-semantification.

Another feature of Kant's view is that his conception of formality applied to logic not only lies under 2.2, but also under 5. Indeed, if logic cannot have

<sup>&</sup>lt;sup>23</sup> Kant, KrV A 107.

<sup>&</sup>lt;sup>24</sup> Kant, A 402.

 <sup>&</sup>lt;sup>25</sup> MACFARLANE J. G., "What does it mean to say that logic is formal?", pp. 79ss.
 <sup>26</sup> MACFARLANE J. G., "What does it mean to say that logic is formal?", pp. 121ss.

any object or any set of objects as dominium, that is to say if logic affords no knowledge of objects.... then of what can it be about? MacFarlane writes:

> One should not picture "the form of thought in general" as a kind of mental glues by means of which representations are stuck together, and logic as a quasi-psychological investigation of its adhesive properties. The form of thought is no any kind of thing (not even a mental thing). It is, rather, a set of norms: in fact, the laws of logic themselves [...] To say that logic treats of the form of thought in general is to say that it treats of the laws of logic.<sup>27</sup>

Kant, in this sense, holds the following:

We know the object when we have ensured the synthetic unity of the manifold intuition. But this unity is impossible if the intuition can't be yielded by such synthesis function, according to a rule, which makes necessarily a priori the reproduction of the manifold and, then, make a concept possible [...] This unity of the rule determine all the manifold, and restricts it to conditions which make the unity of apperception possible [...] All the knowledge requires a concept, but a concept is always, as regards its form, something universal which serves as a rule.<sup>28</sup>

Then, according to MacFarlane, "Kant thinks of this normative aspect of concepts [...], their rulishness –as their form".<sup>29</sup> We could think, then, that Kant holds that logic is formal as pertaining to rules or as dynamic formal, as much as abstract of intentional or semantic content. So, then, Dragalina-Chernaya, as I have written above, seems considering formality of logic as 2.2 or 2.3, according to Dutilh Novaes, could be taken as formal as pertaining to constitutive rules. Anyhow, Dutilh Novaes treats Kantian view falling under 2.2<sup>30</sup> as much as falling under 5.<sup>31</sup>

R. Brandom has stressed the link between Hegelian philosophy and Kant's insight about the essentially normative character of mind and rationality.<sup>32</sup> Maybe one of the main purposes of Hegel's interpretation of Brandom, as much as others as R. Pippin, is freeing Hegel's philosophy of metaphysical aspects. In order to achieve this, all this issue about norms, rules, etc. seems very promising. Nevertheless, the textual accuracy of this interpretation seems dubious. I will argue, indeed, that Hegel's critique of formalism concerns particularly to the Kantian anti-metaphysical approach to logic.

<sup>&</sup>lt;sup>27</sup> MACFARLANE J. G., "What does it mean to say that logic is formal?", p. 89.

<sup>&</sup>lt;sup>28</sup> KrV A 105-106.

 <sup>&</sup>lt;sup>29</sup> MACFARLANE J. G., "What does it mean to say that logic is formal?", p. 90.
 <sup>30</sup> DUTILH NOVAES, C., "The Different Ways...", pp. 316ss.
 <sup>31</sup> DUTILH NOVAES, C., "The Different Ways...", pp. 327ss.
 <sup>32</sup> BRANDOM, R., *Reason in Philosophy*, Cambridge: Harvard University Press, 2009.

### 4. Metaphysical meaning of logic

First of all, we must stress the fact that, according to Hegel himself, the main flaw of the Kantian interpretation of logic's formality is that it "does not regard the metaphysical meaning of logic at all".<sup>33</sup> What is this metaphysical meaning? As I have said above, Kant is concerned that his transcendental approach is not to be conflated with some sort of metaphysical speculation. In virtue of it, Kant insists that the structure of the subject of which he talks about should not be taken as an objective structure of the things in itself. For instance, as the objective structure of the mind itself, *in as much as the mind is an entity*, but as a set of rules or norms which govern how the particular mind must be applied to objects. In other words, Kant insists that he is talking about norms, not about entities.

Nevertheless, it is at least dubious that assertions of this kind were able to avoid some metaphysical burden. R. Stern argues that, according to Hegel, "in a very real sense, metaphysics is unavoidable".<sup>34</sup> In one of his Berliner courses, Hegel taught:

Everyone possesses and uses the wholly abstract category "being". The sun *is* in the sky; these grapes *are* ripe, and so on *ad infinitum*. Or, in a higher degree of education, we proceed to cause and effect relation, force and its manifestation, etc. All our knowledge and ideas are entwined with and ruled by metaphysics.<sup>35</sup>

From a very naïve perspective someone could challenge the Kantian stance by considering: well, all this stuff about the norms is fine, but in the end, these norms *are* or, are they not? But whatever could be the answer, we are in the thick of metaphysics.

Perhaps so, but the Kantian could answer back saying that, as a matter of fact, the very question about the being of the norms do not make any sense, that concepts such as reality or being cannot be used outside the realm of experience, that is to say, that all those concepts can only be used as much as they can be applied to empirical data. In an analogous way to Max Scheler, who thought, about the values, that it makes no sense, to say that they *are* or not, but only if they *are worth*; so the Kantian could argue that the real issue about the norms is not about if they are or not, but only about if they rule. According to this latter, then, the point is not to focus on the semantic or intentional content of the sentence by which the norm is expressed, because

<sup>&</sup>lt;sup>33</sup> Hegel, WL I 41.

<sup>&</sup>lt;sup>34</sup> STERN, R., Hegelian Metaphysics, Oxford: Oxford University Press, 2009, p. 4.

<sup>&</sup>lt;sup>35</sup> Hegel, VGP I, 77.

there is no such thing: normative sentences have not *denotata;* but rather in the fact that a normative stance expresses a duty.

Nevertheless, Kant says not only that these norms govern the use of reason, but also that by doing that, the norms constitute the reason as such. The point is that the latter is not a normative claim, but an objective one. If Kant holds the rules constitute the reason in such or such way, this very holding is not a rule or normative statement, but a theoretic one. In other words, since *Kritik of reinen Vernunft* is not a book of rules, but a treatise whose aim is to give an account, theoretically, on how the human reason actually works, and on why it works so, "it raises [...] the question of the status of Kant's own inquiry", faced to the fact that:

[W]hile the Kantian needs to make some modal claims about our cognitive structures in order to explain how we have synthetic a priori knowledge of the world, it would seem that he cannot account for those modal claims using the same manoeuvre, so that in the end, the Kantian story is explanatory inadequate in this crucial respect.<sup>36</sup>

Hegel, then, realizes how transcendental anti-realism suffers that flaw descripted by K. Westphal (1986) in the following way: "Kant fails to address second-order questions about the justification of his philosophical theory of knowledge".<sup>37</sup> Hegelian argument is philosophically as powerful as to be addressed to another kind of metaphysical anti-realism, for instance in García de la Sienra against the rather moderate form of anti-realism called "internal realism".<sup>38</sup>

Hegel's point, definitely, is that it is impossible to avoid the fact that *logic*, however much formal (in 2.2 sense) or rulishness it can be said it is, is an *entity*, and as such, worth metaphysically treating. Then, according to Hegel, even to say that logic is formal according to 2.2 sense, is a metaphysical issue, and, therefore, an issue that must be analyzed in a proper metaphysical context.

This metaphysical context, as R. Stern<sup>39</sup> or P. Reyes-Cárdenas<sup>40</sup> have pointed out, is a holistic theory of the structure of the object. According to this theory, the unity of the object not depends upon the synthesis of a manifold of isolated and self-subsistent properties or attributes, whether by a *bare substratum* underlying the plurality of attributes, or by a formal (in 2.3 sense) synthesizing activity, but on being an irreducible substance, whose irreduci-

<sup>&</sup>lt;sup>36</sup> STERN, R., Hegelian Metaphysics, p. 24.

<sup>&</sup>lt;sup>37</sup> WESTPHAL, K., *Hegel's Epistemological Realism*, Dordrecht/Boston/London: Kluwer Academic Pub-lishers, 1989, p. 35.

<sup>&</sup>lt;sup>38</sup> GARCÍA DE LA SIENRA, A., "La dialéctica del realismo interno", en Dianoia, vol. 38, núm. 1992.

<sup>&</sup>lt;sup>39</sup> STERN, R., Hegel, Kant and the Structure of the Object, London/New York: Routledge, 1990.

<sup>&</sup>lt;sup>40</sup> REYES-CÁRDENAS, P., "Contemporary Hegelian Scholarship", en Tópicos, núm. 50, 2016, pp. 123-149.

bility is explained by the fact of being the manifestation or realization of an universal-kind substance, which confers it its unity.

This stance, of course, puts Hegel in the stream of Aristotelian realism,<sup>41</sup> which is very plausibly, because Hegel praised Aristotle much than any other philosopher, even Kant.<sup>42</sup> Hegel, says, for instance, that Aristotle "was one of the richest and deepest of all the scientific geniuses that have as yet appeared – a man whose like no later age has ever yet produced".<sup>43</sup> I will go back to this issue below. For now, I want only to stress the following two points: 1. The Hegelian realist conception of the unity of the object, as any conception of this kind, supposes the matter-form distinction;<sup>44</sup> 2. This matter-form distinction is exactly that what Hegel uses in order to give an account of the formal character of logic. For this reason, I hold that formality of Hegel's logic falls under the "substantial formalism", but also under a special kind of substantial formalism, namely that which takes the matter-form distinction amid a context of a substance-kind model of the unity of the object.

### 5. Mereological logical hylomorphism

The matter-form distinction has been applied in logic traditionally since some centuries ago. This has enabled that MacFarlane and Dragalina-Chernaya, amongst others, talk about a logical hylomorphistic tradition. MacFarlane, besides, added that such distinction, among this tradition, is used for demarcating logic only since Kant. There is a currently received view about the role the distinction plays in the logical discourse, which goes back to Kant. Namely, a view according to which, matter-form distinction is applied to arguments, in order to demarcate what must count and what not as logical in the argument.

S. Read<sup>45</sup> offers a brief characterization of logical hylomorphism according to received way. Firs of all, he explains that the classic criterion to tell logical consequence is truth-preservation. Then, adds that this criterion is substitutional:

We take an argument, M. We replace a certain amount of terminology in M by schematic letters, to obtain an argument-for, M'. We then interpret the schematic letters in M' in various ways, looking to see whether any instance of M' has

<sup>&</sup>lt;sup>41</sup> STERN, R., Hegel, Kant and the Structure of the Object, p. 64.

 <sup>&</sup>lt;sup>42</sup> Cf. Doz, A., La logique de Hegel et les problèmes traditionnels de l'ontologie, Paris: Vrin, 1987.
 <sup>43</sup> HEGEL, VGP I, 132.

<sup>&</sup>lt;sup>44</sup> Cf. FESER, E., Scholastic Metaphysics. A Contemporany Introduction, Heussentam, Germany: Scholastic Editions, 2014, pp. 177ss.

<sup>&</sup>lt;sup>45</sup> READ, S., *Thinking about logic*, Oxford: Oxford University Press, 1995.

true premises and false conclusion. Suppose it does, that is, that there is an instance N of M' with true premises and a false conclusion. Then N results from M by substituting one or more terms for others – by replacing certain expressions in M by different ones [...] By such a substitution we would obtain an argument which lead from truth to falsity. Hence the original example could not be guaranteed to lead us form truth only to truth [...] So it must be invalid.46

At last, he clears out that not every substitution is permissible. That is to say, there are some restrictions for the possible substitutions, and "[t]his restriction is contained within the notion of form",<sup>47</sup> which means that only the expressions whose substitution is not allowed, arranged in certain way, constitute the form of the argument. Then, it turns out that there is a set of expressions, which will be called "logic constants" and which should remain fixed through every substitution, and other set of expressions, which could be substituted. The former pertains to form of the argument, the latter to matter.

In other paper, Dutilh Novaes depict this kind of hylomorfism calling it "mereological hylomorphism",<sup>48</sup> because according to this, matter and form are parts of one whole. Surely, an important task for mereological hylomorphism is to provide a criterion by which someone can tell which of the expressions of an argument are logical and which not. Nevertheless, among philosophers, apparently there is certain escepticism about this task: "[M]ost (perhaps all) of the substantive philosophical conceptions of the problem of logical constants may have created unsolvable versions of the problem. The search for a characterization of the intended set of logical expressions [...] may be a hopeless project".49

Dutilh Novaes suggests that this problem, as such, is probably owing to the fact that mereological hylemorphism hinges on certain assumptions, such that an historical revision can show that have not an adequate guarantee.<sup>50</sup> For instance, since matter-form distinction are applied properly to substances, and since such application to logic seems to go back to Aristotle commentators (even if not to Aristotle himself), someone can ask if it does makes sense to apply it to arguments? Or as Dutilh Novaes herself asks: "Are we justified in importing presuppositions and expectations pertaining to metaphysical hylomorphism into logical hylomorphism?".<sup>51</sup>

<sup>&</sup>lt;sup>46</sup> READ, S., *Thinking about logic*, p. 40.

 <sup>&</sup>lt;sup>47</sup> READ, S., *Thinking about logic*, p. 40.
 <sup>48</sup> DUTILH NovAES, C., "Reassessing logical hylomorphism and demarcation of logical constants", in *Syn-these*, núm. 185, 2012, p. 396. Doi: 10.1007/s1129-010-9825-0
 <sup>49</sup> C. (1997) The matching of logical constants" on Bullotin of Symbolic Logic núm.

<sup>&</sup>lt;sup>49</sup> Gómez Torrente, M., "The problem of logical constants", en Bulletin of Symbolic Logic, núm. 8, 2002, p. 31.

 <sup>&</sup>lt;sup>50</sup> Dutilh Novaes, C., "Reassessing logical hylomorphism...", p. 398.
 <sup>51</sup> Dutilh Novaes, C., "Reassessing logical hylomorphism...", p. 399.

Some allergic to metaphysics philosopher could argue that she herself does not use matter-form distinction in any metaphysical way, that what she only want to do, when says logic is formal, is to point out that logicians are concerned with argument schemata exclusively, but not so with its particular topic. But in this case, from the fact that logic *uses* schemata, does not follow that logic were formal. To be sure, this schemata idea fits with the Tarskian definition of logical consequence as truth preservation under every reinterpretation of non-logical expressions, but only as much as it was taken for granted, in order to give a definition of truth in an interpretation, the number, nature and interpretation of logical constants. If someone refuses to face out the problem of logical constants, then the use of "formal" devices, such as schemata, do not say anything specifically about logic in itself, because such devices can be used in other fields as algebra, economics, geometry, etc.

In this sense, Dutilh Novaes writes:

My proposal is thus not to get rid of the schematic-substitutional technique – it has been crucial for much of the progress made in logic so far, and it still seems to have much to deliver – but rather to give upon on the idea that this technique by itself can resolve deeper philosophical issues such as the demarcation of logic. If logic as a discipline can be demarcated at all, it seems that this cannot be done by simply isolating a particular subset of notions or concepts as quintessentially logical by means of a (sharp, principled) partition of the vocabulary.<sup>52</sup>

Furthermore, Dutilh Novaes holds something that I deem worth mentioning, because concerns especially to Hegelian logical project:

This particular form of mereological logical hylomorphism does not work, but perhaps a different understanding of hylomorphism may provide a more illuminating account of logic from a hylomorphic perspective. In particular, the non-mereological, *functionalist* hylomorfism that emerges from Aristotle's own writings may provide a fruitful framework to think about logic in hylomorphic terms.<sup>53</sup>

Thus, hence I hold that Hegelian view provide such a kind of Aristotelian logical hylomorphism.

<sup>&</sup>lt;sup>52</sup> Dutilh Novaes, C., "Reassessing logical hylomorphism...", p. 407.

<sup>&</sup>lt;sup>53</sup> DUTILH NOVAES, C., "Reassessing logical hylomorphism...", p. 408.

### 6. Hegel on hylomorphism

I have shown above, by texts, that Hegel explicitly holds that logic is formal, even his own logic. I have explained that even though elsewhere Hegel complains about the formalism of logic, this is because "formal" is said in many ways. Hegel rejects Kantian formalism. Indeed Hegel finds that Kant conceives the formal in a defective way, namely such that it provides for the object only an external unity. But as R. Stern suggests, Hegel embraces the Aristotelian concept of form, as much as this concept plays a leading role in the Hegelian conception of the unity of object. So, for instance, on the one hand, Hegel argues that in a mechanical view of physics "the form, which constitutes their [of the objects] difference and agglutinates them into an unity, is an external [außerliche], indifferent one" (WL II, 412);<sup>54</sup> but on the other hand, from a holistic point of view "it's determinateness is essentially distinct from a mere [...] *external cohesion* of parts [...] it is an *immanent form*<sup>55</sup>, a self-determining principle, in which the objects inhere and by which they are bound together into a truly one" (WL II, 424). Let's see what is what Hegel says explicitly about the concept of form, in order to see what does it means to say that it is an immanent form.

Hegel holds something that refers to Aristotle very clearly: "Form deals with matter and subsistence as one of its determinateness in itself. So, the phenomenal has its ground in this form as its essence". Hegel then seems to hold that form constitutes the object essence. Nevertheless, the very concept of essence is not clear enough. In order to clarify, I believe we should follow R. Stern, who holds that the whole essence's issue is about the problem of universals, on which Hegel adopts an anti-nominalist realist position.<sup>56</sup>

Logic's form, whether there is such one, must define logic's essence. In such a manner, formality is taken as a demarcation criterion, but such that it deviates from mereological hylomorphism. Whether it is true that Hegel adopts an anti-nominalist realist position, then would not be easy to atone his view with that, according to which, logical form depends on an unprincipled choice of certain part of vocabulary.

But, as a matter of fact, Hegel rejects not only the nominalist view in general, but also rejects the very conception of matter and form distinction as a mereological one. First of all, Hegel asks what kind of relationship matter and form can have whether it is assumed the pluralistic ontology that underlie

<sup>&</sup>lt;sup>54</sup> Hegel, EPW § 132.

<sup>&</sup>lt;sup>55</sup> Emphasis in "form" is mine.

<sup>&</sup>lt;sup>56</sup> STERN, R., *Hegelian Metaphysics*, p. 34.

deeply the whole Kantian philosophy. According to this ontology, whatever object is constituted as a "compound of more fundamental and independently existing separable elements: that is, it is reducible to a plurality of intrinsically unrelated individual components out of which [...] the whole is constructed, through some process of unification".<sup>57</sup> Hegel answer is: whole and part relation: "The immediate relation is that of the whole and the parts".58

On a first moment, says Hegel, the form is taken as the whole, and the matter as the parts. The matter, then, as a manifold of "existing self-subsistences [existierende Selbständigkeit]", i.e. as subsisting properties, indifferent to each other; and the form as the kind of unity expressed by "the also [das Auch]".<sup>59</sup> The former appears as the determinate concrete, while the latter as the indeterminate substrate of this determinateness. But on a second moment, it should be realized that as much as the unity expressed by "the also" is one, then is opposed to other ones, i.e. not as an also anymore, but therefore the form is characterized in such a way that this characterization gives rise to a contradiction. It can be eluded this contradiction if the respective natures of matter and form were relativized, as if those were taken alternately sometimes as the ground, sometimes as the grounded, i.e. as if the burden of the essence role should rest sometimes in one of the parts of the objects, but sometimes in the other parts. Nevertheless Hegel thinks that in such a case would be incurred "in progression ad infinitum [...] and therefore [the relation matter and form] become an unintelligent [gedankenlose] alternation".60

In the realm of philosophy of logic, the previous issue could be articulated as follows: firstly, the matter as a set of subsisting semantical properties, while the form as a sort of unity factor devoided of semantical or intentional content, and therefore without any ontological commitment. But as much as there is certain speech about the relation between matter and form, full of modal claims, then the form itself is endowed with semantical and ontological features. Afterwards, in order to elude the last contradiction, it could be argued that choosing the parts of the language that constitute the logical form is a conventional matter. But this move would entail to give up the rational treatment of logical form.

Right away, Hegel argues that some philosophers as Herder have tried to resolve the problem by suggesting that form and matter relation is equivalent to force and its manifestation [Äusserung] relation.<sup>61</sup> Nevertheless, the very

 <sup>&</sup>lt;sup>57</sup> STERN, R., Hegelian Metaphysics, p. 1.
 <sup>58</sup> HEGEL, EPW § 135.

<sup>&</sup>lt;sup>59</sup> Hegel, WL II, 167.

<sup>60</sup> HEGEL, EPW § 136.

<sup>&</sup>lt;sup>61</sup> Hegel, EPW § 136.

concept of force is empty, says Hegel,<sup>62</sup> as much as it is conceived under the pluralistic assumption of which we have talked above; because given such an assumption, then for every force turns out that it and its manifestation are exactly the same,<sup>63</sup> which entails a contradiction.<sup>64</sup> While it is supposed that force confers unity to phenomena, which have no unity by itself; nevertheless, since force itself is something, and therefore endowed with unity and content, it is the case that such an unity and content seems to be nothing more than those that phenomena have already.

Summarizing: mereological hylomorphism takes as granted that form and matter, either taken as the whole and as the part respectively, or viceversa; or one and the other as different parts of the whole - are "existing self-subsistences". This drives to any of the following conclusions, namely or the form is the whole and the part simultaneously, which is contradictory; or the form and matter are arbitrary exchangeable, which entails that matter and form issue is *unintelligent*.

Hegel, then, tries to elude this difficulty refusing the general pluralistic ontology underlying the mereological hylemorphism, and offering, instead, a model according to which the object is "an irreducible substance [...whose] irreducibility is explained by virtue of its being of such and such a kind".<sup>65</sup> Under this model, the key concepts are actuality and potentiality. So for instance, if it is supposed that a whole, say water, is compounded by hydrogen and oxygen, in such a way that a pluralistic metaphysician can take the latter as the parts of the former, from an Aristotelian-Hegelian perspective, instead, the water is conceived as an irreducible substance, in which hydrogen and oxygen appears as powers or potential entities.

D. Oderberg says:

[S]uppose we had samples of hydrogen and oxygen which we synthesized through combustion into a sample of water, with no loss of matter [...] What reason is there for thinking that the hydrogen and oxygen atoms, or quarks for that matter, are *actually* present in the water, as they were in the original samples of hydrogen and oxygen? Well, if the water contained actual hydrogen, we should be able to burn it – but in fact the opposite is the case [...] Of course the response is that the oxygen and hydrogen are bounded in water and so cannot do what they do in the absence of such a bond. But that is precisely the point. The combustibility of hydrogen and the specific boiling point of oxygen [...] are accidents that necessarily flow from their very essen-

<sup>&</sup>lt;sup>62</sup> Hegel, NH, 156.

<sup>&</sup>lt;sup>63</sup> MIRANDA, P., Hegel tenía razón, México: Universidad Autónoma Metropolitana, 1989, pp. 196ss.

<sup>&</sup>lt;sup>64</sup> Hegel, WL II, 44.

<sup>&</sup>lt;sup>65</sup> STERN, R., Hegel, Kant and the Structure of the Object, p. 4.

ce. Since the properties are absent in water, we can infer back to the *absence* of the essences from which they necessarily flow. Therefore neither hydrogen nor oxygen is actually present in water. Rather, they are *virtually* present in the water in the sense that some (but not all) of the powers of hydrogen and oxygen are present in the water [...] and these elements can be *recovered* from water by electrolysis.<sup>66</sup>

In the same way, Edward Feser argues:

One implication of this is that contrary to deniers of the unicity of substantial form, there is no plurality of substantial forms in natural substances. In water, for example, there is only the substantial form of water, and the substantial forms of hydrogen, oxygen, quarks, etc. are not actually present because hydrogen, oxygen, quarks, etc. themselves are only virtually rather than actually present.<sup>67</sup>

Of course, it is possible to find similar Hegelian texts, particularly in the Philosophy of Nature of the *Enzyklopädie*:

Such substances should principally sever to counteract this sort of metaphysics which prevails in both chemistry and physics, namely thoughts or rather sterile representations of the *immutability of substances* in every circumstance; and categories such as composition and *subsistence*, on the strength of which bodies are supposed to be formed from such substances. So, it is granted that chemical substances in combination lose the properties they show in separation, and yet some imagine that they are the same things without these properties that they are with them.<sup>68</sup>

The main point, nevertheless, is that Hegel holds that, from the difficulties bound to pluralistic logic hylomorphism, the reason should reach a very important concept, namely "*Wirklichkeit*", which is used by Hegel as a translation of the Aristotelian greek " $\epsilon v \epsilon q rac$ ".<sup>69</sup> This point have been emphasised by some scholars as A. Ferrarin<sup>70</sup> and A. Doz.<sup>71</sup> From "*Wirklichkeit*" as actuality, Hegel reaches the concept of possibility, as much as actuality is the reality as the fulfilment of a possibility, which, for their part, "is essentially with respect to actuality".<sup>72</sup> So, form corresponds to actuality, while matter corresponds to possibility.

<sup>&</sup>lt;sup>66</sup> ODERBERG, D., Real Essentialism, London/New York: Routledge, 2007, p. 75.

<sup>&</sup>lt;sup>67</sup> FESER, E., Scholastic Metaphysics..., p. 179.

<sup>68</sup> Hegel, EPW § 335.

<sup>&</sup>lt;sup>69</sup> Hegel, EPW § 142.

<sup>&</sup>lt;sup>70</sup> FERRARIN, A., Hegel and Aristotle, Cambridge: Cambridge University Press, 2004, p 107.

<sup>&</sup>lt;sup>71</sup> Doz, A., La logique de Hegel..., p. 128.

<sup>&</sup>lt;sup>72</sup> Hegel, EPW § 143.

Next, Hegel infers a set of key concepts, firstly substance and accident relation, causal relation later. About the former, Hegel holds that "substance is the last unity of essence and being",<sup>73</sup> which means that substance is an concrete universal, i.e. "an instantiation [the being] of universals [the essence]",<sup>74</sup> but such that this universal is not only a set, nor a bundle of attributes, but something that exists only as much as it is instantiated, but being that by which the substance is such and such. The form is, exactly, this instantiated universal.75 Besides, the accidents are "the power of substance [Macht der Substanz]"<sup>76</sup> "the acting capacities of substance [die Aktuosität der Substanz]".<sup>77</sup>

About the causality relation, Hegel realized the fact pointed out by E. Feser: "there is something in the very nature of potency that requires actualization by something already actual".<sup>78</sup> Or as Hegel expresses it: "An entity is actual as an effect, which is necessarily through a causal process".<sup>79</sup>

### 7. What is rational is actual, and what is actual is rational

Hegel introduces the logic in a very strange manner. He says at the beginning of his Major Logic that logic "is the exposition of God as He is in his eternal essence before the creation of nature and a finite spirit",<sup>80</sup> and at the beginning of his Minor Logic that logical categories "may be looked upon as definitions of the Absolute, or as metaphysical definitions of God".<sup>81</sup> If we take for granted, as Hegel himself does, that God is *pure actuality*, then we may should infer that according to Hegel the demarcation criteria for logic lies in its actuality. In this sense, as much as formal means actual, then formality serves as demarcation criteria for logic.

MacFarlane holds that according to Kantian view, the substantial thesis about the distinctive formal character of logic, such as it is understood by Kant, follows from a trivial definition of logic.<sup>82</sup> That is to say that if we estipulate that logic deals with thinking as such or with thinking in all its generality, then we must conclude that logic is formal in 2.2 sense.

<sup>&</sup>lt;sup>73</sup> Hegel, WL II, 219.

<sup>&</sup>lt;sup>74</sup> STERN, R., Hegelian Metaphysics, p. 357.

<sup>&</sup>lt;sup>75</sup> GEACH, P., God and the Soul, South Bend, Indiana: St. Augustine's Press, 1969, pp. 42ss.

 <sup>&</sup>lt;sup>76</sup> Hegel, WL II, 221.
 <sup>77</sup> Hegel, WL II, 221.

<sup>&</sup>lt;sup>78</sup> FESER, E., Scholastic Metaphysics..., p. 133.

<sup>&</sup>lt;sup>79</sup> Hegel, EPW § 153.

<sup>&</sup>lt;sup>80</sup> Hegel, WL I, 44.

<sup>&</sup>lt;sup>81</sup> Hegel, EPW § 85.

<sup>&</sup>lt;sup>82</sup> MACFARLANE J. G., "What does it mean to say that logic is formal?", pp. 91ss.

S. Houlgate holds that Hegelian thinking essentially entails the commitment of a philosophy without presuppositions. Of course, Hegel says, in the very beginning of the *Enzyklopädie*, that "Philosophy misses an advantage enjoyed by other sciences, namely it cannot presuppose the existence of its object as given to representation, nor its method of cognition, either for starting or for continuing".<sup>83</sup> So, according to Hegel, Houlgate says:

[W]e do not take for granted any particular conception of thought and its categories at the outset of philosophy or assume (with Kant) that concepts are "predicates of possible judgements". It also means, however, that we do not assume that thought should be governed by the rules of Aristotelian logic or that the law of noncontradiction holds, or that thought is regulated by any principles or laws whatsoever. In short, it means that we give up everything we have learned about thought from Plato, Aristotle, Leibniz, or Kant (or twentieth-century symbolic logic)-that we "abstract from everything". This is not to say that we ourselves assume that the principles of Aristotelian (or post-Fregean) formal logic are simply wrong [...]. It is to say that we may not assume at the outset that such principles are clearly correct and determine in advance what is to count as rational.<sup>84</sup>

This feature of philosophy in general concerns to logic specially: "Logic cannot presuppose any of these forms of reflection or laws of thinking, because these constitute part of its own content, and must first to be established within the logic itself".<sup>85</sup>

As we will see below, this sort of project forces to face up a big philosophical problem. According to these, the beginning of philosophy in general, and of logic in particular, must be completely indeterminate. It is exactly for this reason that logic, Hegel thinks, should begin with "being". But what next? Houlgate explains: "The method followed by presuppositionless thought is simply to render explicit or unfold what –if anything – is implicit or entailed by the thought of sheer indeterminate being with which it begins".<sup>86</sup> But, we should not take for granted that we know already what "to entail" means. As a matter of fact, establishing what does "to entail" mean constitutes part of logic's own content.

Furthermore, Houlgate adds:

The task of the fully self-critical reader of the *Logic* is thus not to adduce alternative arguments against which to test Hegel's own but to follow the course

<sup>&</sup>lt;sup>83</sup> Hegel, EPW § 1.

<sup>&</sup>lt;sup>84</sup> HOULGATE, S., *The Opening of Hegel's Logic*, Indianapolis: Purdue University Press, 2005, p. 30.

<sup>&</sup>lt;sup>85</sup> Hegel, WL I, 35.

<sup>&</sup>lt;sup>86</sup> Houlgate, 2005, p. 40.

of and "advance together with" (*mitfortschreiten*) what is immanent in each category, making sure that Hegel adheres rigorously to what is required by presuppositionless thought. If Hegel does not do this and either fails to draw out the *evident implication*<sup>87</sup> of a category or moves from one category to another on the basis of extraneous considerations (such as metaphorical association or the simple desire to press on), then he is subject to criticism.<sup>88</sup>

But, what is an evident implication? Maybe in this point Hegel must be read as a logician in Frege's tradition,<sup>89</sup> as much as he would consider the logic as a "Lingua Universalis" and not as a "Calculus Ratiocinator".<sup>90</sup> In any case, I suspect that Houlgate fails to realise an important issue in Hegel's philosophy, namely that someone "not only may, but even must presuppose some acquaintance [Bekannschaft] with [logical] objects".<sup>91</sup> In this sense, K. Westphal writes:

Simply rejecting all such ideas tout court would leave us bereft of term for even posing the problem, to say nothing of solving it [...] Some sort of prima facie cognitive abilities and terminology must be granted in order to have a problem and a discussion of it at all.92

So, after all, Hegel does suppose certain use of the expression "logic", but also certain history bounded to this use and to the interest generated by the object named by such expression. There is certain interest for Truth, and as a matter of fact, it is this very interest, which raises the whole pressupositionless thought issue. That is, only if someone is concerned with Truth, then has any sense to worry about the fact that a belief hinges on an unfounded presupposition. But Hegel holds that Truth is the logic's subject, such as Frege also does.

I think in this point Hegel departs from Kant's view. As we have seen, Kant adopts as a part of a trivial definition of logic that this deals with thought in all its generality. Nevertheless, Hegel argues that this is not a part of a trivial definition of logic, but of a substantive thesis about it, because presupposes that thought and reality go separate ways. Furthermore, Hegel thinks this presupposition turns out to be incoherent: takes for granted that reality stands on one side, and that thought on the other, but as much as thought is outside the reality, the thought is outside the truth; which, nevertheless, is taken as if were true – "an assumption which, while calling itself fear of error, makes itself known rather as fear of the truth".93

<sup>90</sup> Cf. HINTIKKA, J., Lingua Universalis vs. Calculus Ratiocinator: An ultimate Presupposition of Twentieth-Century Philosophy, Dordrecht/Boston/London: Kluwer Academic Publishers, 1997. <sup>91</sup> Hegel, EPW § 1.

<sup>93</sup> Hegel, PG, 70.

<sup>87</sup> Emphasis is mine.

 <sup>&</sup>lt;sup>88</sup> HOULGATE, 2005, p. 41.
 <sup>89</sup> Cf. BLANCHETTE, P., Frege's Conception of Logic, Oxford: Oxford University Press, 2012.
 <sup>19</sup> Cf. BLANCHETTE, P., Frege's Conception of Logic, Oxford: Oxford University Press, 2012.

<sup>&</sup>lt;sup>92</sup> WESTPHAL, K., Hegel's Epistemological Realism, p. 91.

To be sure, Hegel does not reject that logic is the science of thought as such, as a matter of fact he holds explicitly that logic is "the science of pure thought".<sup>94</sup> He rather argues that the sense of Kant's definition by which he concludes that logic is formal 2.2, depends on the presupposition of some conception of thought, which should be examined beforehand, and which is incoherent actually. Hegel does not think that thought were outside of reality, but even thinks that thought is "more real than matter".<sup>95</sup>

Someone might think that, since Hegel and Kant understand different things under the expression "thought", then they don't talk about the same subject and, therefore that all of this is only a discussion about names. Nevertheless, Hegel holds, as we have seen, not only that Kant understands something different than he does under the name "thought", and therefore under the name "logic", but that those that Kant considers to be the meaning of "thought" or "logic" is incoherent.

Let us take for granted, in order to elude the incoherence, that logic must deal with something real, and therefore, that whatever thought as such is, it must be real. Maybe the thought were *a part of reality*. But in such a case logic would be psychology. Of course this is not a thesis that should be rejected beforehand. But if logic were psychology, then there should be other science, maybe the philosophy of psychology. So, a pressupositionless philosophy could give away the name "logic", but nevertheless there would remain a research domain outside the boundaries of psychology, which it has been named "logic" traditionally.

Otherwise, Hegel's stance is that a pressupositionless philosophy of logic shouldn't assume as granted any conception of thought, except those that pressupositionless philosophy, paradoxically, should presuppose, namely that thought deals with Truth essentially. Or, better said, the occurrence of thought as an object of pressupositionless philosophy will be justified only as much as thought appears bounded to truth, but on such a way that thought doesn't stand on one side and truth on the other. Hegel holds that that representation of truth with which pressupositionless philosophy must presuppose some acquaintance is that according to which "*God* and He *only* is the true".<sup>96</sup> That is to say that the kind of representation of truth, which the philosophy may to presuppose, it's that named by Carnap "no-semantic".

One of the typically misunderstood topical issues of Hegel's philosophy is his theory of truth. Indeed has been lined in almost every stance of truth:

<sup>94</sup> Hegel, WL I, 57.

<sup>&</sup>lt;sup>95</sup> MIRANDA, P., Hegel tenía razón, p. 81.

<sup>&</sup>lt;sup>96</sup> Hegel, EPW § 1.

as a correspondentist, a coherentist, a defender of the identity theory, etc. [...] Many of the classical misunderstandings of his interpreters stem out of what it is believe to be his theory of truth [...] Hegel advanced ideas on truth redefining the concept of truth and distinguishing it from correction [...] In the case of correction we are presented with a relationship across statements and the contents that make them part of a true proposition, these are singular cases of truth bearing and truth making. Singular cases, however, are not the whole story for truth: for grasping truth means the process of achieving knowledge of a thing with respect to its essence.<sup>97</sup>

In Hegel own words:

Truth is understood first to mean that I *know* how something *is*. But this is truth only in relation to consciousness [...] mere correctness. In contrast with this, truth in the deeper sense means that objectivity is identical with the concept [...which means that] an object is true when it is what it *ought* to be.<sup>98</sup>

Hegel, therefore, holds that, from a pressupositionless point of view, truth should be predicated of reality or being in general, and not only of sentential ítems, or of sentential ítems only as much as this are *real*, putting aside whether such ítems has any special syntactic of sematic features. Furthermore, reference to God as the only truth suggests Hegel believes that philosophy must deal with degrees of truth, which are bounded to degree in which something is equal to its concept (Inwood, 434ss).<sup>99</sup>

Here, "concept" is taken as the universal of which the entity is an instance.

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<sup>&</sup>lt;sup>97</sup> REYES-CÁRDENAS, P., "Contemporary Hegelian Scholarship", p. 18.

<sup>&</sup>lt;sup>98</sup> Hegel, EPW § 213z.

<sup>&</sup>lt;sup>99</sup> INWOOD, M., Hegel, pp. 434ss.

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