

Reason, Thinking, *Geist*:

Epistemological Concepts in Frege's Philosophy

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Abstract: I analyze three crucial epistemological concepts that appear in isolated passages throughout Frege's work. First, I argue that the concept of reason should be understood as the faculty which gives sense to objectivity – that is, it makes knowledge possible. Second, after distinguishing thinking from psychological representations, I show how thinking enables the correlation between the spirit (*Geist*), which I conceive as an ego, and thoughts, which are ontologically independent and objective, but, from an epistemological standpoint, necessarily related to the ego. Third, I examine Frege's peculiar notion of 'being given' and claim that the givenness of thoughts to the ego amounts to giving meaning to objectivity through thinking, for without this, we would be unable even to understand what objectivity is. I conclude that Frege's fragmentary reflections on these issues can be better comprehended through a transcendental perspective that explains how knowledge functions as a whole, rather than being restricted to logic alone.

Keywords: Frege; Reason; Thinking; Spirit (*Geist*); Being Given

1. Introduction

According to the 'standard interpretation' – as mainly represented by Michael Dummett – Frege was not only a logician and a philosopher of mathematics, but also a philosopher of language, and even perhaps the father of the linguistic turn. Although Dummett was (to a certain extent) aware of some flaws in this interpretation (Dummett, 1993: 5-6), he continued supporting this view as a way of reading Frege's project. In line with this reading, Frege overcame modern philosophy – i.e., philosophy understood as epistemology, namely as the study of the nature, origin, and limits of human knowledge, therefore mainly based on the analysis of the subjective aspects of knowledge, which is the foundation of all philosophy – by means of a new philosophical standpoint focused on language. Even before Dummett, Peter Geach had asserted that Frege "wholly rejected an epistemological approach to philosophical knowledge" (Anscombe and Geach, 1961: 137). Philosophy of language was the new *prima*

philosophia (Dummett, 1973: 669). Within this framework, there is no place for any epistemology. Due to this interpretation, secondary literature mainly disregarded Frege's epistemological concerns.¹ Considering Frege's philosophy as a whole, we might agree with the 'standard interpretation' on one general point: mental representations are not relevant for logic and for philosophy in general – this is indeed the main claim of his anti-psychologist position. Having said that, does this emphasis on logic amount ipso facto to a dismissal of all epistemological concerns, mainly those regarding the subjective aspect of knowledge, for being something 'just' psychological?

Not only was Frege convinced that epistemology is not psychology, but he also considered it as a fundamental and independent part of philosophy. In his early review of Hermann Cohen's book from 1885, he emphasizes that knowledge is the object of epistemology (*Erkenntnistheorie*) and epistemology must be sharply separated from psychology (Frege, 1967: 102). Even much later, in a letter to Knittermayer (1912), he fervently opposes to the idea of replacing a chair in epistemology with a chair in (experimental) psychology instead (Schlotter and Wehmeier, 2013: 601).

The following article is based on three general convictions. First, Frege was undoubtedly concerned with certain epistemological topics, such as cognitive activities and the bearer of these acts – topics that are significant for logic and not mere psychological representations. Second, he never developed a full-fledged, systematic account of these topics; on the contrary, his works contain only occasional and fragmentary references to epistemological issues, which he never addressed in a comprehensive manner. Third, as I will attempt to draw out, Frege's philosophy lacked the methodological or the conceptual 'tools' necessary to adequately engage with these epistemological concepts.

First, I analyze Frege's concept of reason, as introduced in some early and isolated passages from *Die Grundlagen der Arithmetik* (1884) (in what follows GL)² and the way in which objectivity is 'given' to reason. Second, I argue why reason, as the necessary subjective correlate of objectivity, should be better conceived as a faculty. Third, I examine some of Frege's later passages from *Der Gedanke* (1918) (in what follows Ged) and, focusing on the role of thinking as the act of grasping thoughts, I claim that thinking is not a psychological representation but rather a subjective / objective cognitive act, which is a fundamental epistemic

¹ The first works on Frege's epistemology appeared in the early 1980s (cf. Kitcher, 1979; Sluga, 1980; Elridge, 1982).

² All translations from German are mine.

condition for truth. Fourth, I address Frege's notions of the bearer of thinking and of spirit and maintain why the spirit should be understood as a transcendental ego and not as an empirical mind. Fifth, I highlight that there is a necessary correlation between this ego – or reason as its highest cognitive faculty – and objectivity (thoughts).¹ Sixth, I contend that these epistemological considerations, which do not ontologically reduce objectivity to subjectivity, show that objectivity cannot have any meaning for us at all, without being correlated with the ego. I conclude by explaining why the grasping of thoughts by the ego or, the other way around, the givenness of thoughts to the ego amounts to giving meaning or sense to objectivity, and why all these issues can be better comprehended with a transcendental perspective.

2. Reason and objectivity

Frege's analyses were clearly focused on the philosophy of logic (cf. Künne, 2010). But on occasion one can find some isolated passages with a reference to some key epistemological concepts. Such is the case with the concept of reason (*Vernunft*) – most certainly a heavily loaded philosophical concept – which appears in GL, and which does not quite fit in the standard interpretation of Frege's thought.

In § 26, after rejecting the conception that numbers are something subjective, Frege differentiates between that which is objective (*Objective*) and that which is real / actual (*Wirklichen*). Without giving any definitions of these (primitive) concepts, he presents at least some examples in order to clarify the meaning of these concepts. So, the 'axis of the earth' and the 'center of mass of the solar system' are both objective but not real (Frege, 1990: 35). And since Frege's project was to address (ideal) objectivity and not real spatial things in the world, his goal was to understand what objectivity – which does not entail any reality – is. Having established this conceptual difference, Frege says:

I understand objectivity (*Objectivität*) as [something] independent of our sensing (*Empfinden*), intuiting (*Anschauen*), and representing (*Vorstellen*), and of conceiving internal pictures out of recollections of earlier sensations, but *not* [as something] independent of reason (*Vernunft*); for to answer the question what are things independent of reason would mean as much as to judge without judging, to wash the fur without wetting it. (Frege, 1990: 36; my emphasis)

¹ Objectivity is a more encompassing notion than thought, which, in turn, is something objective. Given that an analysis of these concepts is beyond the scope of this article, and for the sake of simplicity, I will simply consider both terms as the 'objective side' of knowledge.

Without any further explanations, Frege adds at the end of the following paragraph (§ 27): “The basis (*Grund*) of objectivity cannot rely on a sensory impression, which, as an affection of our soul, is completely (*ganz*) subjective, but rather (...) on reason” (Frege, 1990: 38). Incidentally, the use of *ganz* implies a certain level of graduation in a comparative context. While impressions are ‘completely’ subjective, reason must be accordingly ‘less’ subjective.

If we consider Frege’s (alleged) refusal of epistemology, these are indeed strange passages. Moreover, he neither defines nor further explains the concept of reason in this text or elsewhere. This is perhaps the reason why this passage has been neglected or directly left aside in secondary literature. Michael Dummett speaks about a “cryptic remark” (Dummett, 1981: 513)¹ and Wolfgang Künne refers to it as an “obscure remark” (Künne, 2010: 372, fn. 364). Other critics, although without much inquiring into the meaning of this fundamental concept, at least consider reason as a subjective faculty of the mind. Thus, von Kutschera speaks of “human reason” in reference to this text (von Kutschera, 1989: 179). Wolfgang Carl properly points out that this passage highlights more an epistemological concern than an ontological one (Carl, 1994: 79-80). In a more Kantian vein but making a good point, Hans Sluga emphasizes that this passage lays bare the fact that “it is incoherent for us to try to say what things are in themselves, independent of our judgments” (Sluga, 1980: 120). At least one point is clear, Frege is explicitly trying to avoid certain ontological and epistemological commitments to some positions in (the philosophy of) mathematics, as correctly acknowledged by Dummett. When presenting the status of numbers (of both natural and real numbers) as objective ‘entities’, Frege is taking distance from formalist, empiricist, and psychologist accounts of the concept of number. So far so good. But since numbers are logical objects, i.e., something objective, they cannot be given in a sensation or an intuition. Hence, they can only be ‘given’ to reason (Dummett, 1981: 502-503), whatever this might mean.

To begin with, ‘reason’ can be the translation of two different German terms: *Grund* or *Vernunft*. While the former means foundation or ground, the latter is related to the act of grasping or thinking (something). Incidentally, in the passages quoted above, Frege explicitly uses the term *Vernunft*, even when he continuously uses the concept of *Grund* throughout his works. So, the very choice of the word *Vernunft* seems to indicate that Frege actually refers to

¹ “I do not, indeed, feel wholly sure what Frege intended in speaking as he does of ‘reason’ in the two passages from *Grundlagen* (...) If more lies behind these two remarks, it seems irrecoverable now, since there is no echo, let alone elucidation, of them in any other place (...) [W]hile it is clear what Frege is denying, it is obscure what he is asserting” (Dummett, 1981: 514-515).

something like the subjective acts of grasping (something), or even perhaps the cognitive power or faculty of grasping (something). Moreover, it should be remarked that in GL § 26 Frege does not speak *stricto sensu* about sensations, intuitions, and representations, as rendered in the English translation – which are literal translations from the German nouns *Empfindungen*, *Anschauungen*, and *Vorstellungen*. On the contrary, he explicitly uses the infinitives *Empfinden*, *Anschauen*, and *Vorstellen*, which should be rather translated as ‘to sense’, ‘to intuit’, and ‘to represent’, or by using the ‘-ing form’: sensing, intuiting, and representing. This shows that Frege does not compare reason with a sensation or an intuition, but with the *act of* sensing, intuiting, and representing. This appears to be another hint that Frege thinks that reason is something related to cognitive acts, in short, to the ‘subjective’ side of knowledge.

In this context, the crucial notion of givenness must be introduced.¹ It appears in GL – and also in his later work (see below, Section 7) – in close connection with reason. However, little attention has been paid to the precise meaning of this notion in Frege’s writings. When explaining the concept of number in GL §62, Frege asks: “How shall a number be given to us (*uns ... gegeben sein*), if we cannot have a representation or an intuition of them?” (Frege, 1990: 73, my emphasis).² The answer, according to him, lies in the context principle. Yet, he does not give any further explanation of how numbers (as self-subsistent objects) are given, or how this is related to the context principle, i.e., to sentences or propositions (*Sätze*). And even when Frege decidedly rejects the idea that objectivity can be grounded in an intuition, he does not attempt to explain the connection between givenness and sentences – that is, language – either. How is the symbolic expression of something in language, such as a number-term (*Zahlwort*), connected with the idea of a number (*Zahl*) as a self-subsistent object (*selbständiger Gegenstand*) that is given to reason? If language is considered as a symbolic device, then it does not *give* anything; it merely represents or expresses something by means of its symbolic tools. Thus, the central problem remains unresolved. Whether ‘to be given’ is meant purely metaphorically, or whether it signifies something else entirely, Frege offers no clear answer.

Carl correctly points out that the “question of how an object is ‘given to us’ is the question of by which cognitive faculty it is accessible” (Carl, 1994: 42). According to him, numbers (which are “objective but not real”) are only accessible by (or given to) reason or thinking.

¹ Frege does not speak of givenness as a noun, but he rather uses verbal expressions such as ‘to be given’ (*Gegeben-sein*). For the sake of simplicity, I will refer to ‘givenness’, understood as the fact that something (objectivity) ‘is given’ to reason or the ego.

² Incidentally, in this passage Frege actually uses the German nouns *Vorstellung* and *Anschauung* as something we ‘have’ and not as something we ‘do’, as it was the case in GL § 26.

Although I agree on this point with Carl's interpretation, I do not share his conclusion that there is no real conflict between the context principle and the givenness of numbers to reason, based on the fact that Frege does not provide any explanation of the meaning of 'to be given'. If 'to be given' amounts to 'to have a direct access' (by reason), this seems to lead directly to something akin to an intellectual intuition. Indeed, in the history of philosophy the concept of givenness is usually related to the concept of *intuitio* (either intellectual or sensible). Admittedly, Frege never speaks about an intellectual intuition and only uses the term 'intuition' to refer to sensible intuitions. Nonetheless, the unclear notion of 'being given', as used in GL and elsewhere, cannot be so easily taken for granted without any further explanation, for it is a very complex notion, mainly because it is introduced in the context of the foundation of arithmetic (see next Section), i.e., in the field of logic. An analysis of the notion of intuition lies beyond the scope of this article.

3. Reason as a faculty

In the Conclusion, almost at the end of GL (§ 105), there is another important (though ambiguous) passage in which Frege refers again to reason. In his final account of numbers, he says: "the actual object of reason is reason" and then immediately adds that in the field of arithmetic we do not know objects (*Gegenstände*) "as something external (*Fremdes*) through the mediation of the senses", because (ideal) objects "are *directly given to reason (unmittelbar der Vernunft gegeben sind)*". And reason "can fully comprehend (*durchschauen*)¹" these objects, because they are "that which is its most inherent [thing] (*ihr Eigenstes*)" (Frege, 1990: 115, my emphasis). There are at least two points to be made. First, even when barely mentioned, the 'being given of something to reason' is perhaps the most fundamental issue underlying this account. Second, it repeats the idea that objects *are given to* reason or, the other way around, that reason *comprehends* those objects. So, in light of the analyses carried out so far, it is at least plausible to consider that reason actually refers to the subjective cognitive faculty of grasping something. Otherwise, how can it be explained that reason 'comprehends' something? Or, the other way around, how can logical objects be given to reason or how can reason be receptive to something?

¹ The German verb *durch-schauen* is difficult to translate, as it means 'to look through the appearances and to penetrate into the essence of something'.

Undoubtedly, § 105 does not dispel doubts regarding the meaning of (ideal) objects as given to reason. The main problem is that reason, which is certainly one of the most fundamental concepts in the history of philosophy, cannot be so easily overlooked, let alone dismissed. Given his original logicist project, it is possible to make clear why Frege firmly rejects any connection between (objective) logical objects and (subjective) sensations, intuitions, and representations (Frege, 1990: 36). Yet, based on what has been said so far, reason can be considered as a cognitive faculty which is directly related to objectivity. Given his reluctance to introduce empirical or psychological elements into the field of logic, reason can also be conceived as having a transcendental function, because it makes knowledge possible by giving sense to objectivity (*ut infra*). Hence, reason is the condition of possibility of knowledge. Frege's underlying idea appears to be that without this cognitive faculty of grasping objectivity or without objectivity being given to this faculty, objectivity does not have any meaning (see below, Section 7).

One common objection to this account is that the concept of reason – as it is used in these passages – is not intended to refer to a cognitive faculty, but rather to something akin to the Greek *logos*. But what does this mean? Setting aside all the different meanings of the concept of *logos* in Ancient Greek philosophy, let us suppose, for the sake of the argument, that there is something like a general concept of *logos*, which is, roughly speaking, some sort of logical structure that goes through all reality (in the broadest sense of the word), like a 'realm of validity'.

As an example, Joan Weiner argues that the source of primitive logical laws is "reason alone" (Weiner, 2020: 291; cf. Weiner, 2004: 21). Weiner grounds her analyses on Frege's distinction between the three sources of knowledge: sensible experience, pure intuition (which only applies to geometry), and conceptual analysis. According to her view, the only possible source of knowledge of logical laws is conceptual analysis, which is, as she explicitly states, "reason (or logic)", in short, something based on logical means (Weiner, 2020: 140, fn. 70).¹ Consequently, Weiner claims that Frege's epistemology is not concerned with individual or psychological cognitive activities, i.e., it is not 'personal epistemology' (Weiner, 2020: 55, 206–208). On the contrary, 'actual epistemology' is rather about proofs or justifications (Weiner,

¹ Frege addresses these three sources of knowledge in a well-known unpublished article from 1925 (Frege, 1969: 286–294). Despite admitting his lack of an answer, Dummett points out that, since we do not have any special faculty such as a mathematical intuition for apprehending logical objects, we only know them by means of the faculty of reason (Dummett, 1981: 552). Whether reason, as I understand it in this article, could be considered a 'fourth' source of knowledge for grasping logical objects, is an open question which has to wait for another occasion.

2020: 291; cf. Weiner, 2004: 9). While the latter is related to logic, the former is just empirical psychology of knowledge (Weiner, 2020: 35). In brief, reason and epistemology are reduced to logic. *Mutatis mutandis*, Tyler Burge also comes to a similar conclusion (Burge, 2005: 313–316). So, both Weiner and Burge agree on at least one point: epistemology is the grounding or justification of logical laws and has absolutely no relation to any psychological explanation of how knowledge works. Yet, the question still remains: what does ‘reason’ mean here? Neither Weiner nor Burge give a precise account of the meaning of this fundamental concept. Ulrike Kleemeier also denies that reason refers to a cognitive faculty, but at least she asserts in a more explicit way that ‘reason’ amounts to the set of all logical laws (*Menge aller Denkgesetze*) (Kleemeier, 1997: 147).

Let us now suppose that Frege actually meant the set of all logical laws of thought every time he referred to reason. If we consider the context in which reason first appears (Frege, 1990: § 27), then we face the following problems. First, if we accept this concept of reason, it does not make any sense that Frege analogically compares the relation between objectivity and reason with the relation between the judgment and the act of judging, or, furthermore, with the metaphorical relation between washing something and getting wet. In either case, an act is implied (i.e., judging, getting wet). Second, in the same vein, it makes no sense either to compare and differentiate reason (taken just as a set of laws) and some mental processes such as sensing or intuiting if it is not implicitly assumed that they share some categorial aspects. In other words, it does not make any sense to compare numbers with elephants. If ‘reason’ amounts to the set of all logical laws, then it should be explained what is the categorial connection (even for a meaningful differentiation) between logical laws and the *acts* of sensing, judging, let alone the metaphorical ‘getting wet’. Third, given that the very idea of logical laws implies for Frege something objective as such, then, to understand objectivity by referring to reason – which *ex hypothesi* is a set of logical laws, i.e., as such something objective – does not seem to explain much. If objectivity is dependent on reason, and reason is the sum of all logical objective laws, then reason is also objectivity. This appears to be a circular argument. Fourth, if reason understood as this *logos* is the sum of all objective laws, why do we need reason as a kind of mediation between us (or, if preferred, our language) and objective laws *as such*? Is this not a clear sign of an unnecessary ‘inflationary ontology’? Fifth, if we consider epistemology in the way Weiner does, we face a rigid either/or argument: there is either ‘actual’ epistemology, which is entirely about logic, or ‘personal’ epistemology, which is only about psychology. Given that there are only these two options, this tenet necessarily excludes the

possibility of conceiving reason as a transcendental cognitive faculty, namely as something which is neither logical *stricto sensu* nor psychological.

Bearing in mind what has been said so far and based on the lack of an explicit explanation given by Frege himself, the most plausible solution appears to be to consider reason as a transcendental faculty. Otherwise, it seems that either the cycle or the inflationary movement is inevitable. I understand ‘transcendental faculty’ as the non-psychological and nonempirical subjective function (see below, Section 5) which enables the cognition of objectivity. If Frege had said that objectivity was just a *Ding an sich* and all logical laws with their objective validity were fully independent of everything, this would have been bare ontological Platonism in the most basic sense of the word, and epistemology would have been simply left aside. Frege did say that about objectivity, but he also said something else, namely that there is reason and objectivity is in some sense dependent on it. What is that supposed to mean?

Let’s imagine that objectivity is merely considered as a Platonic *eidos* or a Kantian *Ding an sich*, namely as something fully unconnected with the ‘subjective side’ of knowledge (in any sense of the word). From a pure ontological perspective, this makes perfect sense. However, if this *eidos* or *Ding an sich* was entirely independent from any subjective grasping, we would not even understand the meaning of what it is; in our case, objectivity would be just an abstraction and a meaningless X, a merely supposed or just postulated something. But this is not what Frege says in the passages analyzed above. On the contrary, he rather asserts that for objectivity to mean something, reason cannot be absent. Evidently, this dependency on reason is not an ontological one: for it is clear that for Frege objectivity is something independent of reason, language, etc.: “We grasp thoughts, but we do not produce (*erzeugen*) them” (Frege, 1969: 214, cf. 138; Frege, 1990: 107-108; Frege, 2006: xxiv). However, from an epistemological point of view, if objectivity is supposed to make any sense for us at all, it cannot be unrelated to (or independent of) reason.

Based on what has been said so far, this account of knowledge as a whole should be better understood from a transcendental perspective, because reason is that which ‘gives sense’ to objectivity (see below, Section 7). In other words, objectivity cannot be understood apart from the grasping of reason or, conversely, apart from its ‘being given’ to reason. It should be emphasized that this reading does not reduce objectivity to subjectivity – a move which would undoubtedly entail a form of logical psychologism – since the argument at stake is neither logical nor ontological, but rather epistemological, as will be discussed in detail in what follows.

Therefore, it can be argued that Frege conceives of reason as a faculty, rather than as the Greek *logos*, understood as an objective set of logical laws.

To summarize, in the context of his rejection of the view that numbers are something subjective (Frege, 1990: § 26 ss.), Frege appears to suggest that there is a sort of necessary relation between objectivity and reason, conceiving the latter as the power of knowing objectivity. The necessity is implied by the very concept of independence (*Unabhängigkeit*) as used by Frege: objectivity is not independent of reason. In these somewhat ‘isolated’ and ‘dark’ passages, Frege shyly crosses the line from a merely logical foundation of arithmetic toward an epistemological consideration. And then he stops, without giving any further explanation.

4. Thinking thoughts: The difference between representing and thinking

In line with what has been said so far but in a different historical context, we find in Ged many explicit references to epistemological issues, together with several ontological reflections, in which Frege presents a clear commitment to some sort of ontological Platonism based on the idea of a ‘third realm’ (of thoughts), which is ontologically independent of the realm of external things and the realm of internal (mental) representations.

In a well-known passage, Frege presents the following analytical dissection of an assertive sentence – a distinction which also appears in other posthumous writings (Frege, 1969: 201, 214, 271; cf. Frege, 1980: 41):

1. the grasping (*Fassen*) of thought (*Gedanken*) – thinking (*das Denken*),
 2. the recognition of the truth of a thought – judging (*das Urteilen*),
 3. the manifestation of this judgment – asserting (*das Behaupten*)¹
- (Frege, 1976: 35)

This passage (as some others) not only presents an explicit reference to epistemological concepts, but it also shows how important were these concerns for Frege, because thinking, as the grasping of thoughts, is an *epistemic condition* for the recognition of truth in a judgment²,

¹ In order to preserve the precision of Frege’s original phrasing, I have rendered the translation as literally as possible.

² An analysis of Frege’s concept of truth (and, of course, as directly related to it, of judgment) is beyond the scope of this article. In any case, the dimension of meaning (addressed here) is the condition of possibility of truth, i.e., it is logically prior.

which, in turn, is the condition for logic and ipso facto of science in general. This is a very basic inference: without thinking there are no judgments, and without true judgments there is no logic, hence, no science. But it should be remarked here that these epistemic acts are a necessary condition for logic, unlike, for instance, language, which is just a circumstantial or factual condition.¹ And, as I will argue, neither the act of grasping nor the recognition of truth should be understood in a psychological sense.

One fundamental difference introduced in *Ged* is that between the act of thinking (*Denken*) and the mere psychological act of representing (*Vorstellen*). On the one hand, representing is the act of having psychological images or pictures in our minds (e.g., as when, while speaking about a triangle, I picture it as green or red, big or small, etc.). On the other hand, thinking is for Frege a very specific cognitive function as it exclusively refers to the cognitive act of grasping thoughts. As many passages exhibit, Frege was perfectly aware of the difference between having mere psychological ideas in the mind – which is something merely empirical – and the cognitive grasping of objective thoughts for which he only uses the German term *Denken*. Although both are subjective acts – indeed, “[t]hinking is a mental process (*seelischer Vorgang*)” (Frege, 2006: xv) – thinking is quite a peculiar kind of act, as it is not something entirely subjective, in the sense that it cannot be fully reduced to something psychological, for it is something objective as well. In other words, it is something both subjective and objective at the same time. This does not necessarily lead to a contradiction, given that subjective acts can be either ‘purely’ subjective (such as the picturing of a dragon) or objective (as when I grasp an arithmetic addition). In brief, thinking is something subjective because it is a mental act performed by the knowing ego (see below, Section 5), but, at the same time, it is objective as it accomplishes and makes possible the fundamental cognitive function of grasping objective thoughts, in short, of making sense out of them.²

Admittedly, the very opposition between ‘entirely subjective’ and ‘subjective-objective’ mental acts involves a certain tension. However, the mere acknowledgment of some mental acts as objective – without denying their subjective ‘nature’ – does not necessarily entail a

¹ Frege does not speak about ‘necessary’ or ‘circumstantial’ conditions. This is just a heuristic tool I propose to understand that certain items (such as thinking) *must be* there for knowledge to be possible, while some others (such as mental images, representations) are only factually there but they are not something necessary and implied by the very nature of knowledge.

² Recently, Garavaso and Vassallo hold the bold thesis that Frege’s philosophy is a philosophy of thinking (Garavaso and Vassallo, 2015). Despite the value of addressing this unattended topic, some ideas are difficult to accept. I do not think, first, that philosophy of thinking was Frege’s main concern and, second, that the relationship between thoughts and thinking undermines the ontological transcendence and independence of thoughts or leads to a form of psychologism.

subjectivization of knowledge. On the contrary, such difficulties could be avoided by adopting a transcendental perspective, since the very notion of cognitive faculties that are simultaneously subjective and objective lies at the core of transcendental philosophy. This perspective is supported by Frege himself in his “Logik” from 1897, in a passage where he explicitly acknowledges the tension between the subjective and objective aspects of this peculiar act of thinking:

(...) the grasping (*das Erfassen*)¹ of this law [i.e., the law of universal gravitation] is indeed a mental process (*seelischer Vorgang*)! Yes! But it is a process which lies at the boundary of the mind (*Seelisches*)² and for that reason *it cannot be completely understood* from a pure psychological standpoint, because *something essential (etwas wesentlich) comes into consideration*, which *stricto sensu* can no longer be considered something mental: the thought (*der Gedanke*); and perhaps this process is *the most mysterious of all* (...) It is enough for us [to acknowledge] that we can grasp thoughts and recognize them to be true; how this happens is a question of its own. (Frege, 1969: 157, my emphasis)

And Frege adds: “This question is still barely understood in its complexity” (Frege, 1969: 157, footnote), clearly emphasizing not only how important this topic was for him, but also that it was still an enigma. Dallas Willard refers to this ‘neither-nor-perspective’ as an ‘impurely psychological standpoint’, namely a perspective which is simultaneously psychological in a sense and non-psychological in another (Willard, 1994: 242). I would slightly modify this expression and rather speak about a ‘purely transcendental standpoint’. In a similar vein, Mario González Porta correctly holds that decisions (like judgments and thinking) are not something subjective in a mere psychological sense, like representations, because they are not subject to the mechanical laws of an empirical mind. This allows a new understanding of subjectivity in a non-psychological sense (González Porta, 2019). In brief, thinking is a sort of unique and peculiar (even mysterious!) objective mental process. This insight can lead to a transcendental understanding of this subjective / objective cognitive process which makes knowledge possible. In this context, Frege asks himself if there is something ‘behind’ thinking, in other words, he raises the question about what (or who) is the bearer of these acts.

¹ Although there are some slight differences between the German verbs *fassen* and *erfassen*, for the sake of simplicity, I translate both as ‘grasping’. In any case, Frege acknowledges that this term is used in a metaphorical sense (cf. Frege, 1976: 49, fn. 6).

² For conceptual reasons, I translate *Seelisches* as ‘mind’ and *Geist* as ‘spirit’.

5. The bearer of thinking: The spirit as transcendental ego

Frege explicitly refers to a bearer (*Träger*) of the acts of grasping thoughts, yet he offers little elaboration on this notion. The central question, then, is whether this bearer amounts merely to the mind – as most interpreters tend to assume – or whether it can be understood as something more, such as a transcendental ego. A careful answer to this question could shed light on the present interpretation of Frege’s epistemology.

Recently, several works have addressed Frege’s conception of the agent of knowledge. Mark Textor offers an account of Frege’s understanding of judgment as the recognition of truth, conceived as a non-propositional attitude involving a thinker, a thought, and an object (namely, the truth-value) (Textor, 2010). Despite the value of this contribution, the author says little about the relation between the thought and the thinker, or about the ‘nature’ of the thinker itself. Maria van der Schaar (van der Schaar, 2017) also provides a nuanced interpretation of Frege’s theory of judgment, which leads to the suggestion that the judging agent may be understood as a transcendental ego. She rightly argues that, although the foundation of logic consists in axioms and definitions, in a transcendental sense, logic presupposes the fundamental epistemological notions of reason and spirit – concepts that are neither empirical nor strictly logical. However, the problem is that she does not clarify the meaning of these crucial terms. It remains unclear what is precisely meant by reason, ego, or *Geist*.

Admittedly, the concept of mind is semantically (and historically) far less burdened than that of the transcendental ego, as the mind can be understood simply as the set of cognitive faculties (higher or lower) and general awareness – that is, a kind of Humean theatre or bundle of flowing representations. A Humean-style reading of Frege’s concept may allow one to avoid a transcendental perspective. However, the Humean notion of mind refers to an empirical bundle of experiences, something Frege would likely have rejected, given his resistance to introducing empirical or psychological notions into the domain of pure thought. Thus, even though Frege does not explicitly invoke a concept such as the transcendental ego, the question cannot be dismissed so easily. Certain passages suggest that the notion of the bearer points to something more than a merely empirical, Humean mind.¹

¹ In his analysis of Frege, Stepanians rightly speaks of thinking acts as “parts of the stream of consciousness of a thinking or representing subject (*Subjekt*)” and also refers to the subjectivity (*Subjektivität*) of thinking as related to the objectivity of thought (Stepanians, 1998: 182), but, unfortunately, he does not provide any further explanations about these concepts.

In an important passage from *Ged*, Frege briefly addresses this bearer by saying that not everything can be analyzed in terms of psychology and points out that there must be a “special spiritual faculty” (*ein besonderes geistiges Vermögen*) which must (*muss*) correspond to the act of thinking (Frege, 1976: 49-50). This text seems to indicate that there is at least some level of the mind that cannot be reductively understood solely as the bearer of psychological acts. And after emphasizing that neither logic nor mathematics can address these topics, he gives a brief and puzzling account of souls, the content of consciousness, and individual humans as the bearers of these objective contents. Of course, these concepts *can* be conceived in an empirical sense. But then we find an astonishing remark: there is – or there can be (he is not fully clear in this respect) – an “investigation of the spirit” (*Erforschung des Geistes*), that he explains with a fundamental (and not less astounding) addition: “of the spirit (*des Geistes*), not of the spirits (*Geister*)” (Frege, 1976: 50). English translations usually wrongly render ‘mind’ for *Geist*, fully disregarding the historical background of this term in the 19th-Century-German intellectual world. And even when it is quite unlikely that Frege was referring to the Hegelian concept of spirit – as he was neither very acquainted therewith nor interested in German Idealism at all (cf. Künne, 2010: 369) – it is as well undeniable that the German concept of *Geist* has a high semantical load and a conceptual history which cannot be easily overseen. Given the scope of this article, I will focus on the concept of spirit. The question about the ‘investigation of’ the spirit will remain a topic for future research.

This passage is a clear hint that Frege is thinking about something that is much more than just a Humean mind. Yet, as usual, Frege does not say much more about the ‘nature’ of this universal spirit and leaves many open questions. But the dismissal of the plural and individual form (*Geister*) in favor of the singular and universal form (*Geist*) indicates that Frege is – at least tacitly – admitting a conceptual distinction between a (kind of) universal ego, which only has a singular form, and the individual psychological subjects, considered in their plural form. This characterization of the spirit in the singular form as a general or universal ‘entity’ is close to the notion of a transcendental ego.

Disregarding possible historical connections and focusing instead on purely conceptual issues, it should be briefly noted here that Kant roughly conceives the transcendental ego as the unity of self-consciousness, which functions as the condition of possibility of knowledge. As Kant emphasizes throughout his *Critique of Pure Reason*, this ego is not to be identified with

the empirical ego.¹ Besides Kant, Husserl's phenomenology is also, *mutatis mutandis*, one of the most important philosophical positions on the transcendental ego. He maintains that the natural and the transcendental ego are one and the same, but considered from different perspectives. The epoché brackets the natural world (including the natural ego) and discloses the ego as the source of meaning of knowledge and experience in general, viz., Husserl's transcendental ego is what gives sense (or meaning) to that which is given – Husserl addresses these topics in many different passages throughout his work (for a summary of this position, see my Niel, 2011: Chapters 11–13). As we will see in what follows, depending on the passages considered and even the concepts emphasized, Frege's view can be closer to Kant's or to Husserl's standpoints. For the purposes of this article, it is sufficient to state that, in a broad sense and at a purely conceptual level, Frege's spirit can be related to a broad notion of transcendental ego. As it is not something natural or psychological, it is the bearer of thinking, the condition of possibility of knowledge, and *gives* sense to that which is given (viz., objectivity).²

It is important to note that this notion of spirit is visibly connected with the early notion of reason (as seen above).³ Even when Frege never mentions a connection between both concepts, the core idea of *Ged* is conceptually very similar to the one expressed in the 'dark passage' about reason from GL – Künne rightly admits that the later concept of spirit "reminds" the early concept of reason, but he does not further inquire into this topic (Künne, 2010: 526). We can surely relate reason (GL) to the notion of a special spiritual capacity (*Ged*), because both refer to a cognitive faculty or capacity (*Vermögen*) which makes knowledge possible; in other words, they play a transcendental function. So, reason as a faculty and the spirit as the ego are the conditions of possibility of grasping thoughts, hence of truth and knowledge, which presuppose that grasping. Even timeless ideal entities must be related to this source of knowledge, because otherwise they would not make any sense at all. Accordingly, this transcendental perspective yields an encompassing depiction of how knowledge actually works

¹ However, there is at least one passage in which Kant asserts that the transcendental and the empirical ego "are the same subject" (Kant, 1787: B155).

² A detailed comparative analysis of the Kantian and the phenomenological notions of 'transcendental' cannot be addressed here and must be a topic for another paper.

³ Just as a brief historical footnote, it is interesting to mention that Lotze's *Mikrokosmos* – which Frege quite likely read and was considered one of the most influential philosophical works at his time – speaks about a *rational spirit* (*vernünftiger Geist*), incidentally relating both concepts addressed here. Unlike the soul (*Seele*), which is something related to the natural animal kingdom and is mortal, the rational spirit goes beyond earthly life and is not mortal (Lotze, 1858: 135 ff.; cf. Gabriel, 1986 and Gabriel, 1989).

as a whole, i.e., beyond logic. But the question now is, how is this ego related to thoughts or objectivity?

6. A correlation between the ego and thoughts

There are some passages which not only indicate that there is a necessary correlation between the ego and thoughts, but even assert that both thinking and its bearer are the necessary epistemological presuppositions for grasping *meaningful* thoughts, meaning ‘meaningful’ something that makes sense, that can be comprehended (in the most basic sense of the word), as opposed to something devoid of sense (*sinnlos*) or unintelligible – admittedly, there is here some unavoidable *circulus in definiendo* (for more on this topic, see below, Section 7). The following passage, for instance, introduces the term ‘aiming’ (*hinzielen*) (at something) in order to express the necessary (again emphasized by *muss*) directedness from the bearer via thinking towards something other than itself, i.e., thoughts:

The grasping of thoughts presupposes someone who grasps (*Fassenden*), someone who thinks (*Denkenden*). This one is then the bearer of thinking, but not [the bearer] of thought. Although the thought does not belong to the content of consciousness of the one who thinks, yet there must be something in consciousness aiming at (*hinzielen auf*) the thought. (Frege, 1976: 50)

This is perhaps Frege’s most explicit reference to something akin to intentionality.¹ The text displays a correlation between two ‘poles’ of knowledge: thoughts and the knowing (grasping and thinking) agent. It is important to note that this passage immediately follows the text in which Frege introduces the concept of spirit. Although Frege does not provide any indication of a direct relationship between the spirit and ‘the one who grasps (or thinks)’, this relation can be perfectly inferred not only from the textual context, but also based on the conceptual meaning of these notions, since both refer to the ‘subjective pole’ of knowledge as something necessarily correlated with objectivity. Frege even emphasizes that the knowing ego is a presupposition (*Voraussetzung*) for thinking thoughts. As it is clear by now, this correlation is only possible by means of thinking as an objective cognitive activity performed by the ego, which precisely connects the ego and thoughts.

¹ Paul Ferdinand Linke refers to this passage as a new discovery of intentionality in the field of logic (Linke, 1961: 56). In his analysis of this passage, Künne also refers to thoughts as “intentional objects” (Künne, 2010: 514 ff.).

The following passage supports this interpretation by referring to a peculiar relation between the bearer and thoughts and emphasizes that, in order for objectivity to make sense or to have a meaning for me/us, it cannot be a non-temporal and unrelated something, a sort of *Ding an sich*:

Even that which is timeless *must be* somehow intertwined (*verflochten*) with temporality, *if it is [or means] anything for us*. What would be a thought *for me* (*für mich*) that was never grasped *by me* (*von mir*)! But since I grasp a thought, I come into a *relation* to it and it to me. (Frege, 1976: 52, my emphasis)

Even when Frege is not entirely sure about how this works – as indicated by the term ‘somehow’ (*irgendwie*) – we may see that there is a necessary correlation – a modality introduced by the German verb *muss* – between the temporal cognitive act of grasping and the non-temporal thought. But we should stress here again that the necessity introduced by the German *muss* is an epistemological necessity and not an ontological one, i.e., thoughts do not need any reference to the ego for subsisting as such. As indicated above, ontologically speaking, thoughts simply subsist in their timeless ‘third realm’. But, in their atemporal realm, they cannot have any meaning or make any sense unless they are related to me (or us) as the knowing subject(s). Moreover, this passage shows an implicit (and astonishing) assumption of a first-person perspective, introduced by the several references to the first-person plural or singular pronouns: us / me.¹ The ego is the point of reference and source of meaning (again, not of being!) for objectivity. As already indicated, from an ontological perspective an ideal and non-temporal thought must not be related to my cognitive capacities. But from a perspective based on knowledge as such, the lack of a reference to a knowing agent (ego) does not make any sense at all. Only the epistemological standpoint introduces the issue of the meaning of logical entities, because we cannot ask what objectivity *means* without asking, at the same time, *for whom* this objectivity means something or makes sense. If objectivity means anything, it means something for someone. Otherwise, objectivity is just like a lost star floating in the middle of nowhere.

¹ van der Schaar’s occasional references to oneself, himself/herself, and myself, are apparently closer to a phenomenological perspective than to an analytic one (van der Schaar, 2017: 15-17, 21).

What value could have for us that which is eternally unchanging (*das ewig Unveränderliche*), [if] we could neither experience [its] effects (*Wirkungen*) nor could it have [any effects] on us (*auf uns*)? Something entirely and in every respect without [any] effect (*Unwirksames*) [on us] would be also entirely unreal (*unwirklich*) and would not be there for us (*für uns nicht vorhanden*). (Frege, 1976: 52)

This is perhaps Frege's most clear statement of a transcendental-like perspective, according to which everything must be related to the ego so as to have any meaning. But the most important question here is: what does 'meaning' mean in this context?

7. Thinking as giving meaning to thoughts

As mentioned above, the correlation between the ego (or reason) and thoughts can be approached from two different angles: either regarding the ego which grasps thoughts (the ego as an active agent which performs a cognitive activity), or taking the ego as that to whom objectivity is given (the ego as a passive receiver of something given). In other words, we can either focus on the direction of the ego to thoughts or on the givenness of thoughts to the ego. In grammatical terms: the ego can be either considered as the subject of the sentence and thoughts as the direct object: 'The ego grasps thoughts', or, by using the passive voice, we can rephrase the sentence and take thoughts as the subject of the clause and the ego in the dative case: 'Thoughts are given to the ego'. In either case, the reference to the ego is unavoidable. This may initially sound odd and even alien to Frege's philosophy, but most passages quoted so far support this interpretation, and we may also mention other passages in which Frege explicitly refers to the 'being given of thoughts' (*Gegebensein eines Gedanken*) (Frege, 1976: 51).

But in order to answer what 'meaning' means here, we must first explain: how thinking and giving (something) are related to each other, why they both play a crucial role, and what their relation is with meaning; all questions which, in a way or another, have been answered so far. The cognitive function of thinking is the grasping of thoughts. As such, it makes possible the correlation between the ego and thoughts and knowledge as well. Therefore, thinking has a transcendental function, namely to turn thoughts (objectivity in general) accessible and intelligible to the knowing agent, viz., to make thoughts *meaningful* to the ego. This is the condition of possibility for judgments as the recognition of truth. And this is the 'big picture'

of knowledge which encompasses both logic and epistemology, as mentioned by Frege in his review of Cohen's book, quoted above.

As indicated above (see Section 6), it is (almost) impossible to give a definition of what 'meaningful' is (in this basic sense of the word), for to explain what 'to mean' is, clearly implies using this concept to define it: as said, 'being meaningful' is to make sense, to be understood or comprehended (via thinking by the ego); as such, it is prior to reference (*Bedeutung*). Admittedly, this kind of characterization somehow also tacitly encloses the very notion of meaning. It is apparently unavoidable not to be in a circle, because in order to understand or comprehend something, this something must be meaningful. When Frege says that to think about imaginary beings with different logical laws than ours is just a form of madness (Frege, 2006: xvi), he is also implying that the very idea of other logical laws makes no sense, because they cannot be understood at all. In other words, if something does not make any sense, we would not even know what we are speaking about. So, even logic presupposes this basic notion of meaning, which should not be understood as something psychological.

As is known, Frege is aware that science has a limit, which he calls the 'circle of unprovable primal-truths' (*Kreis der unbeweisbaren Urwahrheiten*), i.e., truths which, due to their ultimate and original nature, cannot be deductively proved. For this reason, Frege suggests that science must reduce this circle as much as possible (Frege, 1969: 221). He even openly confesses that not everything can be defined: primal-concepts cannot be decomposed into more basic elements, and the very attempt to define them leads to non-sense (*Unsinn*) (Frege, 1969: 290). Consequently, these primitive-concepts can only be described in an indirect way by means of elucidations (*Erläuterungen*), hints (*Winke*), or indications (*Hinweise, Hindeutungen*), which are just "figurative expressions" based on the "usage of the language of life" (*Sprachgebrauch des Lebens*) (Frege, 1976: 63, fn. 4, cf. 71; Frege, 1975: 66-67, 69; Frege, 1980: 9; Frege, 1969: 224, 254; cf. Weiner, 1990: Chapter 6; Künne, 2010: 382, fn. 15, 393).

At this point, it should be obvious that notions like meaningful belong to this category of primitive concepts, since they are as undefinable as the concept of truth. Gabriel admits that such epistemological notions go "beyond logic" and "sometimes (...) violate categorial distinctions in logic"; thus, when logic cannot give any proof in the strict sense of the word, philosophy must appeal to "elucidations" and "hints" (Gabriel, 1996: 346). On this point, I fully agree with van der Schaar's appraisal that elucidations are given in natural language and their aim is solely a practical one, for they cannot provide a solid foundation for logic (van der Schaar, 2017: 12). By using Wittgenstein's metaphor, it looks like Frege's methodological tools

have reached a bedrock and the spade is turning. Can phenomenology – as Denis Fisette suggests (Fisette, 2002: 73) – offer a rigorous method for overcoming the conceptual limitations of Frege's *Erläuterungen*? Based on what has been said so far, this proposal should be at least considered, but in another paper.

8. Concluding remarks

Frege was, first and foremost, a philosopher of mathematics and logic. While developing some topics on the foundations of arithmetic, he encountered certain fundamental philosophical problems. Some of these were addressed with exquisite philosophical refinement – such as those related to semantics and the way language has both a sense and a reference – while others, particularly epistemological issues, were barely mentioned and addressed only fragmentarily. But, despite this unsystematic treatment, these topics were undoubtedly fundamental philosophical concerns for Frege, as he regarded these epistemological concepts as a necessary condition for truth and knowledge in general, rather than mere psychological ‘chitchat’.

Many Fregeans are afraid of turning Frege into some sort of idealist just by mentioning the passages quoted above. Frege never intended to transform objective thought into something subjective. However, as emphasized repeatedly throughout this paper, ontological independence is not epistemological independence. Being an idealist or a psychologist is one thing; quite another is denying the epistemological evidence that every thought (no matter how ontologically objective) must be related to the ego, via its cognitive act of thinking, in order for objectivity to have any meaning for me (or for us). Frege even appears to hold the conviction that objectivity is necessarily related to the agent of knowledge, which, as previously argued, should be rather conceived as a transcendental ego. This is because objectivity cannot even be thought without this ‘subjective side’ of knowledge, as Frege emphasizes on several occasions. Moreover, if this agent (or ego or spirit) wasn't transcendental, this would quite likely lead to an empirical and psychological mind (as the bearer of objective thinking), and Frege was too cautious trying to avoid his greatest fear, namely, psychologism.

For these reasons, these topics can be addressed neither through psychological investigation nor through a naturalistic philosophy of mind, but rather through a (kind of) pure science of the spirit, as Frege reservedly suggests with the isolated reference to an *Erforschung des Geistes*. He said little about this, likely aware that he was treading on very thin ice every time he mentioned these topics, which lie on the fine dividing line between an actual

philosophical approach to knowledge and a psychological one. Frege never attempted to go in-depth in his analyses of epistemological issues. It is quite likely that he left this significant field of research open because it was a dead end for his philosophy, given that his philosophical method – which was primarily that of philosophical logic (cf. Künné, 2010: 19) – was intended for other philosophical purposes. Therefore, he lacked the methodological tools to address epistemological topics, and perhaps for him, there was no other option but to set these topics aside and characterize them as “mysterious” (Frege, 1969: 157). In any case, he regarded these as truly fundamental philosophical concerns but deliberately chose to stand at the front door and not go any further.

Methodological tools such as elucidations or hints can serve as heuristic devices for achieving a basic understanding of these fundamental and primitive epistemological concepts. However, it is doubtful that these tools suffice to establish a solid foundation for knowledge. Whether phenomenology can fill this gap and provide a meaningful explanation remains an open question for further research. Although this proposal may seem excessive to many Fregeans, we should not forget Frege’s metaphorical yet insightful idea that one cannot wash the fur without wetting it.¹

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