

David Suárez-Rivero (*)

Insights on Gottlob Frege's Puzzle

Resumen: *Para entender el contexto filosófico en el cual se inserta la discusión del presente volumen de filosofía del lenguaje, introduzco el Puzzle de Gottlob Frege y explico por qué este ha sido un problema para los teóricos de la referencia directa. Muestro cómo Howard Wettstein y Stavroula Glezakos han tratado de disolverlo, enfocando nuestra atención en el argumento de Glezakos, el cual será el principal objetivo de la discusión por emprender a continuación.*

Palabras claves: *Puzzle de Gottlob Frege. Significado cognitivo. Teóricos de la referencia directa. Howard Wettstein. Stavroula Glezakos.*

Abstract: *In order to understand the philosophical context where the present volume of Philosophy of Language's discussion starts from, I introduce Gottlob Frege's Puzzle and explain why it has been a problem for direct-reference theorists. I show how Howard Wettstein and Stavroula Glezakos have tried to dissolve Frege's Puzzle by focusing our attention on Glezakos's argument, which will be the main target in the discussion below.*

Key words: *Gottlob Frege's Puzzle. Cognitive significance. Direct-reference theorists. Howard Wettstein. Stavroula Glezakos.*

0. Gottlob Frege's Puzzle

In "Sense and Reference" (1892), Gottlob Frege stated the following Cognitive Significance thesis:

(CS) Two true identity statements of the form $a=a$ and $a=b$, where the terms a and b are proper names, and both names stand for the same reference, are statements with different cognitive significance (209).

For Frege, those statements differ in their cognitive significance because $a=a$ is *a priori* and analytic, while $a=b$ often represents a valuable extension of our knowledge and is not always considered analytic. Nonetheless:

(FP) Given that the reference for the terms a and b is the same, and both statements stand for the same identity relation of one thing with itself, how do those identity statements of the form $a=a$ and $a=b$ differ in their cognitive significance?

This was the puzzle that Frege thought followed from (CS).

Frege introduced certain *semantic properties*, which he called *senses*, in order to explain (FP). For him, senses are what explain why $a=a$ and $a=b$ express different thoughts –or, in contemporary words, different propositions– and, thus, why they differ in their cognitive significance (1892, 214-215). Nevertheless, Frege argued that, given that the reference for the terms a and b is the same, both statements have the same truth-value (1892, 216).

For Frege, in consequence, the reference of statements of the form $a=a$ and $a=b$ is responsible for having the same truth-value, while their senses are responsible for their cognitive significance. Both identity statements are true, given that a and b stand for the same object, but

both identity statements differ in their cognitive significance, given that their senses, and thus their thoughts, are different.

1. Theorists of Direct-Reference

Direct-reference theorists, such as Saul Kripke (1979, 1980), Keith Donnellan (1979) and David Kaplan (1989), have accepted Frege's thesis (CS). Nevertheless, they have not accepted Frege's theory of senses with which Frege explained how true identity statements of the form $a=a$ and $a=b$ differ in their cognitive significance. The main reason to reject Frege's theory of senses was that it rules out certain important results from the semantic theory: inasmuch as the reference for the terms a and b is the same and both statements stand for same identity relation, not only these identity statements express the *same proposition*, but they also have the *same truth-conditions*. Nonetheless, how have those philosophers explained that true identity statements of the form $a=a$ and $a=b$ differ in their cognitive significance?

They must give a response to the challenge posed by (FP). There have been two different sorts of proposals to explain it. First, some philosophers, such as Nathan Salmon (1986), Ruth Millikan (1997), François Recanati (1993, 2013), Krista Lawlor (2001), Robin Jeshion (2010), and others, have thought that the difference in cognitive significance does not arise from semantic differences between statements of the form $a=a$ and $a=b$ –as Frege claimed–, but arises only for some speakers –e. g. those speakers who do not know the semantic equivalence between these statements. In consequence, they have tried to explain rather what happens in a competent speaker that may make her have a different cognitive attitude towards these statements.

Other philosophers, such as John Perry (1993, 2001), Robert Stalnaker (1978, 2006), and Kit Fine (2007), have tried to identify what kind of semantic properties are responsible for $a=a$ and $a=b$ having a different cognitive value, given that they have considered that the difference in cognitive significance arises –as Frege

thought– from the semantic properties of those statements. In other words, they have considered that, although $a=a$ and $a=b$ express the same proposition and have the same truth-conditions, there are certain semantic properties which are responsible for these two identity statements differing cognitively.

The central point of discussion between direct-reference theorists has therefore been whether (FP) is a psychological phenomenon –given that it arises only for some competent speakers– or a semantic phenomenon –given that it arises from the semantic properties of statements of the form $a=a$ and $a=b$ – (cf. Taylor, 1995). If it is a psychological phenomenon, the challenge consists in explaining why some competent speakers would have a different cognitive attitude, by understanding or apprehending different propositions. But, if it is a semantic phenomenon, the challenge consists in providing the semantic values that explain why $a=b$ represents a valuable extension of our knowledge, whereas $a=a$ does not.

2. Howard Wettstein

From an opposite point of view, Howard Wettstein (1986, 1989) has argued that (FP) is not puzzling at all. Furthermore, he has stated that even if (FP) was puzzling, semantics should not be the one in charge of solving it, given that (FP) is not a semantic phenomenon, but a psychological one. Hence, Wettstein has pointed out that (FP) should be explained by epistemology or cognitive science.¹ What are his reasons in favor of these conclusions?

Wettstein accepts –as the majority of philosophers of language do– Frege's thesis (CS). However, he holds that statements of the form $a=a$ and $a=b$ differ cognitively as a result of the following, which he called *Frege's Data*:

(FD) A competent speaker, who understands true identity statements of the form $a=a$ and $a=b$, may have a different cognitive attitude towards each statement since:

(i) she may regard the statement $a=a$ as true, whereas the statement $a=b$ as false;

(ii) she may regard the statement $a=a$ as trivial, whereas the statement $a=b$ as informative;

(iii) and she may have a different behavior depending on which of these two identity statements she accepts as true (1989, 169).

For Wettstein, then, in order to answer to **(FP)** we need to clarify why a competent speaker may have a different cognitive attitude towards two true statements of the form $a=a$ and $a=b$, since she seems to think differently of these true statements.

Given this understanding of Frege's Puzzle, Wettstein does not accept that semantics should give an explanation to **(FP)** –as Frege proposed. He maintains that the projects of semantics and cognitive science are different: semantics explores the relation between language and the world, establishing truth-conditions for declarative statements, while cognitive science explores the relation between language and thought, and it is not interested in establishing truth-conditions for declarative statements. Wettstein holds that Frege's proposal was cognitive, as he tried to explain thought by means of language. As stated above, Wettstein argues that the semantic project is not cognitive, given that its goal is explaining the relation between language and the world. Therefore, Wettstein concludes that semantics should not give any explanation to **(FP)**: cognitive science is the discipline that should give an explanation to this phenomenon.

Wettstein also rejects Frege's idea that statements of the form $a=a$ and $a=b$ express different thoughts –or, in contemporary words, different propositions– as the terms a and b express different senses across the different descriptions associated with each term. He argues that Frege inferred this semantic idea from **(FD)**: given that a competent speaker may have a different cognitive attitude towards $a=a$ and $a=b$, these statements express different propositions. This inference, Wettstein argues, is not legitimate: **(FD)** does not lead us to conclude that the propositions expressed by these two identity statements are different, inasmuch as a psychological attitude cannot fix any semantic content.

Notwithstanding, Wettstein holds that **(FP)** could be explained in the following terms:

(W) There are no semantic properties in the terms a and b that indicate to the speaker that they are co-referential terms (1989, 175).

Wettstein argues that it is not surprising, then, that a competent speaker may have a different cognitive attitude towards two true statements of the form $a=a$ and $a=b$, given that there are no semantic properties indicating the semantic equivalence between them. Therefore, Wettstein concludes that neither Frege's Puzzle should be solved by philosophers of language nor Frege's theory of senses is legitimate. Moreover, he concludes that Frege's Puzzle is not puzzling at all.

3. Stavroula Glezakos

Thirty years after Wettstein's objections, Stavroula Glezakos (2009) has proposed new arguments against Frege's Puzzle.² As Wettstein before, she has argued that **(FP)** is not puzzling, since the supposed epistemological distinction between statements of the form $a=a$ and $a=b$ is not legitimate. Even more, she has argued that **(FP)** arises only in the context of Frege's theory of senses: if we abandon it, **(FP)** disappears. What are her reasons in favor of these ideas?

Unlike Wettstein and the majority of philosophers of language, Glezakos does not accept Frege's thesis **(CS)**. She finds rather misleading the idea that statements of the form $a=a$ and $a=b$ differ in their cognitive significance. Her argument is as follows: Frege maintained that statements of the form $a=a$ and $a=b$ have a different *epistemic profile*: $a=a$ is *a priori* and analytic, while $a=b$ often contains a valuable extension of our knowledge and is not always considered analytic. She calls into question this idea and asks instead:

(G) What makes a particular statement have one or the other form? (2009, 203)

In order to answer this question, Glezakos states a restriction: **(G)** has to be answered without appealing to Frege's theory of senses, given that **(FP)** should be established independently from his philosophical proposal. In other words, we have to first characterize each statement as having certain logical form in order to explain their difference in cognitive significance. Only then we could appeal to Frege's theory of senses, or other philosophical proposal, to explain **(FP)**.

Glezakos offers the following answer to **(G)**:

(GA) A statement has the form of $a=a$ when the same name flanks the identity sign, while a statement has the form of $a=b$ when two different names flank the identity sign (*Ibidem*).

Given this response, the puzzle consists, Glezakos points out, in answering to:

(GP) What is the source of the epistemic difference between true-identical statements which contain a same name repeatedly and those statements which contain two different names? (2009, 204)

Before answering this question, it is needed to answer, nevertheless, the following one:

(GG) What does it make a name to be the same name? (*Ibidem*)

Glezakos claims that Frege's answer to **(GG)** is that an identity statement has the same name when it has the same sign/reference combination (*Ibidem*). If this is right, Glezakos maintains that the epistemic profile of statements of the form $a=a$ and $a=b$ is not different: both true identity statements are only knowable *a posteriori* –i. e., in order to accept or deny any of these statements, we need to know the reference of the names they contain.

In other words, Glezakos claims that a competent speaker must know the *reference* of the *names* contained in the statement of the form $a=a$. For instance, she takes Saul Kripke's example (1979): (1) Paderewsky is Paderewsky. Suppose that a competent speaker may initially

accept (1) in a context where she thinks that both names refer to the same musician. Later on, she may reject (1) in a context where she thinks that both names refer to different people –the first to a musician and the second to a politician. In order to accept or reject (1), she needs to know the reference of both occurrences of the name 'Paderewsky'. Glezakos argues that something similar occurs in the case of the statements of the form $a=b$: the same competent speaker must know the *reference* of each *name* contained in the statement in order to accept or reject it. Thus, Glezakos maintains that statements of the form $a=a$ are as *a posteriori* as statements of the form $a=b$: in each case we need empirical evidence in order to accept or reject them. But, if this is right, there is no epistemic difference between true statements of the form $a=a$ and $a=b$. Therefore, Glezakos concludes that **(FP)** is not puzzling at all (2009, 205).

4. Gottlob Frege's Puzzle Dissolutions

Although Wettstein and Glezakos have different reactions to Frege's thesis **(CS)**, both hold that **(FP)** is not puzzling.

By accepting Frege's thesis **(CS)**, Wettstein dissolves **(FP)** as he shows that there are no semantic properties in the terms a and b to make the speaker think of them as co-referential terms, and, thus, it is not surprising that the speaker may have a different cognitive attitude towards statements of the form $a=a$ and $a=b$. Alternatively, by rejecting Frege's thesis **(CS)**, Glezakos appeals to a different way to dissolve **(FP)**: she shows that it is not legitimate to mark an epistemic difference between statements of the form $a=a$ and $a=b$, for in both cases we need empirical evidence in order to know whether the names in question are co-referential. In other words, in the same way in which a competent speaker must know the reference of the terms a and b in order to have a cognitive attitude towards an identity statement of the form $a=b$, the same speaker must know that the two occurrences of the terms a in $a=a$ are co-referential terms in order to have a cognitive attitude towards

that identity statement. If a competent speaker has a different cognitive attitude towards these statements, it is because she does not know yet the reference of their terms.

Glezakos's proposal seems to be stronger than Wettstein's. She takes a step back and shows that there are no reasons to accept an epistemic difference between statements of the form $a=a$ and $a=b$. Furthermore, Glezakos shows that Frege himself did not provide any philosophical reason to support this idea: he only assumed this difference. Nonetheless, the epistemic difference does make sense within Frege's theory of senses. If we abandon Frege's theory of senses, Glezakos argues, (FP) disappears as a puzzle. Although Wettstein may agree with Glezakos's idea above, he finds a reason to see statements of the form $a=a$ and $a=b$ as exhibiting a difference in cognitive significance: the different attitude that a competent speaker may have towards these statements –i. e., the different way in which the speaker may understand them. For Glezakos, however, the different attitude that the speaker may have towards statements of the form $a=a$ and $a=b$ does not indicate that these statements have a difference in their epistemic profile. The different attitude of the speaker just shows that she does not know yet the reference for the terms a and b , and, therefore, the content of statements of the form $a=a$ and $a=b$. Independently of the strength of their arguments, and the different reactions they have with respect to Frege's thesis (CS), Wettstein and Glezakos conclude that direct-reference theorists should not give an explanation to (FP), given that it does not rule out the semantic proposal they defended.

5. A reexamination of the Cognitive Significance Phenomenon

In the current volume over fifteen philosophers of language examine the arguments for the dissolution of Frege's Puzzle stated by Glezakos (2009), dissolution that was prompted by Wettstein in the 1980s. The result is an original discussion that once more sheds light on Frege's phenomenon.

Organized in eight sections, the volume is composed of sixteen papers presenting critical arguments in favor or against Glezakos's ideas. The first section **How a sentence is knowable to be true** opens with Stavroula Glezakos's reexamination of her own paper. There she provides new insights to support her Frege's Puzzle dissolution. In the second section **Reflections on Frege's Puzzle**, Genoveva Martí discusses some of Glezakos's thoughts by focusing our attention on the informativeness of identity statements, and other puzzles that Frege would have stated. The third section **Come back to the tables** includes papers by Marco Ruffino, André Leclerc and Ludovic Soutif in which the authors reach for Frege's technical terms, mathematical ideas or philosophical considerations to evaluate Glezakos's proposal. The fourth section **Epistemic profiles** holds papers by Lourdes Valdivia, Max Freund and Víctor Cantero-Flores in which the focus is on some of Frege's theoretical assumptions and the epistemic profile of statements of the form $a=a$ and $a=b$, in their logical and epistemic form, in order to support or reply to Glezakos's argument. In the fifth section **Intentionality**, the works of Gregory Chomsky, Marie Guillot/Alexandre Billon and Sílvio Mota Pinto examine Glezakos's dissolution from an intentional and cognitive point of view. In the sixth section **Anaphora**, Manuel García-Carpintero, Kepa Korta and Emiliano Boccardi use an anaphoric dependence conception to frame an answer to Glezakos's dissolution. In the seventh section **Semantic and epistemic puzzle**, Dirk Greimann considers a semantic and epistemic approach to Frege's Puzzle in order to respond to Glezakos's ideas. The volume concludes with the section **Fregeans and Non-Fregeans** where Leandro De Brasi evaluates whether Fregeans and non-Fregeans can forget Frege's Puzzle given the argument posed by Glezakos.

I would like to give my sincere thanks to our invited philosophers for contributing to our volume *Gottlob Frege's Puzzle. A reexamination of the Cognitive Significance Phenomenon*. I give as well my thanks to Juan Diego Moya Bedoya –the current Director of the Journal of Philosophy of the University of Costa Rica– for

inviting me to organize and lead the present compilation. I thank Max Freund for encouraging me to organize this philosophical project while I was working on a Postdoctoral Research in Costa Rica, which was supported by Mexico through the National Council of Science and Technology (CONACyT). And, of course, I thank very much Marco Ruffino and the Brazilian National Council for Scientific and Technological Development (CNPq) for supporting the completion of this project during my Postdoctoral Research in the State University of Campinas, Brazil. Finally, I thank Laura Sarriego-Kluge, my love, and Víctor Cantero-Flores, my friend, for their kind help during this process.

Notes

1. Strictly speaking, Wettstein held that epistemology should give an answer to (FP). However, in his formulation of Wettstein's argument, Perry (1988, 232) replaced 'epistemology' for 'cognitive science'. Following him, I will use Perry's terminology instead of Wettstein's.
2. In order to consider other sort of criticisms, the reader could see Almog, 2008, who has also offered suggesting arguments against Frege's Puzzle.

References

- Almog, J. *et al.* (Eds.) (2009). *The Philosophy of David Kaplan*. Oxford: Oxford University Press.
- . (2008). Frege Puzzles? *Journal of Philosophical Logic*. 37 (6), 549-574.
- Almog, J. *et al.* (Eds.) (1989). *Themes from Kaplan*. Oxford: Oxford University Press.
- Donnellan, K. (1979). The Contingent *A Priori* and Rigid Designation. In P. French *et al.* (Eds.) (1979), 28-44.
- Fine, K. (2007). *Semantic Relationism*. Oxford: Basil Blackwell.
- Frege, G. (1892). Über Sinn und Bedeutung. *Zeitschrift für Philosophie und philosophische Kritik*. 100, 25-50. Translated and reprinted as (1948) Sense and Reference. *The Philosophical Review*. 57 (3), 209-230.
- French, P. *et al.* (Eds.) (1979). *Contemporary Perspectives in the Philosophy of Language*. Minneapolis: University of Minnesota Press.
- García-Carpintero, M. *et al.* (Eds.) (2006). *Two-dimensional semantics*. Oxford: Oxford University Press.
- Glezakos, S. (2009). Can Frege Pose Frege's Puzzle? In J. Almog *et al.* (Eds.) (2009), 202-207.
- Jeshion, R. (Ed.) (2010). *New Essays on Singular Thought*. Oxford: Oxford University Press.
- Jeshion, R. (2010). Singular Thought: Acquaintance, Semantic Instrumentalism, and Cognitivism. In R. Jeshion (Ed.) (2010), 105-140.
- Kaplan, D. (1980). Demonstratives. In J. Almog *et al.* (Eds.) (1989), 481-563.
- Kripke, S. (1980). *Naming and Necessity*. Oxford: Basil Blackwell.
- . (1979). A Puzzle about Belief. In A. Margalit (1979), 239-283.
- Lawlor, K. (2001). *New Thoughts about Old Things*. New York: Garland Publishing.
- Margalit, A. (1979). *Meaning and Use*. Dordrecht: Reidel.
- Millikan, R. (1997). Image of Identity: In Search of Modes of Presentation. *Mind*, 106 (423), 499-519.
- Perry, J. (2001). *Reference and Reflexivity*. Stanford: CSLI Publications.
- . (1993). *The Problem of the Essential Indexical and Other Essays*. Stanford: CSLI Publications.
- . (1988). Cognitive Significance and New Theory of Reference. *Nous*. (22), 1-18. Reprinted in J. Perry (1993), 227-247.
- Recanati, F. (2013). *Mental Files*. Oxford: Oxford University Press.
- . (1993). *Direct Reference: From Language to Thought*. Oxford: Basil Blackwell.
- Salmon, N. (1986). *Frege's Puzzle*. Cambridge, Mass: MIT Press/Branford Books.
- Stalnaker, R. (2006). Assertion Revisited: On the interpretation of Two-Dimensional Modal Semantics. In M. García-Carpintero *et al.* (Eds.) (2006), 293-309.
- Stalnaker, R. (1999). *Context and Content*. Oxford: Oxford University Press.
- . (1978). Assertion. *Syntax and Semantics*, (9), New York: Academic Press. Reprinted in R. Stalnaker (1999), 78-95.
- Taylor, K. (1995). Meaning, Reference and Cognitive Significance. *Mind and Language*, (10) 1/2, 129-180.

Wettstein, H. (1991). *Has Semantics Rested on a Mistake? And Other Essays*. Stanford: University Press.

———. (1986). Has Semantics Rested on a Mistake? *The Journal of Philosophy*, LXXXIII (4), 185-209. Reprinted in H. Wettstein (1991), 109-131.

———. (1989). Turning the Tables on Frege, or How Is It That “Hesperus Is Hesperus” is Trivial. *Philosophical Perspectives*, (3), 317-339. Reprinted in H. Wettstein (1991), 159-178.

(*) **David Suárez-Rivero** (Department of Philosophy, UNICAMP, Brazil) obtained his *Ph D* at the University of Barcelona (LOGOS-GROUP), Spain. His Master and Bachelor Degrees

were received from the National Autonomous University of Mexico. He is interested in Philosophy of Language, Philosophy of Mind and Epistemology. After a Post-doctoral Research at the National University of Costa Rica, he is currently working as a Post-doctoral Researcher at the State University of Campinas (UNICAMP), Brazil. Two of his recent articles are: (2013) El enigma de Gottlob Frege. Cuatro propuestas de los teóricos de la referencia directa. *Revista Praxis*. Universidad Nacional de Costa Rica, Costa Rica; (2010) Bidimensionalismo. *Revista de Filosofía*. Universidad Iberoamericana, México.

Received: Friday, November 21, 2014

Approved: Sunday, November 23, 2014.

