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ABSTRACT

Quine's semantic skepticism asserts that two or more hypotheses about the meaning of p that are equally consistent with behavioral facts do not guarantee the same theoretical paradigm of p's meaning. Thus, a theory of truth for p is insufficient to entail a theory of meaning for p. Davidson contends that, while Quine is correct regarding the underdeterminacy of a theory of meaning by evidence, this does not rule out a theory of meaning. A theory of truth – consistent with Tarski's T–convention – implies a theory of meaning. Dummett, however, thinks that a theory of truth fails to frame non-straightforward stipulations governing the role of sentences in cases involving non-classical standards of proof. "Truth" is insufficient to be used as an idealized parameter to exhaust conceivable patterns for semantic theories. Quine highlights the weakness of a truth theory grounded in set theory and observation for generating stable theories of meaning. Davidson downplays the significance of this weakness and avoids reaching a semantic-skeptical conclusion, as he believes semantics need only be as robust as the theory of truth. Dummett contends that, while this weakness is a serious threat, it has no bearing on the objective parameters for a theory of meaning, because meaning is intended to function in roles truth standards cannot: defining the theoretical limits of a theory of assertion-judgment. These three authors are examined in this article to determine the scope of semantic skepticism and the possible responses to it.

Keywords: Semantic skepticism. Meaning-theory. Quine. Davidson. Dummett.

Teorias da verdade e teorias do significado: uma discussão sobre o ceticismo semântico e as suas possíveis soluções com base nos trabalhos de Quine, Davidson e Dummett

RESUMO

O ceticismo semântico de Quine afirma que duas ou mais hipóteses sobre o significado de p que sejam igualmente consistentes com factos comportamentais não garantem o mesmo paradigma teórico do significado de p. Assim, uma teoria da verdade para p é insuficiente para implicar uma teoria do significado para p. Davidson defende que, embora Quine esteja correto no que diz respeito à sub-determinação de uma teoria do significado pela evidência, isto não exclui uma teoria do significado. Uma teoria da verdade - consistente com a convenção T de Tarski - implica uma teoria do significado. Dummett, contudo, considera que uma teoria da verdade não consegue enquadrar estipulações não diretas que regem o papel das frases em casos que envolvem padrões de prova não clássicos. A "verdade" é insuficiente para ser usada como um parâmetro idealizado para esgotar padrões concebíveis para as teorias semânticas. Quine salienta a fraqueza de uma teoria da verdade baseada na teoria dos conjuntos e na observação para gerar teorias estáveis do significado. Davidson minimiza o significado desta fraqueza e evita chegar a uma conclusão semântico-cética, pois considera que a semântica só precisa de ser tão robusta como a teoria da verdade. Dummett defende que, embora esta fraqueza seja uma ameaça séria, não tem qualquer relação com os parâmetros objectivos de uma teoria do significado, porque o significado se destina a funcionar em papéis que os padrões de verdade não podem: definir os limites teóricos de uma teoria da asserção-julgamento. Estes três autores são examinados neste artigo para determinar o âmbito do ceticismo semântico e as possíveis respostas ao mesmo.

Keywords: Ceticismo semântico. Teoria do significado. Quine. Davidson. Dummett.

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1 Truth-conditions, Meaning and Skepticism

The idea that the semantic value of expressions should be their truth-value comes from Gottlob Frege's famous interpretation of Leibniz's law of intersubstitution in *Uber Sinn und Bedeutung* (1982). According to him, what must remain constant when we replace co-referential components in a sentence is its truth value:

> Frege's notion of reference […] was unwavering directed at the determination of truth-value: to assign a reference to an expression was to declare its role in the mechanism whereby any sentence in which it occurred was determined as true or false (DUMMETT, 1996, p. 39).

This matches the idea that what is semantic in any reading of the sentence is precisely what can only contribute either to the truth or, in the worst case, to the falsity of the sentence. These are the winning-conditions for the assertion of the sentence. When the sentence's structure fails to represent a single interpretation (true or false), and hence fails to produce a single output for identical inputs, it fails to keep the truth value – and as a result, its assertive parameter lacks stable winning conditions. There are two serious outcomes to that problematic variability of assertive parameters: 1. The sentence may be asserted in defeatist conditions, either favorable or unfavorable, that is, either in settings where the evidence supports it or does not support it; and 2. The sentence may be asserted under cheating conditions; i.e., one may use the statement 'p' to both deny and endorse q, which would disrupt the coherence of the 'p''s meaning theory.

Truth-conditional semantics is grounded in the idea that we can establish a systematic principle for pairing true sentences with true sentences and false ones with false ones. The durability and consistency of meaning are maintained by communicators who are competent in interpreting language and aligning their interpretations with the truth conditions of sentences. The essential feature of meaning, namely its transmissibility and durability across time, is kept by individuals involved in communications who possess interpretative competence and the ability to avoid cheating. The second implicit assumption of truth-conditional semantics is that these two capacities secure the truth of the semantic theory associated with them, which is defined as the prediction of a sentence's "meaning". This presupposition can be broken down into even less simple, but still implicit, ideas: the predictability of semantic events

is based on the charitable presupposition that everyone involved in semantical evaluable acts is playing to win, and thus sabotaging the playing field would be counterproductive.

However, this approach tends to oversimplify the complexities of language. Truth-conditional semantics often conflates truth conditions with the coherence of interpretation, effectively sidelining the role of meaning as an independent concept. By codifying rules of interpretation coherently, individuals gain access to a principle that minimizes the risk of misinterpretation, as sentences can only be false when they are included in the anti-extension to all truth-sentences. With the exception of known paradoxes, false sentences cannot be confused with true ones. As a result, meaning becomes embedded within the theory of interpretation, and a theory about what a phrase "means" is reduced to a recursive and coherent theory of truth for a language.

This optimism is short-lived. To believe the aforementioned equation, we require shared points of contact, such as common experience or platonic access to common structures. Even to assume that everyone plays to win, we need certain points of desire in common, such as the desire to survive and pass on genes. If our interpretation theories are to be regarded meaning-paradigms rather than mere guesses based on identical behavioral facts, they must incorporate some phenomenal data or *a priori* structure that defines the game-conditions in which everyone participates. At this point, the concept of a theory of meanings begins to weigh heavily and cost significantly more than a theory of truth.

The challenges of developing a theory of meaning become apparent when we examine how it intersects with issues of truth and interpretation, particularly when striving for intersubjective agreement and stability. A theory of meaning often demands more stringent guarantees than a theory of truth because there is a risk that underlying assumptions and interpretations will not be universally shared. In this context, meaning becomes a source of normative security, functioning as an additional layer in the structure of interpretation theory. This layer, however, can take on an essentialist and ideologically rigid form, which complicates the effort to align meaning across different perspectives. At this juncture, semantic skepticism becomes especially compelling, as it questions whether meaning can ever be fully stabilized.

W. V. O. Quine's semantic skepticism is the most radical in this context. He simply denies any paradigmatic and irrevisable version of meaning based on set-

theoretical conditions and observational features, which will be referred to here as the semantic-positivist dream. More than that, the concept of semantics as a non-pseudo theory is questioned. He defends the technical nullity of a theory of meaning as a means of selecting correct interpretations and filtering out incorrect ones based on two or more hypotheses equally compatible with behavioral facts. For Quine, a theory of truth does not entail a theory of meaning, just as a theory about the extension of logical consequence does not entail a theory of analyticity. Mohammad Ali (2022) echoes this skepticism, stating that "there is no objective 'product' in any language... Everything that exists is just a 'process' of 'meaning making,' determined by the tensions and contexts individuals bring to each linguistic situation" (MOHAMMAD ALI, 2022, p. 34). This reinforces the idea that meaning is inherently unstable and context-dependent, further questioning the possibility of a fixed or universally applicable theory of meaning.

Donald Davidson argues that, while Quine is correct in asserting the underdetermination of a theory of meaning by evidence, this does not render a theory of meaning impossible. Davidson suggests that compatibility among all hypotheses regarding the truth of a sentence 'p' forms a sufficient basis for the theoretical prediction of a meaning ascription for 'p' (DAVIDSON, 1967). This idea reflects a broader acceptance of the compositional nature of meaning in contemporary semantic theory, where truth conditions provide the foundation for meaning. Davidson's recursive method for assigning truth values to sentences aligns with the principle of compositionality, a concept widely supported in semantic theory today (HEIM; KRATZER, 1998).

For Davidson, the transition from (a) knowledge of the indistinguishability of true sentences to (b) understanding their semantic role within linguistic structures is possible precisely because a theory of truth can underpin a theory of meaning (DAVIDSON, 2001). As long as truth conditions for 'p' are established, it follows that the meaning of 'p' can be derived from these conditions within the language's compositional framework (SOAMES, 1992). This argument aligns with the perspective that a theory of truth – as articulated by Tarski's T-convention – implies a theory of meaning, a position upheld by many in contemporary philosophy of language (TARSKI, 1944). The recursive structure of truth theories has been further developed in dynamic semantic theories, such as discourse representation theory (KAMP, 1981) and file change semantics (HEIM, 1982), which build upon Davidson's initial ideas by

emphasizing how context influences meaning. These theories illustrate that moving from a theory of truth to a theory of meaning is not only possible but necessary in understanding how language functions across different contexts.

Davidson also claims that the additional complexity of a theory of meaning, over a theory of truth, is offset by its explanatory power, particularly when meaning is viewed as reducible within a coherent theory of interpretation (DAVIDSON, 1984). Before we turn to Michael Dummett's critique of these ideas, we will delve deeper into Quine and Davidson's theories in the next chapters, exploring the implications of truth and meaning in both classical and contemporary contexts.

2 Quine's skepticism about meaning

We have chosen to describe Quine's argument as a progressive development based 1. on pragmatic holism, or the expansion of semantic contextualism to the entire theoretical system; 2. naturalism, which equates any puzzle about meaning with the problem of determining the theoretical assumptions of a natural theory; and 3. the indeterminacy of translation, which is the superficial application of the thesis that there are many mutually compatible solutions to the problem of modeling the necessity of a logical consequence or the truth of a proposition. Thus, the translation of a proposition into another language becomes a problem more akin to that of adjusting that sentence into the framework of another theoretical system than an empirically determined problem.

Pragmatic holism: Two Dogmas of Empiricism (1951-1953) marks the beginning of a survey of some of the dogmas of empiricism that went unchallenged in the basic assumptions of analytic philosophy and positivism. One of these was the dogma that the meaning of propositions faces the trial of facts in isolation

> The dogma of reductionism survives in the supposition that each statement, taken in isolation from its fellows, can admit of confirmation or infirmation at all. My countersuggestion, issuing essentially from Carnap's doctrine of the physical world in the Aufbau, is that our statements about the external world face the tribunal of sense experience not individually but only as a corporate body (QUINE, 1953, p. 293).

In his pragmatic holism, the author proposes to extend semantic contextualism from the isolated sentence to the theoretical or linguistic system as a whole, reaching

a holistic point where the theoretical notion of meaning – specially non-extensional contents – itself is dissolved and incorporated into the notion of consistency of the system. However, this strategy had a special character. It was part of the author's anti-intensionalism. Quine assumed that the question of how much support a confirmational instance gives to a proposition is as puzzling as the question of whether a proposition is analytic. We can argue and debate about it, but there is no fact in either case that would decide the issue. Both puzzles can be resolved by determining the place of the sentence in a language system and its contribution to relations with other sentences, but this does not solve the problem *per se*; it only shows that it is a pseudo-problem. There is no "meaning problem" beyond the mere problem of placing the sentence in our theoretical system.

> Let me put it in a nutshell: Quine advocated holism as a consequence of his extensionalist criticism of Carnap-style positivism (which involved, as a matter of course, the claim that there is a sharp distinction, within the empirical realm, between analytic and synthetic sentences). His holism, then, is an expression of his view that all nonextensional contexts are nebulous (BAR-AM, 2010, p. 3).

Thus, there would be no point on the theoretical scale more privileged by contact with the facts, and any sentence could turn out to be true or analytic depending on the theoretical adjustments we make in the system. Turning away from empiricist dogmas, Quine adopts this semi-coherentism, but avoids its strong part and advocates a fallible and revisable coherentism. This theory, found in the *Two Dogmas*, serves as the basis for an innovative philosophical idea, which is to treat the problem of logical necessity as solvable, but only a problem of the respective competent theoretical region; and not as a problem of an isolated and canonical dimension, called "semantics" which would deal with *a priori* analytic truths – true on the basis of our scheme of linguistic structures.

Epistemological naturalism: Quine's naturalistic tendency prompted him to treat semantics by behaviorist methods. In this framework, borrowed from Carnap, content identity is specified in behavioral terms. What is radical about this approach, however, is not the fact that this strategy is, in his words, "simply a proposal to address semantic questions in the empirical spirit of natural science" (QUINE, 1970, p. 8). Rather, the author himself embarks on a skeptical path in which behaviorism, initially conceived as a semantic-empirical program, becomes the catalyst of a semantic skepticism. A

careful analysis of what Quine has to say on this subject in *Ontological Relativity* (1969) shows that the author does not so much set up a semantics in naturalistic terms as eliminate semantics in favor of a naturalistic and pragmatic strategy of content discrimation. This becomes clear when he stages the possibility of conflict between the two parties by choosing to sacrifice the terminology of meaning:

> For naturalism the question whether two expressions are alike or unlike in meaning has no determinate answer, known or unknown, except insofar as the answer is settled in principle by people's speech dispositions, known or unknown. If by these standards there are indeterminate cases, so much the worse for the terminology of meaning and likeness of meaning (1969, p. 29).

Quine's skepticism is then complemented by his epistemological naturalism, which holds that any puzzle concerning the determination of the necessity of a logical consequence or the truth of a sentence is in principle solvable along with the problem of fitting whole blocks of theory to the available evidence, without resorting to category grammars or theories (a science of *a priori* formal combinations) or *a priori* structuralism. Since the available evidence is never sufficient to overcome the level of underdetermination, neither can it produce a state in which the theory is explicative or predictive of meaning.

Indeterminacy of translation: The idea of indeterminacy of translation arises organically from these ideas, and it is not Quine's most radical thesis. It is only its most superficial consequence:

> [...] if we recognize with Duhem that theoretic sentences have their evidence not as singles sentences but only as larger blocks of theory, then the indeterminacy of translation of theoretical sentences is a natural conclusion (QUINE, 1969, p. 80-81).

The problem of indeterminacy arises precisely because we have no access to a supernatural dimension of property determination that is above what we can scientifically theorize with our natural theories. If there is no independent science or theoretical knowledge of the subject matter of sentences in a language (i.e. its semantic content), then any rule – be it psychological, biological, or physical – is equally competent to decide what a sentence in a language selects and excludes. In the words of Itay Shani, commenting on the famous case of *Gavagay*:

> Rabbits and undetached rabbit parts are so correlated that no ostensive behavioral evidence and no facts about speech dispositions could tell them apart and so, according to Quine, any assertion of 'gavagai' can be equally interpreted with either rabbit or rabbit parts as its intended meaning (SHANI, 2005, p. 417).

According to Maria Baghramian: "The indeterminacy is a consequence of the thesis of the underdetermination of theory by experience" (BAGHRAMIAN, 1998, p. 1). Hypotheses about the "meaning" of a proposition or about the "analyticity" of a consequence are thus underdetermined by a multiplicity of possible data and: "Manuals for translating one language into another can be set up in divergent ways, all compatible with the totality of speech disposition, yet incompatible with one another" (QUINE, 1960, p. 27).

3 Davidson's response: theories of truth are enough to ground theoretical predictions about meaning

Quine's skepticism entails a defeatist notion of our ability to overcome a weak dimension of truth-finding and reach a richer and more theoretical one in which we not only know how to apply the truth-predicate but also know something conceptual about what is true. We speak of the transition from a simple mechanical and computational conception of a logical calculus that generalizes the logic of encoding language to external *stimuli*[1], to a more restricted and normative theoretical understanding of what is said with a true proposition. This transition is the crown jewel of a semantic description and a response to the semantic skeptic, who can be characterized as a thinker who does not believe in a layer of meaning or analyticity that is above the mere dimension of models and resources for calculating truth and logical consequence.

But only if this transition from truth to semantics is possible, and we have a way to make it, can we say that the distinction between meaning and nonsense is stable and achievable as knowledge. If the hope that we can justify our theoretical conceptualization of the object of communication and interpretation is not superfluous, we must allow ourselves the hypothesis that Quine was wrong, or that he was right about some proposition but wrong about his own hypothesis about the consequences

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[1]   In *Epistemology Naturalized*: "Internal factors may vary *ad libitum* without prejudice to communication as long as the keying of language to external stimuli is undisturbed" (QUINE, 1969, p. 81).

of that proposition. In the first case, the author would be wrong about the indeterminacy or underdeterminacy of theories of meaning. There would then be a fact of the matter that could serve as a sound basis for deciding on the correctness of an analytic hypothesis or on the limits of the logical consequences of a proposition. In the second case, Quine was right about the lack of this solid rock, but this would not spell disaster for a theory of meaning. In that case, there would be other elements of pressure that would do the work of determination and at least allow the construction of models for determining predictions about valid meanings, all else being equal (c*eteris paribus*).

Davidson was known for following the second line of criticism. The author agreed with Quine on a fundamental point. Suppose we have a method for determining the theory of truth for a language by interviewing speakers of that language and analyzing their agreement with propositions: "Quine is right ... in holding that an important degree of indeterminacy will remain after all the evidence is in; a number of significantly different theories of truth will fit the evidence equally well" (DAVIDSON, 2001, p. 62).

Davidson does not think, however, that any attempt to develop a theory of meaning for this language is doomed to failure or leads to arbitrary and dogmatic decisions. Indeterminacy can be considered harmful or benign; it can be benign if a true sentence is determined in such a way that it cannot be interpreted as false, that is, if the pattern used to assert that 'p' is incompatible with the pattern used to assert that not-p. It does not matter how many paradigms of meaning can correspond to the prediction of the non-absurdity of that proposition – just as it does not matter to scientists and pragmatists what is going on in the minds of the language theorists. Therefore, the T-convention would suffice to test any assertion of meaning. The parameters of the T-convention must be observed, and then we can solve confirmation (proof) and analyticity problems – that is, decide which instances fit these concepts and which do not – by simply describing the structure of linguistic compounds and their recursive generation by a method of mechanical induction:

> There is a sense, then, in which a theory of truth accounts for the role each sentence plays in the language in so far as that role depends on the sentence's being a potential bearer of truth or falsity; and the account is given in terms of structure (DAVIDSON, 2001, p. 61).

The advantages of these line of reasoning lie in the possibility of developing semantic theories capable of determining the idea of meaning without semantic facts, i.e. on the basis of nothing but a theory of truth and empirical tests for filtering out non-sense by competent speakers (those able to mechanically generate a rule for language composition). This avoids the circularity of explaining semantic facts with more semantic facts. Thus, we will be able to reply to the naturalist problem of explaining normative qualities (semantic and intentional) without adding further mysteries to the original ones.

> The problem for a naturalist is to do this without introducing ad hoc abstract objects, say, unanalyzed meanings, senses, propositions, or possible states of affairs as somehow ingredient in nature (MILLIKAN, 1990, p. 152).

We can use Tarski's T-convention ('p' is true if and only if p) as a general test pattern for a useful translation guide from object language to metalanguage. Consistent with this view of the problem, Davidson uses Tarski's T-convention as a tool to make the notion of "meaning" verifiable without semantic facts. We do not need facts that are related to semantically evaluable events; we simply need consistent interpretation rules. Thus, the *datum* of a semantic theory is a consistent pattern of interpretation and nothing more:

> If we treat T-sentences as verifiable, then a theory of truth shows how we can go from truth to something like meaning – enough like meaning so that if someone had a theory verified in the way I propose he would be able to use that language in communication (DAVIDSON, 2001, p. 74).

According to Davidson, then, the presence of a multiplicity of compatible theories of truth is not really a puzzle, even if Quine is right and "different choices could still have made everything come out right that is susceptible in principle to any kind of check" (QUINE, 1969, p. 81-82). This will not be a puzzle provided we can separate evidence for the use of a sentence from evidence against its use in a theory of language learning: "It is no more mysterious than the fact that temperature can be measured in Centigrade or Fahrenheit (or any linear transformation of those numbers)" (DAVIDSON, 1986, p. 313). The cost of Davidson's thesis, of course, is that theories of meaning are just as weak as theories of truth, and that any subtlety or detail is harmlessly lost when translating a sentence from Portuguese to French – if the

sentence remains true when its truth is not overridden, and false when its falsehood is not overridden, nothing else is required. Curiously, the phenomenological, psychological or sociolinguistic condition that preserves the semantic correlation is not debatable; it is just presupposed, like a kind of indisputable dogmatic norm. This, as we will see, opens up a line of Quinean counter-criticism against Davidson.

4 Paradigms of Meaning: the problematic stability of our knowledge of Truth

Micheal Dummett laid the foundation for this theoretical understanding, which he call theory of meaning, and it is the meta-inquiry into the general principles that a meaning theory should observe for any language. He worked in the second half of the 20th century to describe the steps involved in this transition:

> Logic, which is concerned with the validity of forms of reasoning, [...] must deal with a variety of possible interpretations of a formula or propositional scheme. [...] A theory of meaning, on the other hand, is concerned with only one interpretation of a language, the correct one and the intended one (DUMMETT, 1993, p. 20).

Here, we must provide a more detailed image of what a theory of truth cannot accomplish as compared to a theory of meaning. As we saw at the beginning of the article, knowing how to pair truths with truths – within a symbology capable of avoiding paradoxes – provides us with a sense of protection against cheating and, thus, guarantees a measure for the transmission of successful interpretations as well as a fair game parameter to interpret others in an arena of debate and communication. We will now demonstrate that this is insufficient to ensure the stability of the transmissible ingredient. One of the roles that the mere truth-compatibility cannot play is the contribution of a meaning-theory to ensure the stability of the anchoring of non-falsity in contexts of expression where there is more than one possible falsehood opposed to the same truth (counterfactual contexts). These are the conditions under which there is more than one possible route (not always the most "economic" one) to arrive at the truth, to interpret the negation, and to justify the implications. They are conditions under which the meaning can be disputed, and objectively, even if that meaning is underdetermined by the same extension. Dummett made this point central to his philosophical thinking in the 1990s:

> Although the goal of every semantic theory is to specify what it is for a formula to be true under an interpretation, not every semantic theory will take the semantic value of a sentence-letter or other constituent formula, under an interpretation, to consist in one or other of the true-values true and false (DUMMETT, 1993, p. 33).

We may discover that this shows a susceptibility at the beginning of semantic philosophical reflections and its scientific counterparts (linguistics, cognitive psychology), which is reflected in the vulnerability of the concept of "truth" itself to control the parameter of recognition of divergences between patterns of argumentation and our methods of deciding disputes about propositions and competing logical consequences. In order to justify the assertion of p on the premise of not (non-p), it is necessary to find a deductive route from not (not-p) to p. The ability to perform this procedure is equivalent to performing Gentzen's operation of natural deduction, and it constitutes what Dummett calls the normalization of a proof: "Normalisation implies, for each logical constant c, the full language is a conservative extension of that obtained by omitting c from its vocabulary" (DUMMETT, 1993, p. 250).

However, since recognition of this achievement depends on knowledge of the non-radical (or conservative) extensions of language, it follows that the framework of semantic anchoring adopted by meaning theorists precedes our ability to test logical validity.

> Proof-theoretical justifications form an interesting alternative to justifications in terms of semantic theories. Neither is autonomous however: both depend on the defensibility of the meaning-theory within which each finds its proper habitat (DUMMETT, 1993, p. 270).

This is not surprising for a student of analytic philosophy who witnessed how the first authors put effort to deal with procedures of analysis:

> The provision of a workable semantic theory depends to a very large extent upon the prior adoption of a suitable syntax; since the semantic theory has to explain how a sentence is determined as true or otherwise in accordance with its composition […] it is plain that to obtain a successful semantic theory we need first an adequate analysis of the way sentences are to be regarded as constructed out of their component parts (DUMMETT, 1993, p. 25).

That analysis must be capable of specifying the relation between propositions and truth even in horizons of expression in which the form of proof cannot be done in the two simplest ways: empirical and computational. It is ironic that the first large-scale

analytical strategy for describing "meaning" did not invoke descriptions of necessity and analyticity, but rather projected that the right syntactic constraints would mechanically provide these descriptions, filtering our notion of meaning and excluding nonsense. The hope that providing semantic conservative conditions for language would solve any problem concerning the justification of a inference, was a prevalent philosophical ideology that in many ways went hand in hand with other ideologies: empiricist, positivistic-scientist, anti-metaphysical, etc. Among these, the ideology closest to mystical normativism was expressed by Wittgenstein and his thesis that "all the propositions of our everyday language, just as they stand, are in perfect logical order" (TLP 5.5563).

What we can learn from the analytical adventures of this first phase of analytic philosophers is that the concept of truth, as classically understood, cannot be regarded as an ideological parameter of our concept of meaning. In so doing one would be committing the old mistake of confusing the ideal case with the real case:

> […] to say that the semantic value of a singular term is, in general, to be an object is, in itself, a purely formal stipulation; […] the demand that the object denoted by a term shall be an element of the domain merely reflects the usual idealization according to which a formalized language is not permitted to contain empty terms (DUMMETT, 1993, p. 30).

To omit that the idealization is a mere idealization amounts to ignoring the exceptions and obstacles to learning a language that are inconsistent with a theory of truth for that language. This inconsistency arises not only because a linguist can be misled by the native speakers he studies, namely by the problem of insincerity. It also arises because there are inevitable conflicts between different versions of truth caused by different collective information, even in the same society with identical values and tendencies to universalize its parameters. Insincerity becomes a semantic problem when it is systemic, that is, when it is considered a rule in certain contexts (political, economic). An example: when information is poorly distributed and different speakers are semantically disadvantaged because not everyone has the information to create appropriate parameters for modeling other people's sentences. It does not matter if these people speak the same language. One must consider the possibility that learning parameters vary to match the complexity of the obstacles faced not only by linguists

but also by ordinary speakers in situations of systematic dishonesty and lack of information. Thus, non-classical parameters are an option:

> […] for classical logic, we can specify the condition for the truth (under an interpretation) of a complex formula only by means of absolutely or relatively straightforward stipulations relating to each of the logical constants; whereas, for a non-classical logic, […] we may also be able to frame non-straightforward stipulations governing them (DUMMETT, 1993, p. 28).

5 Theoretical selections of meaning theories: ingredient Sense as the object of dispute of meaning-theories

Dummett's thesis represents a developmental line of semantic foundationalism with weak ambitions, i.e., a neo-fregean view of semantic antiskepticism that adds intuitionism to discredit the role that theorists like Davidson and Tarski assign to a classic and extensional theory of truth in the formation of our concept of meaning. For Micheal Dummett, the role of truth is overestimated. And often the role of truth is confused with a realist metaphysical assumption that enters our meaning-theoretical pre-conditions:

> A realist believes that a valid rule is required to preserve a property of truth which may attach to a statement independently of our capacity to recognize that it attach. […] he must make this a principle of his meaning-theory: he must hold it to be integral to our understanding of our language that we conceive of our statements as determinate true or false (DUMMETT, 1993, p. 269).

Indeed, the semantic framework for dealing with risky statements of belief (either because they could be disingenuous or because they are based on limited information) will never be unambiguous or uncontested. Relying on a theory of truth is therefore tantamount to abandoning the possibility of developing predictive strategies under risky and unstable communication conditions - as in bluff-game situations.

> There is no need, however, for a semantic theory to assume either of these two familiar forms (relativized or absolute truth-values). Another possible pattern is one whereby the semantic value of a sentence relates it to what would make it true. Heytings explanation of sentences of an intuitionistic mathematical theory is a simple example of this kind. […] Another example, more complicated in structure, is Hintikka's semantics in terms of games. The semantic value of a sentence is, in effect, the class of all plays (successions of moves) following a move consisting in the production of that sentence. […] No doubt many other patterns are conceivable for semantic theories (DUMMETT, 1993, p. 34).

It follows that proof-theoretic criteria are limited parameters to fully represent our understanding of the concept of "justification" of conclusions: "we are driven to invoke some notion of *truth*, and so have not achieved a *purely* proof-theoretic justification procedure" (DUMMETT, 1993, p. 269). This condition becomes even more necessary when we think of non-classical cases of semantic interpretation, in which we cannot simply assume (as a fundamental assumption in Dummett's sense) the realist metaphysics and extensional idealization where the proof of p implies the proof of not (non-p): "What underpins the fundamental assumption are considerations that are not proof-theoretical but are in a broad sense semantic" (DUMMETT, 1993, p. 269). Here the author gives voice to a position for which there is a demand in the debate market: the claim that there is more than one way to semantically determine the same evidence, just as various scientific theories, for example Darwinism, elaborate their rule of semantic assignment (their attribution of 'truth' to sentences) to defend themselves against Lamarck's theory, and this choice is reflected in certain logical constraints of modeling the connective of "negation" (and implication) in a different context of argument. Under these semantic conditions, our conclusions about the consequences of p cannot rest on the bare information that not-p is false. The ability to account for these exceptions to the classical interpretation of negation is a necessary condition for understanding negation outside of mathematics:

> In mathematics, given the meaning of "if . . .then", it is trivial to explain " Not A" as meaning "If A, then 0=1; [...] More generally, it is by no means easy to determine what should serve as the analogue, for empirical statements, of the notion of proof as it figures in intuitionist semantics for mathematical statements (DUMMETT, 1996, p. 473).

> […] it is sufficient, for mathematical purposes, that a principle of inference should garantee that truth is transmitted from premise to conclusion. Outside mathematics, we have a motive to demand more. […] the conjunction of all of anyone's beliefs is likely to be extremely low, even when they are not actually inconsistent (DUMMETT, 1993. p. 50).

In Dummett's assumptions about semantics, it is possible to have unified and learnable semantic theories even for these non-canonical strategies of derivation, i.e., in the absence of classical dogmas of theories of truth:

> The assignment of distinct undesignated values, 0 and ½, is merely a device for codifying the different act of negation in different cases in which a sentence fails to be true. The relative ranking is a device for registering the behavior of

the conditional. The semantic theory thus serves, as it is its task to do, to explain the contribution of the subsentence of a complex sentence to its determination as true or otherwise (DUMMETT, 1993, p. 47).

Under these conditions, Dummett's theory reveals a new or unforeseen dimension of theorizing for classical semantics, namely, a dimension of semantic objects that do not contribute in identical ways to determine the same referential coordinate. They differ not in their assertoric value, but in their content-ingredient value: "In Lukasiewicz's semantics, the sentences A and [TA] have the same assertoric content; they differ in their ingredient sense" (DUMMETT, 1993, p. 48). The degree of divergence between A and [TA] may vary and depends on how we establish the rules for justifying A's assertion under conditions for which [TA] has no canonical proof. Different semantic theories require more or fewer rules – different canonical or apocryphal routes of proof/derivation – to determine whether the assertion of A is justified on the assumption of "not-A is false". So there is room for disagreement about the justification of our conclusions, as there is room for disagreement about the routes one theoretical system chooses to arrive at "truth" for their sentences. There is a margin of decision that no metaphysical or idealistic assumptions about "classical truth" can compensate for.

This margin of divergence is what is up for grabs for different meaning theorists. The same is not true for logic-theorists. The logical part is not available as an object of divergence of logicians precisely because it does nothing more than define the correction of validity of asserting conclusions. It is only a criterion for the fulfillment of empty schemes. But the semantic part has a scope for divergence, and it is possible to argue about the scope and contribution of the content-ingredient value: "given a semantic theory, logic can determine whether a given formalisation is sound and complete; but whether or not the semantic theory is correct is not for logic to say" (DUMMETT, 1993, p. 270).

The depiction of the ingredient composition of the term "blue" presents additional opportunities for its derivation or deduction within a conceptual framework, thereby expanding its potential as a basis for logical reasoning. This enhances the specification of its inferential function, deepening its intentional role and, consequently, framing the expression in a position of more specific incompatibility with other expressions. The contributory value of an ingredient sense would play the role that a

truth theory cannot play in predicting meaningful sentences, namely, to determine the value of sentences that are fine-grained enough to represent more subtle and partial semantic roles than those assumed by truth conditions: "The ingredient sense is what semantic theories try to explain" (DUMMETT, 1993, p. 48).

6 Dummett's anti-realist theory of meaning against Quine and Davidson

We can condense the message of the first chapters by saying that meaning is not always a *paradigm* of meaning. This is a skeptical message found simultaneously in Quine, Davidson, and Dummett. The challenge is thus to explain how one can objectively pick out meaning where competition between dimensions of meaning are prevalent. For radical skeptics the choice is easy: they refuse to talk on meanings. But that is not without costs. Skeptics must deny the dimension of meaning (above mere truth-application), then, on the cost of denying that there is a clear victorious paradigm of meaning and propositional knowledge at each moment of history and culture. The cost is, then, to allow confusion and indiscernibility between competitive models and possible truth-extensions.

Quine was willing to pay this price because the philosopher valued empiricism more than essentialism[2], and the cost could be added to the bill of his campaign to banish modality, attributes, and mental entities from science. It is true that when operating under ideal control conditions, established through the utilization of set-theoretical tools and Tarski's material and formal criteria, the presence of cheating and systematic defeatism in conveying meaning can be circumvented. However, this state of optimality may pose risks if it is unquestioningly embraced without undergoing critical examination. Quine pushed for an epistemological naturalism that specifically avoided dogmatic adoption of a framework of meaning based on set theory and phenomenalistic theories (the semantic-positivist dream) that was elevated above natural science as an agent of transcendental monitoring. Therefore he saw no problems with a revisable conception of natural science that was free of semantic surveillance. However, it is incumbent upon him to explain how we select successful communications and distinguish them from unsuccessful ones.

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[2]   "The Aristotelian notion of essence was the forerunner, no doubt, of the modem notion of intension or meaning" (QUINE, 1953, p. 281).

Davidson is not obliged to explain this, for he acknowledges that the paradigmatic dimension of "meaning" is attainable without requiring more resources than a theory of truth that filters or tests the conditions under which a sentence has objective-collective value, *enough like meaning* to function in our communication practice.

The main philosophical issue raised here was the question of the limits of meaning, or how far one can go in formulating sentences that are candidates for truth, pairing only with other truth-sentences, without delving into highly speculative, theoretical terrain or terrain remote from the "facts". Dummett stated his concerns regarding entrepreneurs of this kind:

> The realist assumes that, if God knows every prime number, he must thereby know whether or not there are infinitely many prime pairs; but the transition from the determinacy of the infinitely many instances to that of the (doubly) quantified statement was precisely what he was trying to establish, so that he is at just this point begging the question. The constructivist allows that it is determinate, for every natural number, whether it is prime or composite; he denies that it follows that the proposition that there are infinitely many prime pairs is determinately either true or false (DUMMETT, 1993, p. 350).

Dummett's worries are valid, yet it should be noted that Davidson does not fit into the vulgar metaphysical realist grouping. Davidson's choice is ingenious because treating the basic level of empirical testing as sentences that do not violate the T-convention (that can be asserted as true only when the possibility of falsity has been ruled out) is to operate at a level of elementary certainty even when there is no *fact to the matter*. The data of our semantic theories is nothing more than our patterns of consistent interpretative behavior, which can be converted into a representation of the competence to process the rules of a language. However, this solution raises other and more complex problems. Namely, the notion of truth described by the T-convention pattern does not address the problem of the pre-conditions that must be met in order for the truth designation not to be abrogated. Merely assuming that a metalinguistic framework is responsible for anchoring these truth designations may satisfy those interested in avoiding paradoxes like the Liar's, but it does not provide satisfactory answers for describing meaning conditions in more complex proof contexts.

To put it another way, the notion of meaning defended (by Davidson) is sufficient to meet the parameters of a theory of truth, but it is then weakened; as a result, it does not help to explain the roles that the notion of truth cannot play in a conceptual system

– those that only a concept of proof can play. A theory of meaning would be useless in this weakened form since it is limited to the constraints already met by a theory of truth. As long as two theories about the meaning of p are indeterminate only up to the line where this proposition can be interpreted as true, if not false, these theories will be equivalent for all practical purposes of communication. This is also evidence, as we saw with a remark from Millikan, that Davidson and Tarski's theory allows for a naturalistic representation of semantic notions, with no mysteries beyond those contained in the standardization of a consistent interpretation scheme. Questions regarding the intention, intension or internal perspective on the meaning of p that were present in the minds of theorists, as well as complex interpretive methods like psychoanalysis and hermeneutics, will not be brought up.

Dummett disagrees that meaning theory might be beneficial in this weak formulation. Producing a naturalization of the question of meaning may be interesting, but at what cost? If the cost is to eliminate complexities, it may be a counterproductive cost to our theorization of the non-referential (intensional) components attached to meaning. Dummett's point is that the content-complexity (or ingredient complexity) that challenges the unification of a theory of meaning for language cannot be avoided, necessitating more robust conceptual grounds for meaning recognition. These complexities should not be interpreted as an inconvenient departure from the Tarskian paradigm. After all, there is no independent and a priori reason to use the Tarskian paradigm as the exclusive program for determining effective communication or meaning transmission. In fact, to account for complex instances and ingredient contributions, the Tarskian paradigm must be augmented with more sophisticated (non-classical) features.

Dummett believes in a strong semantic theoretical consciousness. He believes that it is possible to have a paradigm of meaning. That paradigm can only be conceived, though, in anti-realistic terms. This would be a model of meaning for the epistemic restrictions of each historical period, to the extent that we can adequately identify the epoch's epistemic boundaries and integrate our ideas about the meaning of 'p' with patterns of mediation to prove that p. Everything that overflows this harmonic pool will have pseudo-meaning. Dummett redirects attention from a realistic theory of truth to a theory of judgment or authorized assertion. This shift involves the capacity to theorize not just the conditions for a coherent connection between an assertion and its

truth conditions, but also the conditions for conceivable and epistemically attainable verification. This possible verification ensures that the connection is not merely speculative and problematic, meaning it does not exceed the boundaries of what we can conceptually mediate as a potential proof.

According to Dummett, there is potential for dispute over the contribution of an A sentence to denying non-A; that is, various semantic theories will require more or fewer rules or computational patterns to establish the accuracy of the inference "if A, then not-(no A)" . Different routes of proof are available, depending on our epistemic limits or our states of information. The hope that there is an ideal case in which A will always be inferred from the assumption that not- A is false is thus dashed. This hope is reasonable only under empty logical conditions. Every time we need to justify inferences in real disputes about consequence, that is, inferences with mediating content, we need to choose specific semantic conditions – specific categorial systems, or specific paradigms of meaning – to justify the deductions. This becomes very clear if we are concerned with learning technical or scientific languages, where the meaning paradigm depends on a particular version of truth or non-falsity that has been carved out for its contribution to more or less particular explanatory purposes. For example, different semantic theories need to be constructed to unify the truth paradigm of different scientific theories and to show how the incommensurabilities of meaning between them are due to the different ways in which their statements contribute to the truth projected by the axioms of the theory.

This means, however, that certain conclusions are guaranteed regardless of whether we have idealized the conditions for the non-falsity of that conclusion by determining the concluding sentence to be (extensionally) indistinguishable from the truth of the premises. Those conclusions are guaranteed simply by the choice of the defense system chosen to justify the assertion of that conclusion, and different scientific systems will choose their defense system according to the debate scenario in which they fit. Darwin set up his theory to defend himself against Lamarck and not against creationism, and this makes an obvious difference in our logical ability to refute creationism by Darwinism alone. Although this (attacking creationism with Darwinism) is feasible, it necessitates additional cognitive capacities and computational patterns with finer intensional structure – a finer meaning-structure – than those found in a theory of truth. Logicians can do nothing about it. They are limited by formal settings.

It is the semantic level – not the logical one – where one can find new ways to use Darwinism as a negation of creationism.

The naive realist, however, believes that there is only one way for any theory to be true or false, and therefore, by this metaphysical premise, Darwinism cannot remain ambiguous in its confrontation with creationism, nor can it ally itself with it when faced with an enemy of both. Dummett's work at least helps us to eliminate the pernicious influence of realists who want to create an idealized semantic parameter in which truth is the universal criterion for any semantic theory.

Under these conditions, it is up to Davidson to explain how changing scientific paradigms alter interpretations of the application of true to sentences, by altering the very meaning of the connective "no", thereby changing the set of our knowledge of true (the extension and anti-extension of "true"). Dummett's contribution to specifying the (meaning-theoretical) conditions under which a hypothesis of meaning prediction is acceptable is thus key to a better understanding of the challenge involved in trying to avoid the skeptical consequences of Quine's theses. For Dummett shows that in all the relatively interesting modal and counterfactual cases where the extension of "is true" has no symmetrical relation to "is false" (and promotes various proof-ways and apocryphal versions of the anti-extension of "is true"), we need a non-realist ideologically-influenced semantics (such as an intuitionist one) capable of specifying meaning with a wealth of detail that mere "truth-models" cannot provide.

Conclusion

Dummett goes beyond Quine to highlight the concept of truth's limitations in defining meaning. He contends that not only are assumptions about meaning underdetermined by facts about "truth", but theories about the usage of logical connectives are subject to a number of non-classical interpretations, undermining the foundation for our judgments and proofs. His solution is based on Gentzen's harmony theory. Despite the limitations of a theory of truth in determining meaning, Dummett recognizes that the harmony between our rules of introduction and elimination consistently determines the relationship between what can be conceived and what can be verified in a given historical phase, defining the distinction between meaning and absurdity at this stage.

We believe that Davidson either fails to avoid Quine's skepticism or pays an equally radical price, namely reductionism and eliminativism, by lowering the bar for meaning-theories and presenting them as mere theoretical predictions of linguistic and behavioral data consistent with Tarskian patterns. Against this endeavor, we argue that the complex *data* of a theory of meaning based on Tarskian criteria is an idealization, and that Quine would condemn this strategy as dogmatic. Our exercises in recognizing patterns of interpretation are unavoidable, but using set theory to establish these patterns as accurate matters of fact for explaining analyticity and empirical confirmation (the dream of semantic-positivism) is a dogmatic duet of empiricism.

Micheal Dummett goes beyond Quine. He believes 1. By reducing meaning to truth conditions, we merely establish superhuman standards of proof and verification. Truth-conditional semantics is just the set-theoretical face of a realistic idealization of what can be proven, based on inductive mathematical criteria that establish a superhuman parameter (based on God's ability to represent problematic content as actual content) for meaning recognition. And he believes, 2. that even if Davidson's reduction of meaning data to truth patterns is successful, something will be lost. A key component of a meaning theory will be lost. This is because a theory of truth fails to frame non-straightforward stipulations governing the role of sentences in cases involving non-classical standards of proof, and that a theory of truth does not sufficiently specifies the conditions for the contribution or ingredient sense of language sentences, thus limiting our ability to disagree about the extension of logical consequence – conceptual disagreement – and objectively frame that disagreement.

Then, for Dummett, "truth" cannot be used as an idealized parameter to exhaust conceivable patterns for semantic theories. According to Dummett, in line with an ancient idea (dating from Frege and Kant), what is crucial is not the "truth" but the judgment, or the conditions under which the statement of 'p' is harmonious with the evidence favorable to p (its representation in a synthesis, or in a non-trivial demonstration/proof). The author works with proof theories to define "harmony" as the condition in which the assertion of 'p' cannot be used to prove more than the logical consequences of 'p', nor can it be used to prove only a convenient subset of the consequences of 'p', i.e., the condition that ensures fixed and non-cheatable parameters of success for asserting 'p'. This limits the meaning of 'p' to a non-metaphysical standard of verification based on the range of feasible mediations to

prove/assert that p, rather than an abstract and Platonic reality. Dummett allows us to salvage a foundationalism about meaning divergence and an antiskeptical theory. By incorporating intensional complexities as ingredient contributions, we sacrifice generality in exchange for specificity. As we introduce these complexities, the set of indistinguishably satisfactory models within the formal system's internal states diminishes gradually. So the additions improve our knowledge about deep differences in meaning.

The conclusion is that truth-conditional theories mischaracterize the knowledge required for a theoretical understanding of the divergence of meanings (and disagreement about the justification of inferences). We must therefore forgo classical and realist patterns of meaning-idealization in order to frame the objective reality of fine-grained divergence between meanings or conceptual systems.

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