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Structure, ingredient sense and assertoric strategy: listening to Michael Dummett to interpret the heritage of Frege's philosophy

Estrutura, sentido-ingrediente e estratégia assertórica: ouvindo Michael Dummett para interpretar a herança da filosofia de Frege

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Abstract: In this article, we will revisit a motivation to consider the advantages of a theory about structured contents over a semantics of possible worlds. We will argue that a *structure* represents the strategic organization of the content of “p” under conditions in which asserting it does not imply contradictory consequences. These are the winning conditions for the assertion of ‘p’. When ‘p’ is modally sensitive – it can change its winning parameters – knowledge of the structure thus represents the rational point for assertions (about non-actualized realities) that are organized to maximize what can be deduced from ‘p’. In these cases, the known relevant structure is intensional. We will argue that actualist Possible World Semantics, seeking the conversion of intensional knowledge into a *de re* representation of possible states, pays the price of being blind to structural divergences; it can only poorly explain these structural divergences between non-actual states of information and correlate it with divergence between winning strategies of assertion. Our argument will begin exposing Frege’s legacy; resort to Dummett’s concept of ingredient sense as an alternative to Kripke’s grade two knowledge; and briefly go through a semantic strategy of Stalnaker and Thomason to represent modal statements. In addition to these authors, we will explore the contribution of Russell, Kaplan and Ecthemendy to our argument.

Keywords: Assertion. Ingredient-sense. Sense. Structure.

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Resumo: Neste artigo, revisitaremos uma motivação para considerar as vantagens de uma teoria sobre conteúdos estruturados sobre uma semântica de mundos possíveis. Argumentaremos que uma estrutura representa a organização estratégica do conteúdo de “p” sob condições nas quais afirmá-lo não implica consequências contraditórias. Estas são as condições vencedoras para a asserção de ‘p’. Quando ‘p’ é modalmente sensível – pode alterar os seus parâmetros de sucesso – o conhecimento da estrutura representará o ponto racional para asserções (sobre realidades não atualizadas) que são organizadas para maximizar o que pode ser deduzido de ‘p’. Nestes casos, a estrutura relevante conhecida é intensional. Argumentaremos que a Semântica do Mundo Possível actualista, que procura a conversão do conhecimento intensional numa representação de re de estados possíveis, paga o preço de ficar cega às divergências estruturais; e só consegue explicar muito mal estas divergências estruturais entre estados de informação não reais e correlacioná-las com a divergência entre estratégias vencedoras de afirmação. Nosso argumento começará expondo o legado de Frege; recorrer ao conceito de sentido-ingrediente de Dummett como alternativa ao conhecimento de segundo grau (grade-two) de Kripke; e passar brevemente por uma estratégia semântica de Stalnaker e Thomason para representar asserções modais. Além destes autores exploraremos a contribuição de Russell, Kaplan e Ecthemendy para o nosso argumento.



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Palavras-chave: Asserção. Estrutura. Sentido. Sentido-ingrediente.

1 Judgment, assertion and propositions revisited by pragmatism

“Something must be clarified here: that in each judgment – even the most obvious – the passage from the plane of thought to the plane of reference (of the objective) has already been given” writes Gottlob Frege in *Sinn und Bedeutung* (1948, p. 216). By referring to the previous footnote, one can finish his thought: “A judgment for me is not the mere apprehension of a thought, but the recognition of its truth” (Frege, 1948, p. 216). Frege’s first symbol, an assertion or judgment (a vertical trace followed by a horizontal one) in another now-classic text, the *Begriffsschrift* (first published in 1879), illustrates how his theory of truth is intended to provide the justification for the semantic model for inferences: “Frege proposes to reduce all inferences to this simple pattern, the modus ponens” (Kneale; Kneale, 1962, p. 486).

The Filo’s conditional expresses a pattern where resolving the *truth problem* of the antecedent is enough to resolve the *truth problem* of the consequent. For Frege (1979, p. 453), “the precisely defined hypothetical relation between contents of possible judgments has a similar significance for the foundation of my concept-script to that which identity of extensions have for Boolean logic”. This highlights the pragmatic importance of asserting the truth of the consequence over its negation, based on the antecedent. This can be seen as an important pragmatic point: that to assert the true of the consequence remains *more rewarding* than its negation, given the antecedent. Given a set of antecedent hypotheses, the extension of the truth-functional implication $p \rightarrow q$ accurately represents what would be the safest hypothetical conditions under which q can be stated. The underlying idea here is that knowing that the falsehood of q is incompatible with the true of p is equivalent to knowing a conservative extension of the (hypothetical) assumption that q follows from p . This method is the most cautious and preventive, aligning closely with our inductive parameters. It assumes that any evidence supporting the truth of p in a possible world will not contradict the stipulated hypothetical conditions, leading to the best possible outcome. Thus, the understanding of the Sense determines the reference: it is prudent or justifiable to posit the thesis that q is true if p is given. Knowing that q cannot be false if p is true suffices to justify asserting q based on the same grounds as p .

This approach garners support and enables the positioning of the asserted proposition, either in opposition to or diverging from generalizations that fail to yield similar results. An assertion is a psychological act that conveys the complete meaning of a statement. It signifies the clear distinction between instances that support a statement and those that do not. According to Dummett, following Frege’s perspective, the terms we employ establish principles that effectively categorize the world: “based on Frege’s vision, the names we use [...] determine principles by means of which the slicing up of the world is effective” (Dummett, 1981, p. 345).

This property, which we might refer to as assertive pressure, ensures that each assertion has a single model or truth table, meaning that p ’s claim cannot have any more implications than those that p projects. This makes it possible to characterize the assertive content structurally. It is possible to abstract a single structure or mathematical relationship that represents the form of every assertion of the same level of complexity. There is a structural generalization for all sentences that are not different in complexity regarding how they are approached as true or false. The underlying structure and relationships between the components of a sentence will behave uniformly. This is nothing more than the assumption that, in a scenario where there is agreement on what makes up a legitimate and invalid assertive move, all sentences are playing to win. Since we cannot say “that p ” without assuming that it is true under the circumstances that support its truth, we must at least have a basic understanding of its structure. It is impossible for the knowledge of the winning-conditions for an assertion to be omitted from the assumptions of any assertive move, if the move *is to make sense*. This is expressed in pragmatic terms: If an individual solely acknowledges the outcomes of his statement when they align with his presuppositions, while arbitrarily rejecting any incongruous consequences, his assertion will prove ineffective in serving as a meaningful action or as a *move that makes sense* in the game. Dummett did a fantastic job at explaining this thesis:

It has become a commonplace to say that there cannot be a criterion of truth. [...]. In the same sense there could not be a criterion for what constitutes the winning of a game, since learning what constitutes winning it is an essential part of learning what the game is. [...] What makes us use the same term “winning” for each of these various activities is that the point of every game is that each player tries to do what for that game constitutes winning; i.e., what constitutes winning always plays the same part in determining what playing the game consists in. Similarly, what the truth of a statement consists in always plays the same role in determining the sense of that statement, and a theory of truth must be possible in the sense of an account of what that role is. (Dummett, 1959, p. 7).

Singularizing assertoric content is an elegant method to promote a pragmatic perspective on intentional content. In this approach, a proposition, which represents the true analysis of thought, becomes the programmatic content of an indefinable number of rational defense strategies within a theoretical framework of truth-prediction. In other words, all the non-defeasible defense strategies for “p” are compatible with the propositional content of p.

According to our argument, assertability is the defensive posture that may be made unique in each full extraction of interpretations from a semantic value assignment. Studying the unique outcomes of various instantiations could help one understand the theoretical characteristics of the assertion and the “things” that can be understood by knowing how to make assertions, such as the propositions or the Sense. One could attempt to summarize empirically all the defensive strategies for “p” so far, carefully study them to differentiate the successful from the unsuccessful ones and develop a formula for propositionality (only including successful strategies of meaning).

2 Structural knowledge about the possible: modal parameters as structural organizations of content

We have argued that talk about propositions can be substituted by talk about assertion or assertoric strategies; although there is a theoretical stage of the knowledge about how to assert ‘p’ that involves the learning of some content (perhaps an *ideal one*), and little reason seem to encourage philosophers to deny that being called a “proposition” or a “Sense”. The concept of “Sense” pertains to the role of an expression in mediating an inference or conclusion. It deals with non-referential knowledge that cannot be truth-functionally represented. When ‘p’ is modally sensitive, it can modify its winning parameters; hence, knowledge of the structure serves as the logical point for statements (about non-actualized realities) arranged to maximize just what can be deduced from ‘p’. This is intensional knowledge. It is represented by a different structural knowledge, a deeper one. Isomorphism of structure is required by Frege’s notion of saturated and unsaturated expressions, since not all generic variables can be properly substituted with one another while maintaining meaning (*salva significatione*). Frege’s intensional theory is “structural”. This means that the higher-conditions for *sameness of Sense* are isomorphism of structure:

If it should turn out that statements involving “knows that” and “believes that” permit of formal analysis, then such an analysis would have to be embedded in a language with a stronger equivalence relation than strict equivalence. Carnap’s intensional isomorphism, Lewis’ analytical comparability, and perhaps Anderson and Belnap’s mutual entailment are attempts in that direction. (Marcus, 1961, p. 313).

The question mentioned refers to the ability to give a coherent semantic representation – or a consistent assertive pattern – to sentences that attempt to map a non-relative value onto a sentence

that contains information about relative circumstances, such as those that hold in possible worlds. As Dummett aptly put it:

Among the linguistic intuitions to which a logical analysis is to be held responsible, there are ones which bear, not upon the absolute true or falsity of what we say, but upon to its true or falsity with respect to hypothetical circumstances, or upon its modal status. (Dummett, 1981, p. 581).

Dummett introduces a useful terminology to address the issue: he refers to a grade-one understanding as falling within the rule for describing extensional conditions, and a grade-two understanding as defining the conditions for maintaining the fixed assignment of truth in counterfactual situations. To successfully interpret this understanding semantically, one would need to grasp what Kripke terms the “question of rigidity”, which concerns whether an expression establishes its reference in all possible worlds where such a reference exists. Dummett argues that Kripke’s explanation is simply a semantic tool for representing the knowledge of someone who understands the meanings of expressions: “rigid designation is not, however, itself a linguistic phenomenon: it is a device of semantic theory to explain certain linguistic phenomena” (Dummett, 1981, p. 580).

Therefore, Dummett believes that the tools of logical analysis used at the outset of analytical philosophy, like Russell’s well-known distinction between primary and secondary scope, are just as effective as Kripke’s approach. Thus, grade-two knowledge can be articulated through a variety of semantic devices, which are essentially different methods of figuring out the structural form of a link between propositional contents or the syntax of a computable pattern.

It is well known that Bertrand Russell (*On Denoting*) had his own theory on how to offer an analysis that characterizes an *absolute* model for interpreting sentences that would not seem to receive an absolute truth value under an interpretation. He showed how the application of the modal operator ‘is possible’ to “The King of France is bald” can be read in two ways. Only when we read this sentence with the meaning that the *general thing* (Ex) that is the King of France could be bald we capture the semantic intuition invoked by Dummett: that of the semantic model of truth or falsehood with respect to the hypothetical condition in which something (Ex) fills the condition of being the *King of France*. We do not suppose existentially any more than we can suppose when speaking of the King of France, and the costs of the assumption that it exists are not ontologically represented, since the King of France, for Russell, is not a primary part of the scope of the proposition, but rather an x delimited by the parameter of his descriptions. However, if we want to reject the King of France’s existence, we do so by using the primary scope, which implies an ontological cost, i.e., we deny directly the assumption that the King of France exists.

Notably, one of the pillars of Russell’s theory of incomplete descriptions explains how it is conceivable to know the semantic behavior of denotations that we have no direct acquaintance with. This is also a problem of psychology about how to determine the content of propositional attitudes. Of course, the problem of the content of propositional attitudes depends on the solution on how to predict the psychic reaction to denotations whose reference is established indirectly, through mediation methods like induction, and how intricate semantic outcomes can be accounted for extensionally. Logical analysis can help restore problematic denotations by providing an extensional-semantic contribution that aligns with bipolarity (describing it as the understanding of a propositional function), thus offering descriptive knowledge that is not at odds with our classical logical intuitions about reference. This way, we can discuss without much difficulty the content of George IV’s belief in ‘p’ (that Scott is the author of Waverley).

By utilizing quantifiers over variables to determine the extension of a belief across different possible worlds as a *problematic extension* (a Russellian propositional function), one can attribute a problematic *de re* content to modal-sensitive propositions like the ones about the authorship of Waverley. With this,

he can disambiguate the modal content of the proposition in which one believes and at least avoid contradictions and retain meaning-substitutional coherence within that belief system:

when we say, “George IV wished to know whether Scott was the author of Waverley”, we normally mean “George IV wished to know whether one and only one man wrote Waverley and Scott was that man”; but we may also mean: “One and only one man wrote Waverley, and George IV. wished to know whether Scott was that man”. In the latter, “the author of Waverley” has a primary occurrence; in the former, a secondary. [...] This does not interfere with the truth of inferences resulting from making what is verbally the substitution of “Scott” for “the author of Waverley”, so long as “the author of Waverley” has what I call a primary occurrence in the proposition considered. (Russell, 1905, p. 489).

Micheal Dummett, who has challenged the exclusivity of Kripke’s theoretical framework on rigid terms, believes that Russell’s solution would suffice for all practical purposes of avoiding defeatist assertions of modal-sensitive propositions: “Many of the differences of behaviour after ‘to be’ and ‘to become’ are due, like those in modal contexts, to conventions of scope [...]” (Dummett, 1981, p. 183) and “[...] the conventions concerning scope determine whether, for each given occurrence of the term, the method of fixing the reference shall be taken relatively to the present time or to that referred to” (Dummett, 1981, p. 184).

For the purposes of the non-contradiction criterion, let us assume that modal content distinctions are, in fact, disambiguated by scope conventions. Therefore, scope conventions provide some strong defensive grounds for one to believe rationally in whatever he believes, preventing disagreement between interpretations of the same belief in a modally sensitive proposition. In the limit, as long as a statement can be believed in only one way and its assertion can only be disproved by a single, coherent interpretation of logical negation (its anti-extension), it does not matter how vulnerable it is to modal conditions or how dangerous it is to assert it. This characterization of the problem rings a pragmatic bell, which is expressed in Dummett’s reflections on the assertoric content of propositions: “someone who is able [...] to classify specifications of possible states of affairs into those that are adequate for an assertion made by uttering it [...] may be said to know the assertoric content of that assertion” (Dummett, 1993, p. 48). If one is to assign rationality to a belief system, then we should be able to understand assertions that are risky to make in the same way that we can understand assertions that are more straightforward, immediately verifiable or refutable.

3 What is the pragmatic knowledge learned by learning the Structure?

Dummett spends much of the chapter arguing that the Russellian scope mechanism is no less artificial or intuitive than Kripke’s mechanism of rigidity, and that both have the same mission of enriching our semantic ability to coordinate value assignments to complex sentences. But Dummett’s answer is richer than that.

Dummett’s response to Kripke¹ is that the author is not describing a *new competence*. He is just describing what it means to grasp the “ingredient” content of sentences, something that one could even do using predicate-abstracts of higher-order logic. Stalnaker and Thomason proposed in 1968 a solution

1 Kripke argues in Naming and Necessity that Frege and Russell would not have been able to characterize the semantic requirements for the representation of propositions’ counterfactual content: “Consider: (I) Aristotle was fond of dogs. A proper understanding of this statement involves an understanding both of the (extensionally correct) conditions under which it is in fact true, and of the conditions under which a counterfactual course of history, resembling the actual course in some respects but not in others, would be correctly (partially) described by (I)” (Kripke, 2001, p. 6).

involving extensional identifications across worlds: “A term that refers to the same substance in each possible world we call a substance term” (Stalnaker; Thomason, 1968, p. 362). The trick involves converting the Koff in a variable linked to a property, because, so it seems:

Individual variables range over substances, and hence play a more specific logical role than do singular terms in general. Thus, e.g., ‘Miss America is mortal’ would not be regarded as an instantiation of a formula of the sort $P(x)$, whereas ‘Socrates is mortal’ would” (Stalnaker; Thomason, 1968, p. 362).

Stalnaker and Thomason then demonstrate how it is possible to reify the modal content applied to a singular term to give an absolute representation of a sentence conditioned on modal parameters: “ $xHA(t)$ is a *de re* formula since in it the modal operator is used to construct a predicate xHA , which is then applied to a singular term; such a formula, then, represents the ascription of a modal property to a thing” (Stalnaker; Thomason, 1968, p. 364).

The abstract predicate refers to what has to be known so that we know exactly what would have to change in our world configuration in order to “fond of dogs” become incompatible to Aristotle. In other words, knowing which worlds or scenarios are excluded by the assumption that (not) “Aristotle was fond of dogs” can be portrayed by knowing the incompatibility between Aristotle and the predicate “possibly fond of dogs” which reifies the modal parameter. That is what the negation of this kind of abstract-predicate is supposed to represent. We are talking about a grade-two understanding: what is known is more than what would be known just by knowing how to assert that Aristotle is fond of dogs. We know how this sentence can be assumed or introduced as a hypothesis and contribute to a more complex, assertive strategy.

We may now argue Dummett’s point by observing what really changes when one goes from a grade one to a grade two understanding. The only concrete change in theoretical content that someone can expect when moving to a supposed grade-two understanding is learning how to apply an abstract-predicate, i.e., how to acknowledge the structure of the relation between instances (saturated terms) and functions (unsaturated terms). And that is nothing but the acquisition of knowledge of the conditions in which the attribution of “possibly fond of dogs” for Aristotle would not invert the semantic value from truth to false, and vice versa. One can substitute the notion of rigidity through the semantic interpretation that maps an absolute value to properties that *could be* attributed to Aristotle, such as that he was *possibly fond of dogs*.

In order to representing a notation that represents the ascription of a reified modal property to Aristotle, like “necessarily/possibly was fond of dogs”, we can in fact use those artifices; although this is a considerable departure from the natural way, we usually depict the condition of being truth in a “possible or necessary circumstance”. What such an abstract-predicate offers are the opportunity of constructing the interpretation that Aristotle falls *absolutely* into the scope of “was possibly/necessarily found of dogs”. This is akin to understanding the circumstances in which Aristotle is considered identical to Plato’s best student in a *ceteris paribus clause*. This helps us understand how to express a hypothetical condition, defend it, and negate it by using truth-functional connectives to convey its meaning. If the interpretation assigns truth to some instance of the abstract-predicate, there is no possible rows of a truth-table in which it could be false.

What has been learned? We are certainly learning how to make semantics sensible to ways of theorizing possibility and asserting hypothesis, giving referential values to complex functions. We are discovering that when specific conditions are similar enough, as symbolized by a higher order predicate, we can accurately understand our statements for what they are, even if the content might vary under different circumstances, acquiring different winning conditions for its assertion. In other words, structural similarities between models are the categorical keys that provide knowledge of semantically valid substitutions of mere non-referential possibilities. The absolute assignment presuppose that we

have some way of identifying what aspect of the “same reference” is persistent in a possible situation to other possible situations. We can say that “under the condition of the hypothesis” that assignment is true (or false), or that “*ceteris paribus*” that assignment is true (or false). In all these cases, we are trying to give an explanation for the semantic iterability of modal sentences, and this is nothing but knowledge of the *sameness of Sense or the isomorphic structure of the content*. So Frege’s theory of *sameness of Sense* end up giving a successful account of persistence across-worlds.

What else was learned? There is quite a lot already: Understanding how to establish structurally the relationship between a predicate and a subject to depict a condition where they cannot be separated without contradiction can be achieved through various methods, such as Kant’s theory of *a priori* synthesis or Frege’s theory of organic analyticity. This knowledge is not trivial. However, it’s essential not to overestimate the accomplishments behind this kind of knowledge. The key aspect of mastering these intricate structures is understanding how they structure our inferential knowledge, enabling us to comprehend the conditions under which assuming *p* leads to the ability to assert *q*. According to Dummett this is just knowing the ingredient-value of a semantic content, which remains neutral until it is not – depending on the assertoric strategy and the state of information: “The additional ingredient that would convert a grade-one understanding into one of grade-two relates solely to the use of the sentence as a constituent in a complex modal sentence”. (Dummett, 1981, p. 573).

One of the biggest advantages of pragmatism over other philosophical stances is that it teaches one to not overestimate some discoveries. Here is no different: we have not learned God’s plan for Aristotle and “possibly fond of dogs”. We just learned how to extend the compatible circumstances of the predicate and its instances to its maximum limit by representing the sentence as a structured function. The elucidation of the function’s structure, in contrast, enables us to depict the inferential significance of the notion of “possibility”, thereby harmonizing the theory of structural contents and inferentialism, as articulated by Stephen Read:

Unless one believes in the reality of possible-world semantics, it cannot provide an independent and non-circular account of the meaning of the modal terms “necessary” and “possible”. Rather, the meaning of these terms must be given inferentially, by laying down rules for their use. (Read, 2008, p. 19).

There are various assertion tactics, but only the rational ones are of importance to us. Someone who is unaware that Hesperus is Phosphorus is not only rational in claiming the possibility that the sentence is false, but he is also formulating a strategic stance on the possible identity of both. If the strategy is rational, it maximizes everything that can be known about the possibility of Hesperus being Phosphorus in an information state. I.e., the characteristic of someone who understands how to organize his propositional knowledge in a structured manner is that even when the winning conditions for his assertion are risky and contingent, he could be wrong in a rational way (as opposed to a superstitious manner), maintaining a minimum rational stance of what his assertion implies, and thus he would not be defeated if an astronomical discovery taught him in the future that those were the same star.

4 Conclusion: structural knowledge of content against possible world semantics

The success of possible worlds semantics is due to how it enables the representation of complex propositional contents, relating to parameters not restricted to the current world (believed, or known contents), without appealing to the controversial idea of “Sense” and other similar ideas, such as mental content. Possible-world semantics do not think complex reference or even lack of reference in though is untenable to be modeled. They see no reasons to avoid quantification over the “possible”. Accordingly,

they are in direct violation of the Fregean principle of canceling the semantic value of no-referential (extensional) expressions, and this is a voluntary choice.

Here, we contend that Possible world semanticists suffer from a drawback. Perhaps in the road to the explanation of the “possible” a wrong turning had been taking. By letting possible worlds (intensional complexity) to be plugged in the variables of the projection of truth (violating the difference between referential and no-referential), they payed the price of making the actual and the possible indistinguishable in any computable syntax. To understand how the structural solution proposes to solve the problem of trans-worldly identity, without losing the ability to distinguish between the powers of structural contribution of the actual and the possible, a quote from David Kaplan (*How to Russell a Frege-Church*) considerably accelerates our task:

The Haecceitist will regard overlaps between $I(w)$ and $I(w')$ as representing features of the metaphysical reality; the Anti-Haecceitist will regard them as artifacts of the model. How can we represent the Anti-Haecceitist's position in our model theory [...] by defining a notion of isomorphism between models which preserves structure except for such overlaps. (Kaplan, 1975 p. 727).

Of course, here possible instantiation is not an *essence being actualized*, but something more harmless: the ability to give a structural account of the possibilities resemblances. It is only the knowledge of how some projections are favored over others. Dummett helps us further:

A theory represents the easy case for explaining the truth or correctness of counterfactuals. [...]; it is just a matter of the values we plug in to the parameters, [...]. It makes not the slightest difference when the theory happens to be a semantic theory for modal discourse. [...] it does not, after all, tell us which possible world is the actual one, that is, which utterances are in fact true. If it did, the modal logician would be omniscient. (Dummett, 1981, p. 568).

Both Kaplan and Dummett, being immersed in Fregean literature, suspected that the Possible-world logician step defines an artificial trick: they try to cheat the structural incompatibility caused by the use of expressions with no assertoric force (or with denotations with unpredictable modal behavior under different time-possible circumstances), by representing it by a model of possible cases. The mentioned strategy is of course an option, that would make one conscious of a *possible rule* for explaining the conditions in which something that is not true would be true. But a possible rule is divergent from an actual rule. A rule that works is different from a rule that could work. We can always ask: what has been learned by that possible rule, though?

Etchemendy clearly saw the problem. Judging how a representational semantics would judge the truth-table distributions of possible states of affairs, he said: “the fact that the target sentence would have been false in a row of the table was taken to indicate that the sentence would have been false in a row [...]. But the third row itself is not a world [...]. It is just a handy surrogate, for the aims of our theory” (Etchemendy, 1999, p. 20), and “Although these models would give us complete partition of possible worlds, the partition would not have been fine-grained enough” (Etchemendy, 1999, p. 24).

This kind of possible-world semanticists, as representational semanticists, are not interested in fine-grained discrimination. They understand no distinction between structural and superficial components of meaning attribution because they have chosen to treat the actual and the possible as equally quantifiable.

In order to represent the *de re* content of the modal sentence, possible world semanticists use a strategy for picturing the necessary or possible content of the sentence, independent of any consideration into the nature of possible interpretation of that pictured content. J. Etchemendy, labeling that strategy as a representative semantics (in opposition to an interpretational one), says that: “Representational

semantics draws no distinction between fixed and variable terms. [...] The new element in our models, the universe set, provides some added detail to our representations: it allows us to depict worlds with various populations [...]” (Etchemendy, 1999, p. 66).

Representative semantic strategy encourages a quite dangerous behavior: it privileges model-representation over fine-grained interpretation in order to depict possible scenarios, and the price is making one defenseless to depict divergences in the semantic contribution of *possible instantiators*. They may think this is a good trade-off. Nonetheless, to be blind about those divergences, we argue, is not an advantage at all. It does not open the semantic view for more possibilities. It only makes semantics incapable of discrimination.

Saying again: possible world semantics makes us defenseless to discern the divergent contribution of the actual (that contributes *actively* to truth) and the possible (that contributes only *in combination* with the target mathematical sets that *simulates* the result). For them it is indifferent if something is an *actual* contribution for the truth of “violets are blue” or a *possible* contribution to it (in the case where that color is dependent on other biological conditions, etc.). That is because they think it is possible to account for those divergences by identifying *haecceitisticall* ways in which possible things diverge from each other. In order to get answers, the possible world semanticist would create a computer that describes all relevant possible simulations and compares them with each other. The old ambition of some medieval metaphysics is helped by computers. Finding the essential feature that instantiate objects that are equal under the same possible conditions, would be made *a posteriori* – by the computer algorithm. Then we would have Kripkean necessary *a posteriori* truths. But in this account, semanticists would remain blind to distinguish the ingredient value of some expressions and their actual semantic value. It is exactly this disadvantage that the structural solution avoids.

Haecceitism is the simplest way of accounting for representation of sameness between worlds, or *haecceitisticall* ways of possible things diverging (divergences that would be repeated under similar conditions); i.e, it is the metaphysical old and poor version of the activity of empirical scientists searching for structural similarities that allow them to predict causal changes. It doesn’t matter if we are talking about essentialist haecceitists or fallibilist haecceitists: both share the common trait of maintaining the belief that knowledge of truth (certain judgment) can be attained through the verification of potential truth (problematic judgment). Under this premise, perhaps by checking all the possible scenarios where “violets are blue” is true, we can gain some insight into God’s design for Violets. New information would show only that God changed his plans, not that *haecceitism* is false. Some would expect this medieval obsession would not prosper after Galileu. But by using a computer program to check all possible simulations, old expectations must have built a new optimistic momentum.

However, that sporadic optimism served to mask the distinction between ingredient content and asserted content. In our abstract reflection about the “possible” colors of the violet, without that distinction, they are also unable to distinguish between what is structural and what is superficial. When they compare between possible worlds, they can never extract a real explanatory difference from it, because the mathematical coordinates of logical space that makes worlds accessible to each other permits no fine-grained distinctions between superficial and structural similarities.

But, of course, the criticism given here will have limited persuasive power. Honestly speaking, we will not show here any surprise capable of changing the minds of philosophers. Possible world semanticists know their limits, and they chose it. The fact that the way they represent modal statements is not how real scientific induction selects better explanations does not seem to hinder the representational designs of modern metaphysicists. Indeed, the decisive assumption has merely slipped in without discussion. These theorists do not care about it, as long as they are able to offer a semantic account of the *possible*. The new theorists of modal logic and possible worlds have succeeded in deflecting from the anti-metaphysical prohibitions matured by empiricism by the door left by the logical positivists themselves: the assumption

that the important thing to determine the *possible* is what is *semantically representable*. Everything else would be pseudo-meaningful philosophical and external questions.

However, these assumptions are not easily settled. It's not just philosophy or art that creates the intellectual energy to push the boundaries of what is considered possible. Extending the domain of "possible things" beyond paradigmatic assumptions is another goal of natural science. Scientific endeavors are not restricted by semantic limitations as a predetermined framework. By stepping outside the semantic bounds of modeling, natural science might uncover new possibilities and transform our knowledge of meaning and inference. In natural science, what is considered "revolutionary" often requires expanding the foundations of necessary truth. It cannot be simply predicted based on the expected behavior of sentences that can be explained by a consistent theory of truth for modal statements.

References

- DUMMETT, M. *The Interpretation of Frege's Philosophy*. Harvard University Press. 1981.
- DUMMETT, M. *The Logical Basis of Metaphysics*. Harvard University Press. 1993.
- DUMMETT, M. Truth. *Proceedings of the Aristotelian Society*, v. 59, n. 1, p. 141-162, 1959.
- ETCHEMENDY, J. *The Concept of Logical Consequence*. Cambridge Massachusetts. Harvard University Press, 1999.
- FREGE, G. Sense and Reference. *The Philosophical Review*, v. 57, n. 3, p. 209-230, 1948.
- FREGE, G. *Posthumous Writings*. Chicago: University of Chicago Press. Translated by P. Long and R. White. 1979.
- KAPLAN, D. How to Russell a Frege-Church. *The Journal of Philosophy*, v. 72, n. 19, p. 716-729, 1975.
- KNEALE, W; KNEALE, M. *The Development of Logic*. Clarendon Press, 1962.
- KRIPKE, Saul. *Naming and Necessity*. Cambridge, MA: Harvard Press, 2001.
- MARCUS, R. B. *Modalities: philosophical essays*. New York: Oxford University Press. 1961.
- READ, S. Harmony and modality. In: DÉGREMONT, C.; KIEFF, L.; RÜCKERT, H. (Eds.). *Dialogues, Logics and Other Strange Things: Essays in Honour of Shahid Rahman*. London: College Publications. 2008. p. 285-303.
- RUSSELL, Bertrand, On Denoting. *Mind*, New Series, v. 14, n. 56, p. 479-493, 1905.
- STALNAKER, R.; THOMASON, R. Modality and Reference. *Noûs*, v. 2, n. 4, p. 359-372, 1968.



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