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No Thing Refers to Nothing
On showing the False.

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Abstract: This discussion tries to explicate some epistemological problems in connection with negation and the so-called godelian sentences. The paper examines some methods of generating negative formulas from positive bases, an proposes alternative methods which with some antinomic formula could be eliminated. The discussion tries to show, that some epistemological antinomies arise from the natural language, and most formal languages inherit the natural (and maybe false) way of indicating negations.

Keywords: godelian sentences, negation, indication, apophatic, kataphatic, representation

Introduction

This short paper tries to show that some of the problems revealed by Godel not necessarily hold for any logical system: under specific conditions the godelian problem could be eliminated. Naturally, this fact is dearly reconcilable with the godelian habit of mind, so the proposal of this paper is an alternative method for showing the False, where the rather problematic term is, of course, not 'the False' but 'showing'. Nevertheless, there are rocks ahead, so let's start with the lighter one.

In logic, the falsity of something could be conteptualized many ways depending on the logical status of that entity which is (or thought to be) false. So logicians are referring to false (or contrafactual) cases, false sentences or false propositions as well. In the formalism, just like in most of our languages, the falsity of an entity (and, formally, the falsity of a symbol or, which is not the same, the falsity of a formula) ought to be represented as a true entity labeled with a sign for negation. This paper aims that the above mentioned fact shows an inherent property of symbolic representation systems (such as natural languages and symbolic notational systems), and that this fact tends to misguide the philosophical thinking about the world.

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On the False

Suppose that Frege has right when he said that the reference of a sentence is its truth-value, which, according to the classical two-valued logic, could be the Truth and the False. For the purpose of the discussion this paper lets the philosphical problems caused by this two ideal objects unmentioned, and supposes that there could be a possible world where the False is an ideal object being the reference of all false sentences (so, the concept of the False originates in Frege, but the followings would be surely not fregeian).

In additon, suppose that symbols (or, more precisely, notational marks) could be comprehensible as fragment of formulas. The reference of complex formulas is then the False, and the reference of formulas interconnected with the mark of negation is a fragment of the False. It could be said without oversimplification that the symbols or formulas in the scope of the sign of negation has the same reference, namely, the False.
In the case of symbolic representational systems negation marks make formulas more complex, which could deceptively suggest that the so-called negative facts (if there are any), which are in correspondance with negotiated formulas could be comprehended as analysable entities. This paper would like to suggest that an analysis of this kind could not be performed. Philosophers analyzing negative facts always analyzing formulas of symbolic representational systems: in the False, as a reference, there is nothing to analyse.

On representing so-called negative facts

Before proposing an alternative way of showing the False (where 'showing' will be distinguished from 'representing'), the discussion presents some ordinary methods of representing negative facts. The following linguistic and logical representations also shows that negative-fact-representations (NFR) are derived from positive-fact-representations (PFR), so formally, NFRs are more complex than PFRs, when 'complexity' should be measured simply by the number of the constituent marks. For example, consider the following primitive PFR:

(1) This is a red circle.

The negative of the proposition represented by (1) could be represented at least two ways:

(2) This is not a red circle.

(3) It's untrue, that this is a red circle.

In ordinary language, the meaning of (2) and (3) seems to be identical, but their logical structure is different, because (2) negates a predicate (or, in linguistic terms, an open or imperfect sentence), (3) negates a proposition (or a compound sentence). This distinction could be more easily represented with a variation of (1):

(4) This circle is red.

where the sole logically correct negation is the following:

(5) It’s untrue, that this circle is red.

The following NFRs are all originates in (4), but neither in ordinary language, nor in logical formalism are them considered as synonyms.

(6) This circle is not red.

(7) This red (thing) is not a circle.

(8) This is not a red circle.

The above mentioned linguistic examples could be easily represented without the classical demarcation of arguments and predicates. Let all meaningful elements be represented successively with A,B,C,D at this point without referring their usually logical categories, let the ¬ represent negation, and ‹,› the ordering of the elements.[1] So (1) – (8) could be formalized as follows:

(1a) ‹AB‹CD››
‹This is‹red circle››

(2a) ‹AB ‹¬‹CD›››
‹This is ‹not‹red circle›››

or

(2aa) ‹A‹¬B›‹CD››
‹This‹is not›‹red circle››

(3a) ‹¬‹AB‹CD››
‹It’s untrue, that‹this is‹red circle››

(4a) ‹‹AD›BC››
‹‹This circle›is red››

(5a) ‹¬‹‹AD›BC››
‹It’s untrue, that‹‹this circle›is red››

(6a) ‹‹AD›B‹¬C››
‹‹This circle›is‹not red››

or

(6aa) ‹‹AD›‹¬B›C››
‹‹This circle›‹is not›red››

[1] Of course *all* indication (including ¬and ‹,›) could be represented with the letters of the alphabet (or, with natural numbers, as Godel numbered them). For the sake of traceableness this paper uses special symbols for negation and ordering, but it’s formalism could be easily translated to formulas where no distinction shold be done in indication. For example, ¬ could be substituted in it’s any occurances to Z, ‹ to Y and › to X.

(7a) ‹‹AC›B‹¬D››
‹‹This red (thing)›is‹not circle››

or

(7aa) ‹‹AC›‹¬B›‹D››
‹‹This red (thing)›‹is not›‹circle››

(8a) ‹AB¬‹CD››
‹This is not‹red circle››

or

(8aa) ‹A‹¬B›‹CD››
‹This‹is not›‹red circle››

Even a bald example like this could show that negations, more precisely, representations of negative statements, derives from representations of their positive bases. Naturally, it could be said that the syntax of a given formal language determines the possible places of signs for negation, but for the purpose of this paper the place of the negation mark does not matters. Representations, so, formulas for negative statements are derives from positive formulas, moreover, they become, by addition of negation mark(s), more complex than their positive bases irrespectively of the syntax of the language they belong to.

c1 *Let the fact, that in symbolic representational systems, such as formal and natural languages, negative formulas are derived from positive bases by addition, be our first consideration.*

From a pre-philosophical perspective one could easily affirm that a negative fact is not a complex one derives from a correlated positive fact but is not a fact at all. So he could also easily say that there are no things in the world (and no one should ask a pre-philosophical one for a definition of „the world”) which could be labeled as negative ones. And, he could conclude that if there are no negative things so there could not be negative facts which are relations of things (maybe our pre-philosophical agent proved to be unconsciously early-wittgensteinian).

An agent of this kind would soon recognise that negative facts could be only perceived as formulas, namely, as negations of representations for positive facts. Negative formulas are in correlation with formulas of a given language: they are grounded in language, and not in the world, as positive formulas being in correlation with facts (now our pre-philosophical agent surely proved to be early-wittgensteinian).

Suppose that an agent of this kind would pose the question if a symbolic representation system could be in correlation with the world. Now he would deny c1 for a language of this kind, and will consider negations as pure absence. When negations are the absence of positive facts then negative formulas should derives from positive facts by abstraction (he won’t say subtraction by design). It means that negative formulas should not be written or said: they should be shown as the absence of positive ones.

c2 *Let the fact, that in a symbolic language correspondes with the world negative formulas derives from positive facts by abstraction, be our second consideration.*

Now suppose that our agent tries to represent the formulas (2a) – (8aa) taking account of c2 (his transformations leaves formulas without negation marks untouched, so formulas of this kind should not be mentioned here). His transformations (⇒) run as follows.

(2b) ‹AB ‹¬‹CD››› ⇒ ‹AB›
‹This is ‹not‹red circle››› ⇒‹This is›

or

(2bb) ‹A‹¬B›‹CD›› ⇒‹A‹CD››
‹This‹is not›‹red circle›› ⇒‹This‹red circle››

(3b) ‹¬‹AB‹CD›› ⇒
‹It’s untrue, that‹this is‹red circle›› ⇒

(5b) ‹¬‹‹AD›BC›› ⇒
‹It’s untrue, that‹‹this circle›is red›› ⇒

(6b) ‹‹AD›B‹¬C›› ⇒‹‹AD›B›
‹‹This circle›is‹not red›› ⇒‹‹This circle›is›

or

(6bb) ‹‹AD›‹¬B›C›› ⇒‹‹AD›C›
‹‹This circle›‹is not›red›› ⇒‹‹This circle›red›

(7b) ‹‹AC›B‹¬D›› ⇒‹‹AC›B›
‹‹This red (thing)›is‹not circle›› ⇒‹‹This red (thing)›is›

or

(7bb) ‹‹AC›‹¬B›‹D›› ⇒‹‹AC›‹D››
‹‹This red (thing)›‹is not›‹circle›› ⇒‹‹This red (thing)›‹circle››

(8b) ‹AB¬‹CD›› ⇒‹AB›
‹This is not‹red circle›› ⇒‹This is›

or

(8bb) ‹A‹¬B›‹CD›› ⇒‹A‹CD››
‹This‹is not›‹red circle›› ⇒‹This‹red circle››

Looking on the results of his transformations our agent would recognise that he has produced formulas of the following kinds. First, he has produced open senteces with blank places for predicates (such in the case of (2b), (6b), (7b), (8b)). Second, he has produced agrammatical sentences without copulation (such in the case of (2bb), (6bb), (7bb), (8bb)). And, finally, he has produced, or, more precisely, he has shown the absence of any positive fact, so he has erased all the formulas (such in the case of (3b), (5b)).

Godelian sentences without negation

So, in symbolic representational systems adopting c2 formulas include negation marks could not be represented. Considering a symbolic representation system withour negation mark in its vocabulary, this statement on representation is a pure tautology because of the fact that, of course, which has no marks for representing could not be represented. This poses two questions, first, how formulas of a given language including negation marks could be explicated or transformed into c2-based formulas, and, second, how could a representational system without negation marks show so-called negative facts? Let's pose the first question employing two ycleped godelian sentence.

(9) This sentence is not true.

(10) This formula is not provable.

Let's try to formalize (ix)-(x) with the former method of this discussion.

(9a) ‹‹AB›C‹¬D››
‹‹This sentence›is‹not true››

or

(9aa) ‹‹AB›‹¬C›D›
‹‹This sentence›‹is not›true›

or

(9aaa) ¬‹‹AB›CD›
It's untrue, that‹‹this sentence›is true›

The c2-transformations run as follows:

(9b) ‹‹AB›C‹¬D›› ⇒‹‹AB›C›
‹‹This sentence›is‹not true››⇒‹‹This sentence›is›

or

(9bb) ‹‹AB›‹¬C›D›⇒‹‹AB›D›
‹‹This sentence›‹is not›true›⇒‹‹This sentence›true›

or

(9bbb) ¬‹‹AB›CD›⇒
It’s untrue, that‹‹this sentence›is true›⇒

The logical structure of (x) is the very same as (ix)’s:

(10a) ‹‹AB›C‹¬D››
‹‹This formula›is‹not provable››

or

(10aa) ‹‹AB›‹¬C›D›
‹‹This formula›‹is not›provable›

or

(10aaa) ¬‹‹AB›CD›
It’s untrue, that‹‹this formula›is provable›

(10b) ‹‹AB›C‹¬D›› ⇒‹‹AB›C›
‹‹This formula›is‹not provable››⇒‹‹This formula›is›

or

(10bb) ‹‹AB›‹¬C›D›⇒‹‹AB›D›
‹‹This formula›‹is not›provable›⇒‹‹This formula›provable›

or

(10bbb) ¬‹‹AB›CD›⇒
It’s untrue, that‹‹this formula›is provable›⇒

So, in a symbolic representation system meets the requirements of c2 the godelian formulas (9) and (10) could be represented as open sentences (such as (9b-10b) or agrammatical formulas (such as (9bb-10bb) or as absence of formulas (such as (9bbb-10bbb). But since neither open sentences, nor agrammatical ones have meaning, it seems that the sole meaningful c2-translations of the above analized godelian sentences are (9bbb) and (10bbb), so, the abscence of any notation.

c3 *Let the fact that in a c2-based language showing the False means the abscence of the representation of the negated proposition be our third consideration.*

It could not be overemphasized that, despite the fact that in reality no one could show (or even imagine) negative facts, in natural and formal languages c2 hardly ever holds. Only the capacity of language empowers it’s users to form contrafactual representations which are false representations of positive facts, and not representations of the False.

Two proposals for showing the False.

This short paper, naturally, could not analyze the causes of the above mentioned tradition, nor could it examine the possibility of a symbolic system without mark(s) for negation, but only focuses the question if negation could be shown without any special notation. The first proposal could be extricated from c3: marks in the scope of a negation symbol should be erased along with the negation symbol, so no meaningful sentences which entail negation mark could be represented.

p1 *Let this proposal be called the apophatic way of showing the False.*

Since all false sentences signify the False, they could be uniformly represented as an abscence of formulas. This pre-philosophical, bald way of representing negation is so evident that no current representational system adopted it. As it had been earlier mentioned this fact may be the result of the natural languages, which have the symbolic capacity for representing contrafactual cases. But, which is far more interesting, diagrammatic logical systems, that could be regarded as alternatives for symbolic systems don’t differ them in this regard: consider the diagrammatic systems of Venn, Euler, Peirce, Spencer Brown or Sun-joo Shin. They all have special mark (which could be, of course, diagrammatic) for negation. Still, the author of this paper thinks that the alternative way of showing the False arises from iconic alias diagrammatic logical systems. A logical system of this kind would easily fit for c2, since any representation proved to be a representation of a negative proposition could be erased without serious problems. Setting up such a logical system would be a concern of some account, but it would surely transcended the objectives of this short paper.

The second proposal of this discussion for showing the False is, simply and solely: showing the Truth.

p2 *Let this proposal be called the kataphatic way of showing the False.*

Suppose, that there are no reasonable objections for marking complex formulas with symbols substituting them, so formulas entail marks for negation could be substituted [→] with [E] as follows.

(2c) ‹AB ‹¬‹CD››› → ‹AB‹E››
‹This is ‹not‹red circle››› →‹This is‹whatever but a red circle››

or

(2cc) ‹A‹¬B›‹CD›› → ‹A‹E›‹CD››
‹This‹is not›‹red circle›› →‹This‹whatever but is›‹red circle››

(3c) ‹¬‹AB‹CD›› →‹E›
‹It’s untrue, that‹this is‹red circle›› → ‹Whatever but the case that this is a red circle›

(5c) ‹¬‹‹AD›BC›› →‹E›
‹It's untrue, that‹‹this circle›is red›› → ‹Whatever but the case that this circle is red›

(6c) ‹‹AD›B‹¬C›› →‹‹AD›B‹E››
‹‹This circle›is‹not red›› →‹‹This circle›is‹whatever but red››

or

(6cc) ‹‹AD›‹¬B›C›› →‹‹AD›‹E›C››
‹‹This circle›‹is not›red›› →‹‹This circle›‹whatever but is›red›

(7c) ‹‹AC›B‹¬D›› →‹‹AC›B‹E››
‹‹This red (thing)›is‹not circle››→‹‹This red (thing)›is‹whatever but circle››

or

(7cc) ‹‹AC›‹¬B›‹D›› →‹‹AC›‹E›‹D››
‹‹This red (thing)›‹is not›‹circle››→‹‹This red (thing)›‹whatever but is›‹circle››

(8c) ‹AB¬‹CD›› →‹ABE›
‹This is not‹red circle›› →‹This is‹whatever but a red circle››
or

(8cc) ‹A‹¬B›‹CD›› →‹A‹E›‹CD››
‹This‹is not›‹red circle›› →‹This‹whatever but is›‹red circle››

(9c) ‹‹AB›C‹¬D›› →‹‹AB›C‹E››
‹‹This sentence›is‹not true››→‹‹This sentence›is‹whatever but true››

or

(9cc) ‹‹AB›‹¬C›D›→‹‹AB›‹E›D›
‹‹This sentence›‹is not›true›→‹‹This sentence›‹whatever but is›true›

or

(9ccc) ¬‹‹AB›CD›→‹E›
It's untrue, that‹‹this sentence›is true›→ ‹Whatever but the case that this sentence is true›

(10c) ‹‹AB›C‹¬D›› →‹‹AB›C‹E››
‹‹This formula›is‹not provable››→‹‹This formula›is‹whatever but provable››

or

(10cc) ‹‹AB›‹¬C›D›→‹‹AB›‹E›D›
‹‹This formula›‹is not›provable›→‹‹This formula›‹whatever but is›provable›
or

(10ccc) ¬‹‹AB›CD›→‹E›
It's untrue, that‹‹this formula›is provable›→‹Whatever but the case that this sentence is true›

As it could be shown by the formalism, p2-formulas use the variable E for substituting negated formulas. Of course, if it is necessary, E itself could be substituted or, more precisely, E could be transliterated to an adequate value of the variable. Transliteration of this kind depends on the logical (or: grammatical) position of the substituted negative formula. Since in reality, as opposed to languages, there are no non-reds but (for example) greens, there are no non-circles but squares etc., p2-formulas could substitute variables with their values as follows.

(2d) ‹This is‹whatever but a red circle››→ This is ‹a green square›

or

(2dd) ‹This‹whatever but is›‹red circle››→‹This ‹used to be›‹red circle››

(3d) ‹Whatever but the case that this is a red circle›→‹It's raining›

(5d) ‹Whatever but the case that this circle is red›→‹It's raining›

(6d) ‹‹This circle›is‹whatever but red››→‹‹This circle›is‹blue››

or

(6dd) ‹‹This circle›‹whatever but is›red›→‹‹This circle›‹should be›red›

(7d) ‹‹This red (thing)›is‹whatever but circle››→‹‹This red (thing)›is‹square››

or

(7dd) ‹‹This red (thing)›‹whatever but is›‹circle››→‹‹This red (thing)›‹used to be›‹circle››

(8d) ‹This is‹whatever but a red circle››→‹This is‹a house››

or

(8dd) ‹‹This‹whatever but is›‹red circle››→‹‹This‹will be›‹red circle››

(9d) ‹‹This sentence›is‹whatever but true››→‹‹This sentence›is‹simple››

or

(9dd) ‹‹This sentence›‹whatever but is›true›→‹‹This sentence›‹used to be›true›

or

(9ddd) ‹Whatever but the case that this sentence is true›→‹It's raining›

(10d) ‹‹This formula›is‹whatever but provable››→‹‹This formula›is‹complex››

or

(10dd) ‹‹This formula›‹whatever but is›provable›→‹‹This formula›‹seems to be›provable›

or

(10ddd) ‹Whatever but the case that this sentence is true›→‹It's raining›

It could by seen at first sight that the transliterations above need some explanation. Let's start with the easier problems. The fact that a certain proposition could be uttered different ways depending on the rules of various representation systems makes no any puzzle. In a language containing marks for negation, transliterations of the following kind are free of any problem.

(11) ‹A› → ‹¬‹¬A›

(12) ‹¬A› → ‹¬‹¬‹¬A›››

Consider that A could substitute any formula, whether atomic or complex, so which holds for atomic formulas holds for complex ones, too. For example, (11)-(12) could be transliterated as follows:

(11a) ‹This is a red circle› → ‹it's not true, that‹it's not true, that ‹this is a red circle›

(12a) It's not true, that‹this is a red circle› → ‹it's not true, that‹it's not true, that‹it's not true, that‹this is a red circle›››

But in a c2-language, where there are no marks for negations, formulas like (11)-(12) could not be represented as negated marks, so negated formulas have to be deleted (that's what this discussion earlier called as p1, the apophatic way of showing the False), or represented by substitution (that's what this discussion earlier called as p2, the kataphatic way of showing the False). The apophatic method makes no difficulties, if we consider indication and deleting as the reverse operations of each other.

c4 *Let the fact that, for any formula A, there could be constructed a formula B which excludes A, be our fourth consideration.*

In classical logics c4 answers to the law of contradiction, and, using the negation mark it could be formalized as follows.

(13) $\neg\Diamond\langle A\wedge\neg A\rangle \rightarrow \langle A\nabla\neg A\rangle$

which means, by c4 and then c2, that

(13a) $\neg\Diamond\langle A\wedge B\rangle \rightarrow \langle A\nabla B\rangle$

The problems gerenated by the logical consequences of formulas like (13) and (13a) are well known; but for the purpose of this paper discussions on the nature and consequences of contradictions need not to be involved. But even if we suppose that the law of constradiction holds for logic, we still have enough puzzle in the realm of ordinary language.

Usually, values for excluding formulas could be easily found in the realm of predicative terms: values for (13a) could be generated from the examples of this paper as follows.

(13c) $\neg\Diamond\langle A\wedge\neg A\rangle \rightarrow \langle A\nabla\neg A\rangle \Rightarrow \neg\Diamond\langle A\wedge B\rangle \rightarrow \langle A\nabla B\rangle$
It’s not possible, that‹...red and not-red› →‹...red (x)or not-red›[2]
⇒It’s not possible, that‹...red and green›→‹...red (x)or green›

(13d) $\neg\Diamond\langle A\wedge\neg A\rangle \rightarrow \langle A\nabla\neg A\rangle \Rightarrow \neg\Diamond\langle A\wedge B\rangle \rightarrow \langle A\nabla B\rangle$
It’s not possible, that‹...circle and not-circle› →‹...circle (x)or not-circle›
⇒It’s not possible, that‹...circle and square›→‹...circle (x)or square›

Demarkating predicates to argument makes no difference here, as it could be seen by (14) and (15).

(14) It’s not possible, that‹this circle is‹red and not-red››
→‹ This circle is ‹red (x)or not-red››
⇒ It’s not possible, that‹this circle is‹red and green›
→‹This circle is‹red (x)or green››

(15) It’s not possible, that‹ this is a red ‹circle and not-circle››
→‹This is a red ‹circle(x)or not-circle››
⇒ It’s not possible, that‹This is a red ‹circle and square››
→‹This is a red ‹circle (x)or square››

Sentences like (1)-(8) could be easily represented with the above exemplified transformations, because, if the ordering is calculated, the complexity of a given formula will not alter the method of the transformations.

[2] Alas, it’s hard to find an adequate ordinary english term for XOR-operator. The famous english translation for Kierkegaard’s *Enten-Eller* has the title Either/Or, which, after all, sounds better than XOR.

Alas, a more serious problem would occur when the range of the negation mark covers the copula directly.[3] The root of the hardship is the fact that, in logical sense, there are no generally accepted term excludes „is". Only negated „is" fits for excluding „is" in any sense of the much problematic term. Still, c4 transformations for the general uses of „is" could be made as follows.

(16) Mary is not.
It's not possible, that‹Mary‹is and is not››
→‹Mary ‹is (x)or not-is››
⇒ It's not possible, that‹Mary ‹is and ∅››
→‹Mary ‹is (x)or ∅››

(17) Mary is not Mrs.Grundy.
It's not possible, that‹Mary is ‹Mrs.Grundy and not-Mrs.Grundy››
→‹Mary is‹Mrs.Grundy (x)or not-Mrs.Grundy››
⇒ It's not possible, that‹Mary is ‹Mrs.Grundy and Mrs.Turner››
→‹Mary is ‹Mrs.Grundy (x)or Mrs.Turner››

(18) Mary is not a girl.
It's not possible, that‹Mary is‹girl and not-girl››
→‹Mary is‹girl (x)or not-girl››
⇒ It's not possible, that‹Mary is‹girl and boy››
→‹Mary is‹girl (x)or boy››

(19) Mary is not beautiful.
It's not possible, that‹Mary is‹beautiful and not-beautiful››
→‹Mary is‹beautiful (x)or not-beautiful››
⇒ It's not possible, that‹Mary is‹beautiful and ugly››
→‹Mary is‹beautiful (x)or ugly››

It seems that the copulative uses of „is" don't make any problem: identity (17), class membership (18) and predication (19) could be represented in a c4-language. But it could be easily discovered that we can't speak of pure c4-transformations here. Pure c4-transformations substitute negated formulas with the excluders of their positive bases, for example, when B sustitutes ¬A, because B excludes A via ‹A∇B›. But in the case of formulas like (16)-(18), the „negated is" should be substituted with its positive base, namely, with „is", and the related formula in the scope of „is" should be substituted with its excluder, too. The logical structures of (18)-(19) make easy to decide which formula is related to the copula. It's obvious that, for example, the statements „Mary is beautiful" and „Mary is ugly" exclude each other, but the same does not holds for statemts „Mary is beautiful" and „Sarah is beautiful". So, here class-terms should be substituted. Unlike (18) and (19), in the case of identity (17), any formula could be substituted along substituting „not is" with „is". So, the formulas „Mary is Mrs.Grundy" and „Mary is Mrs.Turner" exclude each other, just like the

[3] This paper tries not to consider the gigantean philosophical tradition in connection with the copulation and existential statements.

formulas „Mary is Mrs. Grundy” and „Sue is Mrs.Grundy”, while, of course, substituting both formulas effects „Sue is Mrs.Turner” which does not make an excluder, since „Mary is Mrs.Grundy” and „Sue is Mrs.Turner” could be simultaneously true.

The most problematic formula is (16), as it have been expected, because we don’t have any term excludes the „is” as substantive verb. Of course substituting the relates of „is” won’t help here, because the statement „Sue is” will not exclude the statement „Mary is” at all. So all that could be done is to substitute „not-is” with an arbitrary formula ∅ which is, by definition, excludes „is”. Let an empty space signify ∅, (16) would be described as follows.

(16a) It’s not possible, that‹Mary ‹is and ∅››
→ It’s not possible, that‹Mary ‹is and ››

‹Mary ‹is (x)or ∅››→‹Mary ‹is (x)or ››

Alas, what holds for „is” – as a value of „to be” – holds for „true” as well, because the word „false” has no substancial meaning but not-true. Fortunatelly, in a language fits for c3, „true” can be express without any special indication, or, more precisely, *only* true formulas could be expressed at all. And, considering c3, „not-true” could be shown as absence, which means that the abscence and the indication excludes each other, as truth excludes falsity. So a c3-c4 compatible language should not have any special indication for „true” and „false”, because of the fact that indication entails the truth of the relatad formulas, and the abscence of formulas entails all negated formulas. When ∅ stands for formulas should not be indicated in a c2-3 language, the godelian formula (9) could be transformed as follows.

(9e) ‹‹This sentence›is‹not-true››→‹‹This sentence›is›‹∅›
→‹This sentence is›

or

(9ee) ‹‹This sentence›‹is-not›true›→‹‹This sentence›‹∅›∅›
→‹This sentence›

or

(9eee) It’s not true, that‹‹this sentence› is true››→‹∅›
→

It’s not a surprise then, that the formula „this sentence is true” could be formalized in a c2-c3 language exactly in the same way like „this sentence is not true”. Since neither truth, nor false could be indicated *per se*, they could not assist in the course of logical analysis. So a c2-c3 language could indicate true statements by formulas correspond true facts, and negative statements could be shown by an absense of formulas.

The godelian formula (9) could not be represented in a c2-c3 language, so the question of it's truth-value could not be occured. So neither „true", nor „not-true" is a predicate, but they are opposite states of indication.

Indication is a state, not a statement.

6. Summary

This short paper proposed an alternative method for handling negations. Because there are no negative facts, negative formulas need not to be indicated, but so-called negative statements could be shown by showing the False.

The discussion shows that natural languages and most formal languages derive negative sentences from their positive bases, which method could be called as showing the False by addition (c1). This paper proposed a different method, which derives the False by abstraction (c2). In a c2-language showing the False means excluding it's positive base.

Excluding the False could be achieved two ways. First, the apophatic way of showing the False (p1) means erasement: since all negated formula could be deleted, an apophatic representation indicates only positive facts. So no godelian sentences could be written in a language uses p1. „This sentence is not ture" could be written neither it's taught to be false, nor it's taught to be true, so, simply speaking, problems of this kind could not be occured at all. Second, the kataphatic way of showing the False means substitution, because all negated formula could be substituted with the excluder of it's positive base. Of course, in natural languages there are no defined excluders for any possible indication, but this is a factual and not a necessery state. A formal language without indication for negation, but with defined excluder of any regular formula might be constructed. For example, the indication of the excluder of „to be" or „true", which are - not predicates – could be the absence of indication, so, the empty space. Which means that in the case of some special terms as „to be" or „true", their apophatic and kataphatic indication is the very same.

Not to show any indication means showing the False.[4]

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[4] Frege affirmed, that all true sentence refers to the True, and all false sentence refer to the False. Referring is an extensional affair, so Frege imagined the True and the False as ideal objects, so, extensions. While so many philosophical problems could be postulated in connection with the True, I can't imagine any serious ontological problem in connection with postulating the False. Additionally, it's much more economic postulating the False, which could be indicated by pure absence, than postulating – and indicating - potentionally unlimited negative facts.

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