

Proper Names and Propositional Attitudes

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written by

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Abstract

The thesis concerns the semantics of proper names in the context of propositional attitude reports. The semantic contribution of names in the scope of attitude verbs famously generates a puzzle, known as Frege's puzzle. In the thesis, different semantic theories of propositional attitude have been categorized based on their strategy to solve the puzzle. The thesis consists of two parts. The first part (chapters 1-4) critically surveys different solutions of the puzzle in the literature. The discussion of different theories and their shortcomings sets the stage for the second part.

The second part (chapters 5-6) provides a new solution to the puzzle. The solution is based on a new theory concerning the mechanism of reference and **meaning** of proper names. The meaningful use of proper names is argued to require the satisfaction of a competence condition which is used to explain peculiarities of reference found in both their regular contexts, as well as in the context of propositional attitude verbs.

Contents

1	Introduction: Two Puzzles Concerning Propositional Attitudes	5
1.1	Frege's Puzzle	7
1.1.1	Semantic Content and Formalization of Proof	7
1.1.2	The principle of substitution and belief contexts	9
1.2	Kripke's Puzzle	11
1.3	The Responses to the Puzzles	12
2	The Sense Theory, Descriptivism, and Propositional Attitudes	15
2.1	Frege's Solution	16
2.1.1	Sense as a Semantic Property	16
2.1.2	Frege and the Puzzle	20
2.2	Russell's Approach	23
2.2.1	Definite Descriptions and Proper Names	24
2.2.2	Descriptivism and Frege's Puzzle	26
2.2.3	Objections against Descriptivism	27
2.3	Conclusion	29
3	Naïve-Russellian Approaches toward Frege's Puzzle	31
3.1	Russell and Singular Propositions	33
3.2	The Standard Naïve-Russellian Approach	35
3.3	Salmon's Approach	36
3.4	Soames's Approach	41
3.4.1	Truth-conditional Semantics	42
3.4.2	Soames's semantics of propositional attitude	45
3.5	Salmon's Criticism	47
3.6	Conclusion	49
4	Sententialism and Linguistically Enhanced Propositionalism	51
4.1	Carnap's Analysis	52
4.2	Richard's Approach	58
4.2.1	Structured Propositions	58
4.2.2	Richard's conception of Propositional Attitude Reports	61
4.3	Conclusion	65

5	A justificationist theory of reference and meaning of Proper Names	67
5.1	Introduction	67
5.2	Anti-Descriptivism Account of Names	69
5.3	Fixing the Reference	72
5.4	Two Uses of Descriptions	74
5.5	The Justificationist Approach Toward Names	81
5.6	Conclusion	86
6	Propositional Attitudes Reconsidered	87
6.1	Semantic Content and Meaning	88
6.2	The competence-condition of the that-clause of PNs	90
6.2.1	The Biphasic mechanism of Reference	92
6.2.2	Two Tolstoys	94
6.2.3	The Process of Designation	97
6.3	The semantic content of PNs	99
6.4	Two Puzzles reconsidered	102
6.4.1	Frege's Puzzle reconsidered	102
6.4.2	Kripke's puzzle reconsidered	104
6.5	conclusion	105
7	Conclusion	107

Chapter 1

Introduction: Two Puzzles Concerning Propositional Attitudes

The semantics of propositional attitude reports is a major problem in the philosophy of language and formal semantics. The task of semantics is to explain the way that the meaning of each part of a sentence contributes to the meaning of the whole. Hence, the first step in formulating the semantics of propositional attitudes is to examine the meaning of the different parts of a propositional attitude report. A propositional attitude report has the following form “S V that p”. This form consists of three major parts: 1. A subject whose mental state (belief, desire etc.) is reported (S). 2. A that-clause expressing the content of the subject’s mental state (p). 3. An attitude verb relating the that clause to the subject (V).¹ Consider the following example:

(a) Maggie believes that John is interested in philosophy.

In the above example, Maggie is the subject of the report (i.e. the person whose mental state is reported). The that-clause, namely “John is interested in philosophy”, expresses the object of her mental state. The term “object of her mental state” might seem rather peculiar to the readers. In this thesis, we take the object of an attitude to be what the attitude is directed at. The third component of the above report is an attitude verb, i.e. “believe”. The attitude verb in a propositional attitude ascription seems to state a binary relation between the subject and the that-clause (or one may say the content of the that-clause).

So far, we have seen the three major parts of a propositional attitude report. To give a semantic analysis of these sentences, we need to determine the semantic contribution of each part to the semantic content of the whole sentence. Here,

¹The de dicto reports of attitudes is our main concern in this thesis. Arguably, the puzzles that we are going to discuss do not arise in the case of de re reports (See Mcakay and Nelson 2010 for a complete discussion).

our major concern is specifying the semantic contribution of that-clauses. The that-clause is a sentence whose *content* (what is expressed by it) is *related* to the object of the subject's attitude (e.g. what is believed by the subject). Consider the set of Maggie's beliefs. The above report states that there is a belief among the set of her beliefs which has a particular feature: it concerns what can be expressed by the sentence "John is interested in philosophy". Many theories use the notion of proposition to explain the content of that-clauses.² A proposition can be defined as a piece of information about the world that can be expressed by a declarative sentence. The definition is kept consciously vague. The reason is that different philosophers interpret this piece of information in their own ways.³

If we take proposition to be a piece of information about the world, it may also serve the role of the object of attitudes. In the above example, Maggie believes a piece of information that is the content of the sentence "John is interested in philosophy". Therefore, propositions can be seen as the object of attitudes and the content of declarative sentences such as that-clauses. In this way, we can say a propositional attitude report is true, if there is a certain relation between the proposition expressed by its that-clause and the object of the attitude of the subject⁴.

Different theories formulate different notions of propositions to fulfill their role as the object of attitudes and the content of that-clauses. There are also theories which deny that any conception of propositions can serve such a role. Examining different theories about what can play the role of the object of attitudes and the content of that-clauses is one of the concerns of this thesis⁵.

However, that-clauses are complex linguistic expressions which can have different kinds of linguistic expression such as proper names, indexical, quantifiers as their constituents. Hence, a thorough discussion of the content of that-clauses includes many other problems in semantics. In this thesis, we focus on the semantic contribution of proper names to the content of that-clauses. The reason is that the semantic contribution of names in the scope of attitude verbs has generated more discussion in the literature about propositional attitudes. Therefore, the aim of this thesis is to investigate the semantics of propositional attitude reports whose that-clauses contain proper names.

There are two major puzzles concerning the semantic contribution of proper names to the that-clauses containing them: Frege's puzzle and Kripke's puzzle.

²There are theories that try to formulate the semantics of propositional attitudes without appealing to the notion of proposition.

³As we will see, it is possible to see propositions as being merely made of concept-like entities (see the second chapter). Alternatively, some philosophers maintain that individual objects in the world can also be the constituent of a proposition (see the third chapter). Moreover, there are theories which consider propositions to be an amalgam of linguistic expressions and individual objects (see the fourth chapter).

⁴As we will see, some philosophers maintain that this relation is identity. However, there are other theories which deny this e.g. Richard's theory which is examined in the fourth chapter.

⁵In this thesis, we avoid ontological questions about the nature of propositions. Instead, we discuss which conception of propositions can properly describe the object of attitudes and the content of that-clauses.

A plausible account of the meaning of proper names in the scope of attitude verbs needs to solve these two puzzles. In this thesis, the different theories about the semantics of propositional attitude reports are categorized based on their strategy to solve Frege's puzzle. Moreover, Kripke's puzzle gives us additional insights for examining the different theories.

In this chapter, first, Frege's puzzle will be explained. Subsequently, the other puzzle will be explicated and discussed in detail. At the end, different responses to Frege's puzzle will be classified based on their strategy to tackle the puzzle.

1.1 Frege's Puzzle

1.1.1 Semantic Content and Formalization of Proof

In this subsection, we have two connected aims. First, we want to explain the notion of semantic content and two principles related to this notion: *the principle of compositionality* and *the principle of substitution*. Second, we want to sketch an outline of a preliminary semantics for some linguistic expressions. These two discussions provide us with the required background to understand Frege's puzzle, which is explained in subsection 1.1.2.

The *semantic content* of a linguistic expression is those context-independent properties of its meaning which determine the truth-value of a sentence containing it. By using the adjective "context-independent", we aim to exclude those properties that cannot be treated systematically out of the context of utterance. We have also excluded those aspects of meaning which are not directly relevant to the truth-value of a sentence.⁶ The task of the semantics of a formal or natural language is to specify the semantic content of each linguistic expression in that language.

The next point which needs to be addressed is the relation of the semantic content of a linguistic expression with a more complex expression containing it. According to the well-known principle of compositionality the semantic content of the constituents of a complex linguistic expression and its structure fully determine its semantic content (Szabó 2004). Consequently, different parts of a sentence have their own unique contributions which at the end determine the truth or falsity of the sentence⁷.

Given the conception of semantic content, it follows that the substitution of two linguistic expressions, possessing identical semantic contents, with each other does not change the truth-value of the sentences containing them. This

⁶For instance, two terms with an identical semantic content may have different emotional impressions. These impressions are one of the examples of those aspects of meaning which are not relevant to the truth-value of a sentence containing one of these terms. Therefore, these impressions are not part of the semantic content of linguistic expressions.

⁷Here, it is not specified whether the semantic content of a sentence is its truth-value or something else (e.g. its truth-condition) which at the end determines its truth-value. Regardless of the positions that one may take about this issue, it is true that the truth-value of a sentence is determined by the semantic content of its constituents.

is called the principle of substitution. This principle is closely correlated with the requirement for semantic properties that was mentioned at the beginning of this section, namely context independency. The semantic contribution of a term to the sentence is not dependent on the context and therefore two terms with an identical semantic content always make the same contribution. It is also closely related to the principle of compositionality. According to the principle of compositionality the semantic content of a sentence, is based on the semantic content of its constituents. Hence, the intersubstitution of two linguistic terms with an identical semantic content does not change the semantic content of the sentence containing them and consequently it does not change its truth-value⁸.

So far, we have discussed some preliminary facts concerning the notion of semantic content. However, we have not discussed the semantic content of any particular expressions. For our purpose the discussion of the semantic contents of two types of linguistic expressions is required: that of sentences and that of proper names. The reason is that our aim is to discuss the semantics of propositional attitude reports whose that-clause contain proper names. Therefore, the semantic content of proper names and its relation to the semantic content of the sentences containing them is important for our discussion.

For the moment, we leave the discussion of Frege's specific theory about the semantic content of sentences and proper names to the second chapter. Instead, it is plausible to (at least provisionally) take the semantic content of a sentence to be a proposition. In the beginning of this chapter, we defined propositions as pieces of information expressed by declarative sentences. Here, we can give a more precise definition of propositions. A proposition expressed by a sentence is a set of all possible situations in which the sentence is true.⁹ For instance, consider the sentence "John is interested in philosophy". The proposition expressed by this sentence is the set of all possible situations in which John is interested in philosophy.

We also need to discuss the semantic content of proper names. A Millian theory of proper names takes the bearer of each name as its semantic content (Reimer 2009).¹⁰ The intuition behind the theory is that the replacement of co-referring proper names does not change the truth-value of the simple sentences such as the following:

- (1) Hesperus shines in the sky every morning.
- (2) Phosphorus shines in the sky every morning.

The terms, Hesperus and Phosphorus, have an identical bearer. One might also claim that the mere difference in the linguistic expressions does not change the piece of information expressed by a sentence, i.e. the set of situations in

⁸Here again, it is not specified whether the semantic content of a sentence is its truth-value or its truth-condition which determines its truth-value.

⁹This definition of proposition is controversial and as we will see in the third and fourth chapters, there are philosophers who reject this definition.

¹⁰There are many different theories concerning the semantic content of proper names, many of which have been motivated by Frege's puzzle. Here, we start with the Millian theory which is used in the construction of the puzzle. As we will see, the fact that the Millian theory is one of the assumptions which lead to Frege's puzzle is used as an argument against this theory of names.

which a sentence can be true does not change by the intersubstitution of two co-referring names. Consequently, it is at least primarily natural to take the referent of a proper name as its semantic value, namely the feature of its meaning playing a role in determining the truth-value of sentences containing it. In the next chapter, we examine a consequence of the semantic theory that has been outlined for the semantics of propositional attitude reports.

1.1.2 The principle of substitution and belief contexts

In this section, we are going to present Frege's puzzle. It has been said that the principle of substitution states that the substitution of two terms with the same semantic content does not alter the semantic content and the truth value of sentences containing those terms. In the previous section, the semantic content of a proper name is taken to be its referent. From these two points, it follows that the intersubstitution of two co-referring proper names does not change the truth value of a sentence containing either of them. However, Frege found out that this cannot be the case within the scope of attitude verbs. Consider the following examples:

(3) Ancient astronomers believed that Hesperus shines in the sky every morning.

(4) Ancient astronomers believed that Phosphorus shines in the sky every morning.

Except for the proper names "Hesperus" and "Phosphorus", all other constituents of the above sentences are identical. Given the fact that Hesperus and Phosphorus are co-referring proper names, the semantic contents of (3) and (4) are supposed to be the same. Nevertheless, it is a known fact that ancient astronomers were ignorant of the identity of what they counted as two separate celestial objects, namely Hesperus (which is supposed to shine in the evening) and Phosphorus (which is supposed to shine in the morning). Therefore, they believe what is expressed by (2) (which is the that clause of (4)), without believing (1) (which is the that clause of 3). As a result (4) is a true and (3) is a false report of the ancient astronomers' attitudes. Nevertheless, this is impossible, if we take the that-clauses of (3) and (4) to have the same content. The reason is that, given the principle of substitution, the that-clauses with the same semantic content are intersubstitutable. Therefore, the substitution of the that-clause of (3) with the that-clause of (4) should not change the truth-value of the report. The *disquotation principle* can help us to see the puzzle more clearly.¹¹

"If an agent *A* sincerely, reflectively, and competently accepts a sentence *s* (under circumstances properly related to a context *c*), then *A* believes, at the time of *c*, what *s* expresses in *c*." (McKay and Nelson 2010)

¹¹The puzzle can be formulated without using the principle of disquotation. We just need to accept that it is possible for the subject to believe the content of one of the that-clauses without believing the other. However, following McKay and Nelson 2010, I used the principle of disquotation to make this more clear.

This principle takes the agent's approval of a particular sentence as a criterion to ascribe a belief to her. The principle can be supplemented by another principle known as *the converse disquotation principle*:

"If an agent A sincerely, reflectively, and competently denies or withholds acceptance from a sentence s (in a context c), then A does not believe, at the time of c, what s expresses in c." (McKay and Nelson 2010)

The second principle disallows us to take a proposition expressed by a sentence as the object of an agent's attitude, if she rejects the sentence. From this, one can conclude that the rejection of (1) by ancient astronomers makes (3) false. At the same time, we assume that ancient astronomers would assent to (2), which according to the disquotation principle makes (4) true. At this point, we face the puzzle: the result is at odds with what might be expected given the principle of substitution. Here, we list the assumptions which have led us to this point:

I. Sentences within the scope of attitude verbs (that-clauses) are subject to the compositional and systematic semantic explanation similar to other parts of language i.e. their semantic content contributes to the semantic content of the more complex expressions containing them.

II. The semantic content of a proper name is its bearer (the Millian theory of names).

III. The semantic content of linguistic expressions does not alter within the scope of attitude verbs (semantic innocence).

IV. Agents do not believe in the sentences that are denied by them and do believe in the sentences conceded by them (the disquotation and converse-disquotation principles).

V. The truth-value of a sentence is solely determined by its semantic content and therefore two sentences with two different truth-values cannot have the same semantic content.

The first assumption states that that-clauses possess semantic content and their content contributes to the semantic content of propositional attitude reports. The second and third assumptions together imply that the semantic contribution of a proper name to the semantic content of the that-clause containing it is its referent. Therefore, they are intersubstitutable in the scope of attitude verbs (their intersubstitution does not change the semantic content of the report).¹² The fourth assumption implies that sentences such as (3) are false and have a different truth-value from the truth-value of sentences such as (4). The three first assumptions imply that the semantic content of the that-clauses of (3) and (4), and therefore the semantic content of the two reports, are the same. The fourth assumption implies that these two reports have dif-

¹²The principle of substitution as stated above (and as it can be found in the literature) also presupposed the fifth assumption, i.e. it states that the substitution of two terms with the same semantic content does not change the truth-value of the sentence containing them. Here, we just state that it does not change the semantic content of the sentence since there are philosophers (such as Soames whose theory is examined in the third chapter) who deny the fifth assumption.

ferent truth-values.¹³ The last assumption states that it is not possible for two sentences to have different truth-values and the same semantic content.

This set of assumptions cannot be held together as we have seen. To have a coherent semantic theory, one or few of them need to be rejected. In this thesis, the different strategies to solve the puzzle are classified according to the claims which they reject. A single chapter is devoted to each of these strategies. However, before surveying these strategies, we need to explain the other puzzle concerning belief, formulated by Kripke.

1.2 Kripke's Puzzle

In 1979, Kripke formulated a new puzzle about belief, which illuminates some hidden aspects of the semantics of propositional attitudes. The puzzle has generated a huge literature which can be completely surveyed neither in this section nor in the subsequent chapters. In this section, our aim is to explicate the puzzle and its significance for our main discussion.

The primary aim of Kripke is to argue that Frege's puzzle cannot be *genuinely* solved by just renouncing the Millian theory of names. It has been explained that Frege's puzzle depends on allowing the substitution of co-referring proper names. This permission was based on the Millian theory which takes two co-referring proper names to have identical semantic value. Kripke, however, formulates a puzzle, which is independent of the principle of substitution, i.e. the principle is not used in the construction of the puzzle. Hence, Kripke concludes that our theory about the semantic content of names and whether the semantic content of two co-referring names can be different or not is irrelevant to his puzzle. Thus, his puzzle cannot be solved by renouncing the Millian theory of names.

The puzzle goes as follows: Pierre is a bilingual person who was born in France. He has learned the language there and also some facts concerning London such as "Londres est jolie." He moved to London afterwards and started to learn English similarly to a native speaker. As he lives in an ugly neighborhood, he formed the belief that "London is not pretty" without changing his former belief concerning "Londres". Kripke's next step is to unify the disquotational principle and its converse into a single principle, which can be called *the Strengthened Disquotational Principle* (henceforth SDP):

"A normal English speaker who is not reticent will be disposed to sincere reflective assent to "p" if and only he believes p" (Kripke 1979:249)

SDP indicates that if an agent believes a proposition, he is disposed to assent to a sentence which expresses that proposition, otherwise the agent does not believe the proposition. However, SDP is limited to a single language (as

¹³As already mentioned, we can have the puzzle without using the disquotation principle and its converse. Instead, we can say that the agent could believe one of the that-clause without believing the other and therefore the truth-value of the reports cannot be the same. Philosophers denying the disquotation principle or its converse to solve the puzzle also deny this assumption.

Kripke also says French SDP is for French and English SDP for English). Hence, it needs to be supplemented by another principle to be applicable to the case of Pierre. To solve this difficulty, Kripke introduces another intuitive principle, namely *the principle of translation*:

“If a sentence of one language expresses a truth in that language, then any translation of it into any other language also expresses a truth (in that other language)” (Kripke 1979:250)

In the above story, Pierre is a sincere reflective rational man and therefore English SDP implies that he believes in the propositions expressed by the English sentence “London is not pretty”. By the aid of French SDP and the principle of translation (also applied to the quoted sentence), it follows that he also does not believe that London is not pretty. These two propositions are contradictory, thus they cannot be held at the same time. It is intuitive that Pierre would correct his beliefs, in case he notices that they are incompatible. Nevertheless, before noticing that “London” and “Londres” are the same, Pierre is not capable of realizing that one of these beliefs should be withdrawn by just using logic. From this, Kripke concludes that he cannot be accused of irrationality or inconsistency (Kripke 1979:257). We can see that reporting Pierre’s belief states lead to ascribing two inconsistent propositions to him. And at the same time, it is not acceptable to accuse him of inconsistency since he cannot realize the problem by merely using logic

One may reject the principle of translation to solve the puzzle. However, Kripke has formulated another version of the puzzle, which does not even require this principle: Peter knows Paderewski as a talented pianist. As a result, he is disposed to assent to the sentence “Paderewski had musical talent”. He also becomes familiar with Paderewski as a statesman, without realizing that he is the same person. In fact, he forms the belief that two different persons are called by the same name and only one of them has musical talent. Consequently, he also assents to the sentence “Paderewski had no musical talent” concerning Paderewski as the name for a statesman. A similar problem appears also in this case: The sentences that are used to describe Peter’s belief are inconsistent, though it is not acceptable to take Peter to be inconsistent or irrational.

Kripke formulates his puzzle without relying on the principle of substitution or any theory about the semantic content of proper names. He claims that this shows that the real source of the puzzle, also in the case of Frege’s, is not any particular theory of proper names, but our “normal practice of belief attribution” (Kripke 1979:268).

1.3 The Responses to the Puzzles

In this section, we will survey the different types of solutions that have been formulated in the literature as responses to Frege’s puzzle. As has already been said, our main focus will be on Frege’s puzzle and therefore the solutions have been categorized based on their approach toward the set of claims that have been formulated at the end of the section 1.1 concerning Frege’s puzzle.

The first strategy to be discussed, articulated by Frege himself, rejects the second and third claim. Frege introduces another semantic content alongside the customary semantic content which can replace the customary one in the scope of attitude verbs. According to this strategy, the semantic contribution of a proper name to the semantic content of a sentence is not always the same. There are contexts, such as belief contexts, in which the customary semantic content of the constituents of a complex linguistic expression alters. Frege's solution and its shortcoming will be discussed in the second chapter. Particularly, it will be examined whether solutions such as Frege's can also provide an answer to Kripke's puzzle.

The second chapter also discusses the solution originally formulated by Russell. Russell rejects the Millian theory of proper names, which is the second claim in the above list. For him the semantic content of a proper name is its referent neither in the scope of attitude verbs nor outside it. His theory of proper names, known as descriptivism, poses further restrictions on the substitution of proper names. However, the theory has faced with numerous difficulties that will be explained at the end of the second chapter. The common feature between Frege's and Russell's approach, which makes them suitable to be discussed in the same chapter, is their rejection of the Millian theory of proper names (the second assumption in the list).

In the third chapter, the strategy deployed by a group of philosophers, called *Naïve-Russellians*, will be explained. The proponents of Naïve-Russellian reject the fourth claim. In particular, the proponents of this strategy reject the converse disquotation principle as given above.¹⁴ However, there are also more sophisticated formulations of this strategy that also reject the fifth claim. Nathan Salmon's theory is examined as an example of Naïve-Russellian view, which just reject the fourth claim and Scott Soames's approach is discussed as an instance of those which also reject the fifth claim.

A single chapter will be devoted to the linguistic solutions which try to solve the puzzle by taking into account the very linguistic expressions in their semantic theories. Unlike Naïve-Russellians, the proponents of this approach do not deny the fourth claim. Hence, they accept that the semantic content of a sentence might be changed by the substitution of a co-referring proper name. As an alternative strategy, they try to explain the difference between the semantic content of sentences such as (3) and (4) by appealing to linguistic elements. Hence, they reject the second claim, i.e. they reject that the semantic contribution of a name to the sentence containing it is just its bearer. This strategy is different from the strategy used by Frege who appeals to platonic or cognitive elements such as sense to solve the puzzle. It is also different from the naïve-Russellian theory which denies any difference between the semantic contents of the statements such as (3) and (4).

Donald Davidson has formulated another approach, according to which the propositions in the scope of attitude verbs should not be seen as ordinary parts

¹⁴It is also possible to say that they reject that ancient astronomers could believe the content of one of the that clauses without believing the other.

of language. He argues that attitude reports cannot be explained in the general project of articulating semantics of natural languages. Therefore, the first claim in the above list is rejected by him, which requires the explanation of the semantic content of the propositions within the scope of attitude verbs based on the semantic content of their constituents. Thus, Davidson's view denies that the discussion of propositional attitude reports can have any important consequence for the semantics of proper names or other linguistic expressions. In this thesis, we do not discuss his view about the subject since it is more of an outline of a theory and it is mainly suggested to explain indirect discourses and not attitude-report sentences. However, his theory is different from the other theories which we are going to discuss in this chapter (See Davidson1968).

After finishing the critical survey of the other views, we start to develop a new theory, which relies both on Russellian and Fregean insights concerning the nature of a proposition and a modified version of descriptivism. This theory is supposed to neutralize the arguments that we discuss in the second chapter against the descriptivist theory of reference. In the last two chapters, I articulate a new theory of reference for proper names in natural languages. The aim of this theory is to provide a solution to Frege's puzzle that we have explained above. In the first of these two chapters, Kripke's causal-historical theory of reference, which is explained at the end of the second chapter, will be criticized. Then I try to develop an alternative theory of reference and meaning for proper names.

The last chapter concerns my suggested solutions for the puzzle. I try to show how the theories that we have formulated in the fifth chapter aid us in developing a new semantics for propositional attitudes. At last, some of the possible objections are discussed. Then further prospects and implications will be examined.

Chapter 2

The Sense Theory, Descriptivism, and Propositional Attitudes

This chapter mainly focuses on the discussion of two solutions to Frege's puzzle which were formulated by Frege and Russell. The strategy used by both of these solutions is to block the substitution of co-referring names in the scope of attitude verbs. Both of these solutions deny that two co-referring names are interchangeable *salva veritate* in the scope of attitude verbs. Given the substitution principle, any two terms with an identical semantic content are interchangeable *salva veritate*. Thus, these theories maintain that two co-referring names can have different semantic contents. Hence, they take the semantic content of proper names in the scope of attitude verbs to be something different than their referents.

However, there is an important difference between these two solutions. Frege takes the semantic content of names to be their referent when they are used outside of such scopes. Hence, in Frege's theory, the semantic content of a single linguistic term varies with respect to different contexts. As a result his semantic theory violates semantic innocence. By contrast, Russell's theory takes the semantic content of names to be the same inside and outside the attitude scope, without taking them to be their referents.

In this chapter, we first examine Frege's theory. Then, we examine whether the theory can successfully solve the puzzle. In the subsequent part of this chapter, Russell's descriptivism and its consequences for the semantics of propositional attitudes will be discussed. Most of the criticism against Russell's *descriptivism* can also be directed at Frege's theory. Consequently, the criticism could also be discussed after the explanation of Frege's theory. To avoid repetition, we just mention the overlapping objections after the discussion of Russell's theory.

2.1 Frege's Solution

This section consists of two subsections. In the first one, Frege's semantic theory will be discussed. In the second section, we examine how his theory helps him to solve the puzzle. At the end of the second section, we review some criticism of the theory and try to neutralize it.

2.1.1 Sense as a Semantic Property

One can distinguish *cognitive* and *world-directed* aspects of the meaning of a linguistic expression. *The cognitive aspect of meaning is what a language user needs to grasp in order to competently use and understand a linguistic expression.* Thus, this is the aspect of meaning that a language user needs to learn. For instance, Russell maintains that a language user needs to know a definite description of the reference of a name to competently use that name. For him, grasping a definite description by the language user is required. Hence, we can say that for Russell, the cognitive aspect of the meaning of a name is a definite description. A language user needs to learn this cognitive aspect to competently use and understand a name.¹

The world-directed meaning or *semantic content* is the other aspect of the meaning of an expression. *The world-directed aspect of meaning is what a linguistic expression says about the world.* This is the aspect of the meaning of a linguistic expression which contributes to the determination of the truth-value of a sentence containing that expression. Therefore, two linguistic expressions with an identical semantic content have the same impact on the truth-value of a sentence containing each of them. Hence, such linguistic expressions are interchangeable *salva veritate*. For instance, the Millian theory of names takes the semantic content of a name to be its referent. Hence, a proponent of this theory maintains that it is the reference of a name that contributes to the determination of the truth-value of a sentence containing it. Hence, for a proponent of the Millian theory, two co-referring names are interchangeable *salva veritate*. Consider the following example:

(1) Obama is currently the president of Unites States.

The Millian theory tells us that the semantic content of "Obama" in the above sentence is Obama. The world-directed meaning of "Obama" which contributes to the determination of the truth-value of (1) is its reference. Thus, the truth of (1) depends on whether Obama, the reference of "Obama", is the president of United States or not. Consequently, replacing "Obama" with any other name that has the same reference does not change the truth-value of (1).

In this way, the Millian theory explains the world-directed aspect of the meaning of names. However, even a hardcore proponent of the Millian theory would accept that a language user does not need to know *the very referent* of a name to understand and competently use it. A theory about the semantic content of names does not necessarily explain what a language user needs to

¹As will be explained, for Russell, the world-directed aspect of the meaning of a name (i.e. its semantic content) is also a definite description.

learn in order to understand and competently use names. Thus, the Millian theory is not meant to explain the cognitive aspects of the meaning of proper names. Indeed, there are theories whose understandings of the cognitive and the world-directed aspects of meaning are very close to each other. These two aspects are related and a theory explaining one of them might be consequential for a theory about the other. Nevertheless, we need to keep in mind that they are not the same. *In order to avoid any confusion between these two aspects, we write the term “**meaning**” in bold type when we are talking about the cognitive aspects of meaning and we use the term “semantic content” for the world-directed aspects.*

So far, we have explained the distinction between semantic content and **meaning**. Now, we can focus on Frege's semantic theory. In his early work, Frege is mainly concerned with the semantic content of linguistic expressions and not their **meaning**. Subsequently, he uses the term *reference* for this world-directed aspect of meaning. Therefore, in his early work, what he later calls reference is the only semantic property of linguistic expressions. However, in his essay *Sense and Reference*, he introduces the notion of *sense* alongside reference as a semantic property of linguistic expressions (Frege 1948).

The reference of a linguistic expression is not part of its **meaning**. By contrast, the sense of an expression is part of the **meaning** of a linguistic expression², i.e. a language user needs to learn the sense of a linguistic expression in order to competently use it.³ In the remainder of this subsection, we first explain Frege's notion of reference. Then, we explain why he finds it necessary to introduce another semantic property (i.e. sense) alongside of reference. At the end, we explain his notion of sense.

The first step to understand Frege's theory is to understand his notion of reference. The reference of a linguistic expression is its semantic content or the world-directed aspect of its meaning.⁴ Following Dummett, we try to clarify this notion based on Frege's understanding of the semantics of formal language.

The task of a logician is to determine which statement logically follows from which one.⁵ This goal can be achieved by providing a (*model-theoretic*) *semantic interpretation* of the statements.⁶ Such an interpretation determines the *truth-condition* of each sentence in a formal language. By specifying the truth-

²As will be explained, the sense of an expression is just part of its **meaning**. The **meaning** can also be seen for example in the ironic use of linguistic expressions. A language user needs to grasp some information to understand the ironic use of an expression. However, such information is not part of the sense of the expression.

³“The sense of a proper name is grasped by everybody who is sufficiently familiar with the language or totality of designations to which it belongs” (Frege 1948:210)

⁴Frege defines “reference” simply as what the linguistic expression refers to (Frege 1948:210).

⁵As Dummett rightly notes, the primary concern of a logician is “the relation of consequence between the statements” (Dummett 1981:83).

⁶Using the term “model-theoretic” for Frege's approach is to some extent anachronistic. Following Dummett, our aim is to emphasize the fact that in providing semantics of formal languages Frege was not concerned with their **meaning** (i.e. the cognitive aspects of their meaning). Thus, his approach in providing the semantics of a formal language was closer to what we consider as the model-theoretic approach.

condition of each sentence in a language, a logician will be able to say which statements are the logical consequences of which ones.⁷ Following Alexander Miller, we can define the truth-condition of a sentence as “the condition which must obtain in the world in order for the sentence to be true” (Miller 2007:21). Here, we can see that the truth-condition of a statement is what the statement states about the world. A semantic interpretation determines the truth-condition of statements “by assigning the entities of suitable kind to primitive non-logical constants” of the statements (Dummett 1981:89). Thus, an interpretation specifies the semantic content of each of the constituents of statements. *The specified interpretation of each of these constituents in the semantics of a formal language is its reference* (Dummett 1981:89).

Frege suggests candidates for the reference of different constituents of a sentence and also the sentence itself, which are almost similar to the semantic content listed in the first chapter (section 1.1). The most important one for our discussion is Frege’s suggestion for the reference of proper names which he takes to be their referent or bearer. There is one major difference between Frege’s suggestion and our list in the first chapter. According to him, the reference of a sentence is not its truth-condition or a proposition expressed by it but simply its truth-value. His suggestion has generated a considerable discussion in the literature. For instance, some commentators suggest that, given the overall picture of his philosophy, candidates such as states of affair or truth-condition could be more appropriate (Beaney 1996:160). The controversy is not directly related to our aim in this chapter, so we do not discuss it in more detail.

The notion of reference helps us to explain “how language functions”. However, it is important to note that the reference of an expression is not what a language user needs to grasp in order to understand or competently use an expression (Dummett 1981:84). For instance, a language user does not need to know the truth-value of a sentence (which Frege takes to be the reference of the sentence) in order to understand or competently use it. Therefore, *the reference of an expression is not part of its meaning*.

Frege provides an analysis of the **meaning** of linguistic expressions in addition to an analysis of their reference. The main reason that motivated him to provide such an analysis was his concern for *informative* identity sentences. The references of two co-referring words are the same. As a result, if we limit our notion of the meaning⁸ of a linguistic expression to its reference, all identity sentences should be trivial.⁹ Despite this, in some cases, the identity statements seem to be informative for us. Consider the following examples:

- (a) Hesperus is Hesperus.

⁷See Sagi 2013 for a complete account of how it is possible to clarify relation of logical consequence based on the truth-condition of statements in a language.

⁸The reader should keep in mind that when we write “meaning” not in bold type, we use it to indicate the pre-theoretical notion of meaning which consists of the world directed and cognitive aspects. Hence, “meaning” indicates more general notion than “**meaning**”. The meaning of an expression consists of its semantic content and its **meaning**.

⁹The following quotation from Wittgenstein also indicates this point: “Roughly speaking, to say of two things that they are identical is nonsense, and to say of one thing that it is identical with itself is to say nothing at all.” (Wittgenstein 1922:5.5303)

(b) Hesperus is Phosphorus.

Frege uses the term “cognitive value”¹⁰ to clarify the difference between (a) and (b). Frege holds that these two statements do not have an identical “cognitive value”. The reason is that (a) is a priori and can be known independently from experience. However, a sentence such as (b) “contains very valuable extensions of our knowledge and cannot always be established a priori” (Frege 1948:209). This difference cannot be explained by the notion of reference since the references of each of the constituents of (a) and (b) and their truth-values are the same. Frege introduces the notion of *sense* to explain the difference between the cognitive values of sentences such as (a) and (b). The sense of an expression is “the mode of presentation” of the reference of that expression. As an example, Frege mentions different senses of “Aristotle”. Aristotle (who is the reference of “Aristotle”) can be presented by senses such as, for instance, “the pupil of Plato” or “the teacher of Alexander the Great”. Each of these senses presents/determines an object in the world, namely Aristotle. Hence, sense is the mode by which reference is presented and can be determined.

The notion of sense is part of **meaning** of a linguistic expression, i.e. a language user needs to learn (/grasp) it in order to competently use and understand the term. However, the sense of an expression does not fully coincide with its **meaning**. The sense of an expression is just part of its **meaning**. Frege differentiates between various features of the **meaning** of a linguistic expression. The features of **meaning** related to the truth-condition of a sentence are different from those that one needs to know to understand, for instance, the ironic use of an expression. A language user also needs to grasp some information to understand the ironic use of an expression. However, *the sense of an expression is the part of its meaning which plays a role in the determination of the truth-value of the sentence containing it* (Dummett 1981:92).

By using the concept of sense, Frege explains the difference between (a) and (b). According to him, the “modes of presentation” of “Hesperus” and “Phosphorus” are different, although their semantic contents are the same. A language user needs to learn the sense of an expression not its reference to use it. The references of these two terms (i.e. “Hesperus” and “Phosphorus”) are the same, but their senses are different. These two senses are two “modes of presentation” of the same object, but the agent cannot discover that these two “modes of presentation” present the same reference in an a priori way. Here, we see that the difference between cognitive values of (a) and (b) is not due to difference in the references of “Hesperus” and “Phosphorus” but due to the difference between their senses.

So far, we see that Frege introduces the notion of sense to explain the difference between the cognitive values of (a) and (b). Frege treats sense as a semantic property alongside reference. Moreover, he holds that the sense of an expression determines its reference. Therefore, each linguistic expression has two semantic properties, one of which (i.e. sense) determines the other one (i.e. reference).

¹⁰*Erkenntniswert* in German.

Another point that should be mentioned concerning sense is that, contrary to reference, sense is a cognitive element. This might have been expected, given the fact that sense was taken to be an ingredient of **meaning**. Nevertheless, being cognitive should not be seen as a synonym for being psychological. Senses are ontologically independent of the minds of language users. However, they can be grasped by the mind of language users.

2.1.2 Frege and the Puzzle

In the previous subsection, the distinction between sense and reference and Frege's motivations for the introduction of an additional semantic property were examined. However, the distinction by itself does not by itself solve Frege's puzzle. The reason is that according to Frege's theory, the truth-value of a sentence is a function of the reference of its constituents. Therefore, the substitution of two co-referring proper names with each other should not change the truth-value of the sentence containing one of them. In other words, the difference in the sense of two expressions does not influence the truth-value if two senses determine a single referent. This can be seen in the following examples:

- (1) Hillary Rodham will be candidate for the next presidential election.
- (2) Hillary Clinton will be candidate for the next presidential election.

Based on Frege's theory, the fact that two different senses might be associated with the names Hillary Clinton and Hillary Rodham does not influence the truth value of these sentences. It is probable that a former classmate of Clinton, whom we can call Jill, knows her by the name Hillary Rodham. Jill also knows the name of the former United States Secretary of State and Jill also knows that she is going to be candidate in the next election. However, she does not realize that they are the same person and might be disposed to assent to (2) while rejecting (1). Now consider the following sentence:

- (3) Jill believes that Hillary Rodham will be candidate for the next presidential election.
- (4) Jill believes that Hillary Clinton will be candidate for the next presidential election.

The semantic content of these two sentences should also be identical, if we take the references of the constituents in the *customary way*. To solve this, Frege adds a twist to his theory by stating that the reference of linguistic terms within the scope of attitude verbs is their customary sense, instead of their customary reference. Therefore, the reference of "Hillary Rodham" and "Hillary Clinton" in (3) and (4) is the sense of them as they occur (1) and (2). This move makes the difference between two senses significant for the truth-value of the sentences. Their truth-values cannot be determined by the customary references of their constituents, which are identical. Moreover, "Hillary Rodham" and "Hillary Clinton" are not interchangeable in the scope of attitude verbs. The reason is that two names need to have the same semantic content (referential value) to be intersubstitutable. But the referential values of these names in the scope of attitude verbs (i.e. their customary sense) are different. Hence, Frege rejects that these two terms have the same semantic content in the scope of attitude

verbs; thereby Frege can deny that these two terms are interchangeable *salva veritate* in these. In this way, he solves the puzzle.

The first objection that might be raised against Frege's theory is that his theory cannot properly explain the act of ascription. In the above example, the customary senses of two names are different for Jill. However, it might not be the case for the ascriber ascribing the belief to her. The reason is that what the ascriber expresses by (3) and (4) depends on the customary sense of the words for him, not for Jill. Consequently, two names might be intersubstitutable for him also in the scope of attitude verbs. Hence, the semantic content of (4) and (3) would be the same for him.

A possible reply to the above objection is to say that the references of the linguistic terms in the scopes of attitude verbs are not the customary senses grasped by the ascriber but the customary senses grasped by the subject of ascription. Consider the following example: Kim is a high school teacher. She frankly tells the mother of Ellen, one of her students, that she is an unintelligent student. Since Ellen is called Jane by her Father, the mother informed him by stating the following sentence:

(6) The teacher believes that Jane is an unintelligent student.

In this case, it is obvious that for the sentence to be true, the semantic content of the term "Jane" should be the sense of "Ellen" which is grasped by the teacher. Indeed, neither the hearer nor the reporter needs to know that sense. They just need to have a mode of presentation of the sense of the subject of the ascription (they need to grasp the sense of her sense). In order to determine the sense the teacher associates with Ellen, it is enough to have a sense of Ellen whatsoever and a sense of the teacher as a believer. The father can uniquely characterize the sense of Ellen that the teacher has in the following way: a mode of presentation of the person whom I (the father) know as Jane possessed by the teacher. This phrase is like a definite description of a sense of Ellen possessed by Kim (the teacher).

Davidson (1965) formulates another objection to Frege, which is mentioned also by Kripke (2008). The objection goes as follows: A natural language needs to be learnable in a finite amount of time; otherwise no finite being can become a competent language user. This intuitive remark imposes a constraint on theories of meaning for natural languages. A theory of meaning which renders the process of learning infinite is disqualified. Frege's theory suggests that attitude verbs alter the reference to the customary sense which is designated by an indirect sense. However, it is possible to iterate attitude verbs in a single expression, for example:

(6) I believe that you believe that Jill believes that Hillary Clinton will be candidate or the next presidential election.

Consequently, Frege's theory is committed to a sort of hierarchy of senses. The reason for this is that the reference of that-clauses shifts after adding each of these attitude verbs to its former sense. Hence, we need a new sense as the mode of presentation of the former sense. This problem is not just due to Frege's particular treatment of linguistic expressions within the scope of propositional attitudes. Kripke argues that the same problem emerges even independent

of Frege's thesis concerning belief contexts (Kripke 2008). The hierarchy can be seen by considering the fact that each sense can be potentially designated by an expression, e.g. "the sense of "Aristotle" , "the sense of "the sense of "Aristotle""". For such an expression to be meaningful, it needs to be associated with another sense as a mode presentation of the designated sense. This new mode of presentation can also be designated by a new expression and so on. The infinite hierarchy of sense may be problematic concerning the learnability of natural language since it makes the process of learning endless.¹¹

To neutralize the objection, I need to first introduce a distinction between the *dictionary* and the *lexicon* of a language. The dictionary of a language is a list of conventions concerning the **meaning** of the words that a language user needs to learn one by one. The conventions in the dictionary can be called *first-order conventions*. For instance, the practice of naming animals in English can be examples of first-order conventions. The meaning of "Tiger" and "Elephant" should be learnt independently and one by one. The lexicon of a language is the comprehensive list of the meaningful expressions in a language. All the linguistic expressions in the dictionary of a language are in its lexicon but it is not the other way around. The reason is that there are linguistic expressions whose meaning can be learnt via a rule about first-order conventions. For instance, imagine a language in which the name of an animal is a pair consisting of the number of its legs and its color. Hence, the tiger is called (four, orange) and the flamingo is called (four, pink). A zoologist who wants to learn this language does not need to learn the names of animals, he just needs to learn the names of colors and digits. He can also understand the speaker of the imagined language, when she is talking about an animal without previously learning the word.¹² Conventions such as the convention about the names of animals in this language can be called *second-order conventions*. The learnability constraint requires the process of learning the words in the dictionary to be finite. However, this might not be the case with the lexicon of the language. The lexicon can be infinite provided that the part of it that is not in the dictionary is governed by the second-order conventions.

With respect to the higher order sense, we can detect a sort of second-order convention. It is true that in order to use a proper name or many other linguistic expressions, one needs to be exposed to a learning process. Nevertheless, the process of grasping a sense of a sense (i.e. the higher sense in the hierarchy) is systematic and does not need further learning. If an agent truly knows the systematic way, in which such a hierarchy can be generated, he can understand the new sentences. For instance, he needs to know that by adding attitude verbs

¹¹It might be true that the learnability of language is not the primary concern of Frege. He believes in a sort of platonic realm from which the language users can grasp senses. Hence, the process of learning is understood by him in the way that we might understand it today. However, the objection concerns any contemporary proponent of his theory, who rejects his Platonism.

¹²It is true that this system of naming is not efficient in the case of animals and might generate numerous confusions. The reason for this is that there are many different animals with the same number of legs and color. However, my point is to merely indicate that there is such a possibility in language.

the sense of that-clause shifts to a higher-order sense which is a mode of presentation of what he has already grasped. For grasping this higher order sense, he does not need to learn anything new. The agent just needs to understand this systematicity. In this case, the process is systematic enough to not require further learning.

Another objection to Frege's solution to the puzzle is that it violates semantic innocence by accepting that it is possible for an expression to have different semantic contents in different contexts. Violating semantic innocence by itself is not a strong objection against Frege's theory. The argument can be strengthened by considering the cases in which a systematic relation between the semantic content of the expression can be detected. For instance, the semantic properties of expressions outside the scopes of attitude verbs can be related to the semantic properties of those within these scopes. This can be seen in the following example:

(7) An ancient astronomer looked at Hesperus believing that this is the morning star.

Here, the semantic content of the term "this" depends on the semantic content of Hesperus, which is outside the scope of the attitude verb. However, McKay and Nelson rightly note that famous cases, such as the following, also show an apparent shift in the semantic content (McKay and Nelson 2010):

(8) Giorgione was so-called because of his size.

Therefore, the alteration of semantic content due to the context is not uncommon in ordinary language. In order to reject Frege's theory due to violating semantic innocence, the argument should be improved. In particular, the opponent of Frege's theory needs to show a difference between the alterations of semantic content of (8) and (7).

We have surveyed some objections to Frege's solution. I tried to show that most of them can be adequately responded to. The opponents of Frege's theory would at least need to formulate these objections in a new way. However, the overview of the criticism was not exhaustive. There is still a more significant criticism that we will examine after the discussion of descriptivism.

2.2 Russell's Approach

Russell articulated a position which respects semantic innocence and at the same time solves the problems which led Frege to propose the bifurcation of semantic properties. In his alternative semantics, the analysis of definite descriptions has a pivotal place. Our plan is to first discuss his suggested analysis of definite descriptions. Then his theory of proper names and its consequences for the analysis of propositional attitudes will be examined. At the end, we will critically survey some of the objections raised against the theory.

2.2.1 Definite Descriptions and Proper Names

A famous problem that was also briefly mentioned in the exposition of Frege's view is the problem of linguistic expressions such as proper names "signifying" "non-existent objects". It is not clear how to assign any semantic content to these expressions in the absence of an existing denotation. Russell tries to tackle the problem by first examining the case of definite descriptions. Definite descriptions are linguistic expression of the form "the G " and their function is to uniquely characterize what they denote. It is possible to take the individual object characterized by a definite description as its semantic content. As an example, we can use the sentence used by Russell in his article: "The king of France is bald." Given the grammatical form of the sentence, it can be formalized as " Fa ", in which the term a is used for the denotation of "the King of France" and " F " the predicate ascribed to it, namely being bald. Russell, however, gives an alternative formalization, which cannot be directly related to the grammatical form of the sentence. According to him, the *logical form* of a sentence containing a definite description is not a single subject-predicate sentence without quantifier. According to him, a sentence such as "The king of France is bald" semantically expresses something equivalent to what is expressed by the conjunction of the following three sentences:

- a) There is at least one King of France.
- b) There is at most one King of France.
- c) Anything which is a King of France is also bald.

The idea is that for the sentence to be true there should be at least one object which satisfies the description. For a description to be definite there should be at most one object which is characterized by it. With these two general statements, we can single out what is denoted and therefore be able to ascribe the predicate to it. This analysis directly influences the semantic content assigned to definite descriptions. One can determine the semantic contribution of definite descriptions to a sentence, independently of the existence of what is denoted by them. According to Russell's analysis, sentences such as "the king of France is bald" are false, if the definite description determines no existing object. Nevertheless, they have truth-conditions. By contrast, if we take the semantic contribution of a definite description to be the object satisfying it, a sentence such as "The winged horse sired by Poseidon is a very admirable horse" would not have any truth-condition. The reason is that according to this approach, a description such as "the winged horse sired by Poseidon" does not have any semantic content (referent). We need to determine the semantic content of the sentence based on the semantic content of its constituents. However, it is not clear how to determine the semantic content of this sentence when one of its constituents does not have any semantic content.

Russell's analysis has generated a huge discussion concerning the nature of descriptions and their role in natural language. We postpone a more detailed discussion of it to the fifth chapter. Instead, we focus on the analysis of proper names that Russell offered based on his approach to the semantic content of definite descriptions. According to Russell, ordinary proper names are not *real*

names but they are definite descriptions in disguise. Real names are those names whose semantic content is their referents.¹³

Russell suggested a theory to analyze the semantic content of ordinary proper names called descriptivism. According to descriptivism, the semantic content of a proper name is equivalent to a definite description of its bearer. Consequently, a proper name such as "Aristotle" should be seen as a disguised definite description of its bearer such as "the most famous pupil of Plato". However, it is not the case that the semantic content of a name can always be associated with a single description. The descriptions associated with "Aristotle" by his childhood friends were not necessarily those that Thomas Aquinas associated with the name "Aristotle". Consequently, the semantic content of names is *context-sensitive*. This is a feature that provides Russell with a way to tackle Frege's puzzle. Before examining Russell's solution to the puzzle, it is worthwhile mentioning an important modification of descriptivism formulated by Searle (Searle 1958).

Searle argues that different individuals might associate different descriptions with a single name. Imagine two first year philosophy students, one of which takes a course in metaphysics and the other in moral philosophy. The first person knows Aristotle as a great ancient philosopher who wrote *Metaphysics* and the second person knows him as an ancient philosopher who wrote *Nicomachean Ethics*. These two students intuitively can communicate with each other using the name Aristotle. However, if we take the semantic content of "Aristotle" to be the description associated by each of them with it, the communication between these two students will be impaired. By asserting (i), one expresses the truth condition expressed by (ii) and the other the truth-condition expressed by (iii).

- i. Aristotle is a great philosopher.
- ii. The author of *Metaphysics* is a great philosopher.
- iii. The author of *Nicomachean Ethics* is a great philosopher.

If we accept the above analysis, the conversation between the two students was just a misunderstanding. The semantic content of the name as used by each of them is a different thing. Another problem is that sometimes, agents do not have a single definite description of an individual. Rather, one may have a set of different descriptions in mind. Searle suggests that the problem can be solved by taking the associated description not to be a single one but "a vague cluster of descriptions." The fact that this cluster is vague is significant. For Searle, a proper name is not an abbreviation of a single or few descriptions; rather it plays the role of a "peg" which helps us "to hang" various descriptions on the same individual. This is a very notable observation since it shows the different functions of names and descriptions in natural language. A name can be used as the mark or sign of the cluster containing all these descriptions. Therefore, by using names two agents can communicate without exactly associating the

¹³Russell's conception of real names will be discussed in the next chapter. For our discussion in this chapter, it is enough to know that for Russell, the semantic content of real names is their referents.

same description to the names. This function of names cannot be explained by the theory as it was originally outlined by Russell.

Searle's theory allows different individuals to have different clusters of descriptions, provide that they determine a single object. This move helps the theory to explain the fact that individuals usually associate more than one description with a single name. However, it is not clear how it is possible for two persons to communicate while having two different clusters in mind. Searle also adds a complication to his theory. For him, not all the descriptions need to be true of the real bearer of the name. It would be sufficient, if just more than half of them are accurate. Consequently, he is committed to a sort of *weighting process*, to single out the referent of a name. By the weighting process, we mean the process of finding the referent by searching for the object satisfying most of the descriptions in the cluster. The problem is that, several objects might exist, each of which satisfies some of the descriptions in a given cluster of descriptions. The weighting process determines the referent which is the object satisfying the most of description. That object is considered to be the referent of the name.

In this subsection, we explained the outline of Russell's approach. In the next subsection, we see how his theory can provide a solution to the puzzle.

2.2.2 Descriptivism and Frege's Puzzle

In the first chapter, we listed the different assumptions, which can be seen as the root of Frege's puzzle. One of the claims was that the semantic content of a proper name is its bearer. Frege, as has been discussed, denies that this is the case within the scope of attitude verbs. Russell put forward a more general claim. For him, the semantic content of a name is the semantic content of a definite description associated with it, both within and outside the scope of attitude verbs.

According to descriptivism, the semantic content of proper names is context-sensitive in general (Cumming 2013), i.e. it is the description which is associated by the speaker to the name in that context. Consequently, it is possible to say that not only two sentences such as (3) and (4), but also two sentences such as (1) and (2) can have different semantic contents, although they contain two co-referring proper names, namely "Hillary Clinton" and "Hillary Rodham". In the above example (the case of Jill's beliefs about Clinton), since the semantic contents of these names are not the same, they are not intersubstitutable.

To sum up, a proponent of descriptivism solves the puzzle by rejecting the Millian approach and providing an alternative picture for the semantic content of names. However, unlike Frege, the proponents of descriptivism do not need to violate semantic innocence. Furthermore, descriptivism avoids bifurcation of the semantic content of linguistic expressions as suggested by Frege's solution. Despite these advantages, the theory has faced numerous criticisms mainly claiming that it fails to correctly characterize the semantic content of names. In the next subsection, we will survey some of the criticisms.

2.2.3 Objections against Descriptivism

In a series of lectures published under the title *Naming and Necessity*, Kripke formulates several arguments against descriptivism. In this subsection, we mainly explicate these arguments which are considered to be fatal for descriptivism and Frege's theory of sense and reference. Furthermore, we examine further objections, formulated in his essay *A Puzzle about Belief*, which aim to show that the real root of Frege's puzzle is not any particular theory of proper names. Hence, it attacks the strategy used by the theories that we discussed in this chapter to solve the Frege's puzzle.

Kripke's first worry with descriptivism is that it gives a false picture of the modal properties of sentences. A definite description of an individual object does not always represent its necessary characteristics. For instance, the fact that Aristotle was "the most famous pupil of Plato" is not an essential characteristic of Aristotle. Thus the following sentence is not necessary:

(A) Aristotle was the most famous pupil of Plato.

However, the sentence cannot be false, if the semantic content of the name is associated with the definite description "the most famous pupil of Plato". In this case, the sentence is a tautology and necessarily true. The truth is that most definite descriptions that we use to characterize various individuals do not describe their uniquely essential features (in case such features exist). Therefore, descriptivism gives a false account of the modal properties of the sentences containing proper names. Compare the following sentences:

(B) Aristotle was not the most famous pupil of Plato.

(C) The most famous pupil of Plato was not the most famous pupil of Plato.

There is no possible world in which (C) is true, but this is not the case with (B). A proper name can be used to denote a single object in different possible situations, whereas descriptions can only denote objects as far as they possess the described feature. Therefore, a definite description which singles out an object in the actual world might fail to single out that object in another possible world. The term *rigid designator* is coined for the linguistic expressions which designate a single object in all possible worlds. Kripke's claim is that names are rigid designators, since their semantic content is not a function of different features that an object might have or not have in different possible worlds. By contrast, descriptions are not rigid designators for the reasons already explained. Thus, it is plausible to say that no semantic analysis of proper names can associate them with linguistic expressions that are not rigid designators. Hence, descriptivism is not a plausible account of proper names. This argument against descriptivism is called the *modal argument*. Particularly, this argument attacks the idea that the description associated with a name contributes to the semantic content of the sentence containing that name.

Another argument against the descriptivist analysis is called the *epistemic argument*. Assume that the meaning of a name such as "Aristotle" is associated with a particular description such as "the most famous pupil of Plato". Then, (A) is analytic and can be known independent of experience. However, one can competently use the term "Aristotle" without knowing that he was a pupil of

Plato. Hence, sentences such as (A) are synthetic (i.e. they cannot be known independently of experience). Therefore, the descriptivist analysis of names inevitably gives a false picture of the epistemic status of the sentences in which a definite description of the bearer is predicted of the name.

Kripke formulates another argument called the *semantic argument*, which is considered to be stronger than the other two. The previous arguments mainly target descriptivism as a theory of meaning for proper names, i.e. the arguments show that the semantic content of names cannot be analyzed in a way that is similar to the semantic content of descriptions. However, one may still defend descriptivism as a theory of reference. According to this weakened version of descriptivism, definite descriptions merely aid the speaker to single out the bearers of the names in the world, without providing their semantic content. Therefore, names refer by means of the descriptions associated with them. In this way, descriptivism is not a theory concerning semantic content, but about the mechanism of reference. It explains how a name refers, but does not explain its semantic contribution to the sentence.

Kripke points out that there are two problems with this theory. First, intuitively it is possible for a layman to use proper names such as “Aristotle”, without having any definite description of their bearers. A layman might just know Aristotle as an ancient Greek philosopher and still be able to refer to him. The second problem is that the process of referring as conceived by the proponents of descriptivism depends on the accuracy of the descriptions that we have about the bearer of the name. The true bearer is the one that satisfies most of the descriptions. However, it is possible to imagine that most of the descriptions that we have concerning the bearer are just false. For instance, Aristotle might have not been the most famous pupil of Plato or he might have not written *Metaphysics*. These facts apparently do not disturb our use of the name “Aristotle”. The name can also be used by a person who knows just false descriptions of Aristotle, to refer to the same object.

The final objection that needs to be mentioned is one that was formulated in Kripke1979. We have already discussed Kripke’s puzzle in the first chapter. The important feature of the puzzle is that it shows that our ordinary practice of attitude ascription is problematic without appealing to any theory of proper names. Hence, it is used to argue that Russell’s and Frege’s solutions, both based on rejecting the Millian theory of names, are not really helpful since the puzzle can be reintroduced without assuming the Millian theory.

Kripke points out that the puzzle cannot be solved by just saying that Pierre identifies “Londres” and “London” with different “uniquely identifying properties”. Pierre might actually have the same properties in mind in different languages associating each name with one of them. For instance, he associates “the capital of United Kingdom” with “London” and “La capitale de l’Angleterre” with “Londres”. This objection is very significant since it shows that even taking the semantic content of each name to be a particular description would not genuinely solve the puzzle. We leave further discussion and the examination of Kripke’s criticism and the responses of the proponents of descriptivism to it to the last chapter. Instead, in the next chapter, we examine theories which have

been articulated directly under the influence of Kripke's criticism.

2.3 Conclusion

In this chapter, we surveyed two solutions to the puzzle formulated by Frege and Russell. Both of these solutions have been criticized from different angles by Kripke. Kripke attacks the idea that the reference of proper names can be determined by a description. Moreover, he argues against taking description to be the semantic content of names. In this thesis, we accept Kripke's arguments against taking descriptions to be the semantic contents of names. However, in the fifth chapter, we will outline a descriptivist theory of reference that neutralizes Kripke's arguments.

Chapter 3

Naïve-Russellian Approaches toward Frege's Puzzle

In the previous chapter, we examined the Fregean/descriptivist strategy to solve Frege's puzzle, i.e. renouncing the Millian theory. However, the strategy faces two major difficulties. First, Kripke's arguments against Frege's theory of names and descriptivism have seriously challenged the plausibility of these two theories of names. Second, Kripke's puzzle shows that taking a (unique) descriptive feature of the bearer as a part of the semantic content of the name is not a general strategy. This is because Frege's puzzle can be reintroduced in other forms independent of our theory of the semantic content of proper names. Thus, the ability of the Fregean/descriptivist strategy (i.e. renouncing the Millian theory) to tackle other puzzles about belief is in question.

In this chapter, we are going to examine what is called the *naïve-Russellian* theory of propositional attitudes. Naïve-Russellians strongly reject all forms of descriptivism in favor of the Millian theory of names. Hence, the reason that they are called naïve-Russellian is *not* that they accept Russell's analysis of proper names. The reason is their use of a notion of proposition which was first introduced by Russell. For naïve-Russellians, the semantic contribution of proper names is always their referent, i.e. an object. Consequently, the proposition expressed by a sentence containing a proper name should have an object as one of one of its constituents. As you can see, this notion of a proposition does not match that of Frege, according to which propositions are exclusively constituted by senses and not by objects in the world. Therefore, naïve-Russellians need another notion of proposition which is compatible with the Millian theory of names.

The notion of proposition which is used by naïve-Russellians is called a *singular proposition*. The main feature of a singular proposition is that it has individual objects as its constituents. This is the understanding of propositions

that matches the naïve-Russellian theory. Although, the term “singular proposition” was not used by Russell in his works, he laid the theoretical foundation for the notion (Russell 1910). According to naïve-Russellians, the that-clause of an attitude ascription containing a proper name expresses a singular proposition. The reason is that the semantic contribution of the name to the semantic content of the that-clause containing it is only its bearer. Consider the following example:

(a) John believes that Barack Obama and the current First Lady of the United States are important political figures.

According to naïve-Russellians, the that-clause in the above example expresses a singular proposition. However, it is important to note that the singularity of a proposition is a relative concept, i.e. a proposition can be singular with respect to one object by having it as its constituent, while not being singular with respect to another. For instance, the proposition expressed by (a) is singular with respect to Barack Obama and not with respect to the current First Lady of the United States. The reason is that “Obama” in (a) is a proper name and its semantic content is an object. However, “the current First Lady of the United States” is a description and its semantic content is not the object denoted by it.¹

By taking singular propositions as the semantic content of sentences containing proper names, Frege’s puzzle looms large again. Consider again the following examples:

(b) Ancient astronomers believe that Hesperus shines in the morning.

(c) Ancient astronomers believe that Phosphorus shines in the morning.

All constituents of the that-clauses of (b) and (c) are identical except the proper names. However, the proper names “Phosphorus” and “Hesperus” are co-referring. If we accept the Millian theory of names, the semantic content of these two names will be identical. Hence, both that-clauses will express the same singular proposition. Therefore, it will not be possible for an agent to believe one of the that-clause without believing the other. The result is that the substitution of two co-referring names, such as “Hesperus” and “Phosphorus”, does not change the semantic content of sentence containing one of them.

Naïve-Russellians concede that *the substitution of two co-referring terms does not influence the semantic content of the sentence in which they occur*. This claim is taken as the main characteristic of naïve-Russellians in this thesis². The main problem for a proponent of naïve-Russellian approach is to explain away

¹As will be explained in the fifth chapter, there are philosophers who also take the semantic content of definite descriptions to be merely an object denoted by them.

²There are theories, such as Soames’s, which can be excluded from this group, if we replace the phrase “semantic content” by “truth-value” in our characterization. In fact, the term “naïve-Russellians” has been used in a way that consciously excludes Soames’s later view (see for example McKay and Nelson 2010). However, it might be better to categorize different positions by their approach to the semantic content of sentences rather than the truth-value of sentences. Indeed, these two concepts were traditionally considered to be correlated, but Soames has articulated an approach which, at least to some extent, disentangles these two concepts. The element which is important in the final evaluation of his view is what he takes as the semantic content.

Frege’s puzzle, while taking sentences such as (b) and (c) to express the same proposition. In particular, they need to explain why we are wrong to assume that the that-clause of (b) can be believed without believing the that-clause of (c). This is the intuition behind Frege’s puzzle which naïve-Russellians reject.

In this chapter, we start by briefly discussing Russell’s conception of singular propositions. Then, three naïve-Russellian views will be critically examined.

3.1 Russell and Singular Propositions

In this section, we explain the notion of singular proposition, which is also called “*Russellian proposition*”. A singular proposition is a piece of information specifically concerning an individual object which functions as one of its constituents. Hence, it has two main features: (a) it is about a particular object (the relation can be called the relation of “aboutness”) (b) this relation between the proposition and the object exists since the object is one of the constituents of the proposition. By way of a contrast, a *general proposition*, e.g. “Tigers are beautiful animals”, is not specifically about an individual and does not have any particular object as its constituent.³ There is a third type of propositions, namely *particularized propositions*. Particularized propositions are about a particular object without having it as a constituent. Instead, they use a “proxy” such as a definite description to single out the object. For instance, the sentence “the most famous contemporary British writer is extremely rich” is about a particular person satisfying the definite description “the most famous contemporary British writer”. However, the semantic contribution of this description to the sentence that contains it is not the object that satisfies this description.⁴(see Fitch and Nelson 2013).

The divergence between singular propositions and other sorts of propositions is based on Russell’s distinction between “*acquaintance*” and “*description*”. Russell⁵ defines being acquainted with an object as having “a direct cognitive relation with the object” (Russell 1910:108). According to him, agents are only able to form singular thoughts about those objects that they are acquainted with. Concerning the other objects, they can only have general or particularized thoughts using proxies such as definite descriptions. Here, we do not need to fully explicate the condition of being acquainted with an object. The only important point that we need to mention is that if an agent is acquainted with an object, she cannot misidentify it. For instance, ancient astronomers were not in a direct cognitive relation with Venus, otherwise they could not possibly

³One may reject this point, by saying that these propositions have for instance the property of tigerness or set of all tigers as their constituents. However, even in this case they do not have any particular individuals as their constituents. Hence, they are not singular propositions. This discussion is not directly relevant to our main concern in this thesis. Therefore, we do not discuss it in more detail.

⁴The example is correct, if one accepts Russell’s analysis of definite descriptions. In case, one takes descriptions to be referential expressions, the sentence expresses a singular proposition (see chapter sixth for further discussion).

⁵At this point, we are talking about the earlier works of Russell.

reject that “Phosphorus is Hesperus”.

Based on the distinction between description and acquaintance, Russell introduces the concept of *logically proper names* or *real names*. According to Russell, the semantic content of a real name, unlike that of ordinary proper names, is its referent. A person can use a linguistic expression as a real name (i.e. to directly refer to its bearer), if she is in a “direct cognitive relation with” that bearer. According to Russell, a sentence containing a real name expresses a singular proposition. The reason is that the semantic contribution of the real name to the semantic content of that sentence is its referent. Hence, the reference of the name is part of the proposition expressed by that sentence.

Language users are not in a direct cognitive relation with most of the referents of the names they use. The reason is that it is possible for them to *misidentify* the referent of such names. For instance, it is possible for an astronomer to fail to identify Hesperus in the morning. It is not possible for an agent to misidentify an object, if she is in a direct cognitive relation with it. Thus, the relation of the referent of most of the names and the language user is not based on acquaintance but description. Hence, Russell believes that sentences containing ordinary proper names do not express singular propositions because the semantic content of such names is a definite description.

The notion of singular propositions is significant for the philosophers who take the Millian approach. The reason is that Russell’s idea provides a conception of propositions which individual objects can be part of. *Unlike Russell*, naïve-Russellians take ordinary names to be real names. Therefore, they take all sentences containing an ordinary proper name to express singular propositions. This idea matches with the Millian conception, according to which the semantic contribution of proper names is their referent.

However, the claim that sentences containing ordinary names express a singular proposition faces a major difficulty. Consider the following examples.

- (i) Samuel Clemens is a famous writer.
- (ii) Mark Twain is a famous writer.

Intuitively, it is possible to accept one of these two sentences while rejecting the other. Frege explains this possibility by taking them to express different thoughts. He uses the idea of thoughts as a medium between the agent and the world. For Russell, believing one of the above sentences without believing the other is possible if the agent knows the referent of the names by a description rather than by acquaintance (i.e. a direct cognitive relation). Therefore, both Russell and Frege explain this possibility by holding that the relation of the agent to the world is not direct. They take a medium (i.e. thought and sense) or proxy (i.e. definite description), which represents the referent of the name, to be the semantic content of that name. By contrast, naïve-Russellians deny *the semantic significance* of any cognitive lens or Fregean sense as part of the semantic content of the that-clauses. They take what is semantically expressed by the above that-clauses to be directly correlated to the objects in the world. Hence, they claim that both of the above sentences express the same singular proposition. Different versions of the naïve-Russellian approach give different

reasons to explain why this intuition⁶ is misplaced. In the next three sections, we examine some of these different versions.

3.2 The Standard Naïve-Russellian Approach

In the previous section, we said that naïve-Russellians, unlike Russell, think of proper names in ordinary language as real names. A proposition expressed by a sentence containing a real name has the bearer of the name as its constituent. Thus, the proposition is singular in respect to that bearer. Hence, naïve-Russellians believe that the propositions expressed by sentences containing proper names are singular. As a result, the proponents of this view are not able to differentiate between the semantic content of two sentences containing different co-referring proper names. Consequently, they take the semantic content of the following sentences to be the same:

- (1) Hesperus is Hesperus.
- (2) Phosphorus is Hesperus.

Unlike Frege, Naïve-Russellians take the semantic content of linguistic expressions to be constant whether inside or outside the scope of attitude verbs. Therefore, according to them, the semantic content of the following sentences is also identical:

- (3) Ancient astronomers believed that Hesperus is Hesperus.
- (4) Ancient astronomers believed that Phosphorus is Hesperus.

The main challenge for naïve-Russellians is to explain away the discrepancy of their idea about the semantic content of sentences such as (3) and (4) with the common intuition that the semantic content of these two sentences are different. In this section, we explain a view which can be called, following McKay and Nelson, *the standard naïve-Russellian view* (McKay and Nelson 2010).⁷ The basic strategy used by this view, is appealing to the *semantics/pragmatics distinction*. To see the distinction, consider the following example. On a long rainy night, a father starts to give a long tiresome speech. His son, becomes bored of the speech and sees that the others are as well, suddenly interrupts his father and asserts (5).

- (5) It is raining.

Evidently, (5) is used by him not to say something about the weather but to express his boredom. However, the conveyed information (i.e. that the speech is boring) is not systematically related to the semantic content of each word in (5). Hence, it cannot be the semantic content of (5). This example illustrates that by using a sentence, a language user can impart information other than its semantic content. The *pragmatically imparted information* is a piece of information that is not semantically expressed by the sentence but can be imparted by using it in a particular context. By contrast, *the semantically encoded information* is the semantic content of a sentence which is expressed by it independent of the

⁶The intuition that it is possible to believe (i), without believing (ii).

⁷Different philosophers hold a view similar to the standard naïve Russellian view. See the collection of essay edited by Salmon and Soames 1988.

context. The distinction between the information semantically expressed and the information pragmatically imparted is used by the standard naïve-Russellian to solve Frege’s puzzle.

According to the standard naïve-Russellian theory, (3) and (4) semantically express the same information concerning the world. However, they pragmatically impart two different pieces of information. The difference between pragmatically imparted information misleads us to take their semantic content to be different. Hence, the intuition that these two sentences semantically convey different information is based on the *confusion* of “semantically encoded and pragmatically imparted information”⁸ (Salmon 1986:87).

The standard naïve-Russellian view also provides an account of the pragmatically imparted information. According to the standard naïve-Russellian theory, (4) mistakenly implies that ancient astronomers were aware of the fact that the linguistic expression, used by them to refer to Venus when it appears in the morning, can also be used to refer to it when it appears in the evening. Therefore, by using (4), the ascriber pragmatically imparts a false piece of *metalinguistic* information about the ancient astronomers’ beliefs about the names. The reason that we think (4) has a different truth-value from (3) is confusing this false metalinguistic piece of information with the true semantic content of the sentence. Hence our intuitions concerning the difference between the semantic contents of (3) and (4) is just based on failure to distinguish between the different sorts of information imparted by a sentence.

The other solutions that are discussed in this chapter find the standard naïve-Russellian response to Frege’s puzzle to be inadequate. These two solutions are still categorized as naïve-Russellian since both of them maintain that the substitution of two co-referring terms does not influence the semantic content of the sentence in which they occur. In the next section, we discuss Salmon’s response to Frege’s puzzle.

3.3 Salmon’s Approach

In this section, we are going to examine a strategy to solve Frege’s puzzle formulated by Nathan Salmon. Salmon’s approach is categorized as a naïve-Russellian view. The reason is that he holds that the substitution of two co-referring names does not change the semantic content of sentences containing either of them. In this section, we first explain his theory and then examine some of its shortcomings.

For reasons that will be explained in section 3.5, Salmon rejects that appealing to the semantics/pragmatics distinction is enough to solve the puzzle. We do not discuss his criticism of this strategy at the moment since his criticism can also be applied to Soames’s view. Therefore, to avoid repetition, we explain his criticism of the above theory after discussing Soames’s theory (see section

⁸By semantically encoded information, following Salmon, we mean the semantic content of the sentence.

3.5). The following examples can help us to start the discussion of Salmon's theory:

- (1) Hesperus is Hesperus.
- (2) Phosphorus is Hesperus.

According to Salmon, the above sentences convey the same "semantically encoded information", i.e. they have the same semantic content. An agent who can competently use the above sentences is naturally able to understand the information semantically expressed by them. Therefore, we might expect a person who understands both of these sentences to immediately recognize that they express the same piece of information. However, we know that ancient astronomers would have rejected (2), although they believed (1). The question is why the astronomers were disposed to reject (1), while believing (2) if these two sentences express the same piece of information.

Salmon explains the disposition of astronomers to reject (2) by holding that their relation to the information expressed by these sentences is *indirect*, i.e. the information expressed by these sentence is grasped by them through different mediums. He suggests that a language user believing a particular piece of information might fail to recognize that piece of information when it is semantically expressed by another sentence. The reason is that *the mediums by which she has access to the information are not the same on each of these occasions*. In the case of the ancient astronomers, they would have rejected (2) not because (2) and (1) semantically convey different pieces of information but because the information conveyed by them is grasped through different mediums. In this way, Salmon explains the disposition of astronomers to reject (2), while accepting (1) by holding that their access to the semantic content of these sentences was mediated by different mediums. Now, we can examine the consequence of his view for the semantics of propositional attitude reports. Consider again the two reports of ancient astronomers' attitudes:

- (3) Ancient astronomers believed that Hesperus is Hesperus.
- (4) Ancient astronomers believed that Phosphorus is Hesperus.

The above sentences *seem* to state a binary relation between the semantic content of the that-clauses and the subjects. This picture is rejected by Salmon. As already mentioned, Salmon calls the semantic content of a sentence "semantically encoded information". He holds that the information expressed by the that-clauses is grasped by the subject through a medium.⁹ Therefore, he takes the belief relation to be a *ternary* relation rather than a binary relation. For Salmon, a report states a ternary relation between a singular proposition a medium and an agent.

By taking belief to be a ternary relation, Salmon can explain how the same piece of information can be simultaneously rejected and accepted by a person. A piece of information can be grasped through different mediums and the agent can believe that piece as grasped through some of those mediums, while not

⁹Unlike Frege, he does not take the medium to be part of the semantic content of the that-clauses of the reports. Instead, he maintains that the subject of the reports (i.e. astronomers) grasp the semantic content (which is a singular proposition) through a medium.

believing it as it is grasped through other mediums. The agent does not need to recognize a piece of information when it is grasped through different mediums.

A question that Salmon needs to address is in which sense an agent might fail to recognize a piece of information that she knows. Assume that two sentences semantically convey a same piece of information. Salmon's claim is that an agent might grasp the piece of information conveyed by these two sentences without realizing that they are the same. Grasping a piece of information is normally tantamount to fully understanding it. Therefore, it is not clear how Salmon's claim can be true. Salmon himself notes that his claim might seem rather peculiar, if not totally unacceptable. It is common to hold that individual objects such as the morning star might not be recognized by an agent on different occasions. For instance, ancient astronomers could not recognize the morning star in the evening. However, it is not clear in which way one may understand a piece of information, while failing to recognize it on another occasion (Salmon 1986:105).

Here, Salmon appeals to the conception of proposition formulated by Russell in place of the Fregean conception of proposition. A proposition (or thought) as understood by Frege "is made entirely of things like concepts" (Salmon 1986:107). Hence, in Frege's picture, understanding a sentence is tantamount to fully grasping the thought expressed by it. This picture leaves no place for any failure to identify the semantic content of the sentence on other occasions. If two sentences express the same thought, the agent who can competently use them will immediately recognize that this is the case.¹⁰ In other words, an agent who fails to identify a thought expressed by a sentence on other occasions does not understand the sentence. However, singular propositions are directly constituted by objects and not concepts alone. Therefore, it is plausible to maintain that those propositions might not be successfully identified by the agent on other occasions. The reason is that the agent might fail to identify *the objects which are part of singular propositions on other occasions*. Therefore, an agent might understand and competently use two sentences expressing the same singular proposition without recognizing that to be the case.

Salmon calls the mediums between singular propositions and their agents "*guise*". Salmon illustrates the notion of guise in his book by the following example (Salmon 1986:104). His example concerns a woman, Mrs. Jones, who loves her husband who is a District Attorney. However, unbeknownst to her, he is also the guy who nightly steals corpses from the cemetery and known by the media as Jones the Ripper-Officer. Mrs. Jones strangely starts to develop some feelings for the guy in the news and stops loving her husband after a while. The question is whether she loves her husband who is actually Jones the Ripper-Officer or not (Salmon 1986:104). In this case, it is evident that her attitude toward the man is mediated by different guises. Hence, an adequate report of her attitudes needs to also take into account these different guises. Information is always given under certain guises which might mislead the agent. In this

¹⁰Therefore, Frege solve the puzzle by taking sentences such as (1) and (2) to express different propositions.

case for instance, Mr. Jones is loved by his wife under one guise and not under the other. Therefore, Mrs. Jones fails to recognize the semantic value of Mr. Jones as Jones the Ripper-Offer in the following sentence: "Mrs. Jones loves Mr. Jones". Consequently, she might deny it, while it is actually true. This picture suggests that the relation of agents and propositions is not direct, but via a medium.

The notion of guise matches Salmon's idea that propositions might not be recognized to be the same. The upshot of the view is that the fact that an agent assents to a sentence shows that she believes in the proposition expressed by it under a certain guise. However, *one cannot conclude from an agent's denial of a particular proposition that she disbelieves the proposition expressed by it*. The denial of an agent merely shows that the proposition is not believed under a certain guise. Hence, Salmon rejects the converse disquotation principle. Both of the following sentences can be true at the same time:

(6) Ancient astronomers believed that Hesperus shines in the morning.

(7) Ancient astronomers did not believe that Hesperus shines in the morning.

According to the analysis suggested by Salmon, these two sentences should be read in the following way:

(8) There is a guise and ancient astronomers grasped the semantic content of "Hesperus shines in the morning" under that guise and ancient astronomers believed under that guise that Hesperus shines in the morning.

(9) There is a guise and ancient astronomers grasped the semantic content of "Hesperus shines in the morning" under that guise and ancient astronomers *did not* believe under that guise that Hesperus shines in the morning.

These two sentences are compatible, if the guises are not the same. An agent grasps the same piece of information under different guises and believes it under some, while rejecting it under the other. In this way, it is possible to solve Frege's puzzle without renouncing the Millian theory of names. We just need to differentiate the different guises under which a singular proposition such as "Hesperus is Hesperus" can be believed (or doubted or etc.).

It is important to note that Salmon accepts that two co-referring names are interchangeable *salva veritate*¹¹ in the scope of attitude verbs. The reason is that the semantic content of names is merely their reference. Using different co-referring names does not influence the semantic content of the that-clause or the report. Therefore, he rejects the Fregean intuition that by replacing Hesperus with Phosphorus in (6), the truth value of the sentence changes. Now, we need to see whether Salmon's strategy is also effective in the case of Kripke's puzzle.

Kripke's puzzle is based on both the disquotation and converse-disquotation principles (which he unified in a single formulation, as explained in the first chapter). Salmon's analysis does not require us to revise the disquotation principle. The acceptance of a sentence by an agent implies that the agent believes the proposition semantically encoded by it (although under a certain guise). However, as already mentioned, Salmon rejects the converse disquotation prin-

¹¹Two terms are intersubstitutable *salva veritate* if replacing one with the other does not change the truth-value of the sentence containing the first one.

ciple. By dissenting from a sentence, an agent shows that he does not believe the semantic content of the sentence under certain guise but not in general. Salmon uses the term *withholding a belief* for the condition in which an agent denies a proposition under a guise. An agent who dissents from a particular sentence may believe the information semantically encoded by it. However, he withholds that particular belief under this specific guise. Consequently, in Kripke's puzzle, Peter believes that Paderewski is a talented musician, while withholding this belief under a particular guise. Consider the following sentences:

(10) Peter believes that Paderewski is a talented musician.

(11) Peter does not believe that Paderewski is a talented musician.

According to Kripke, the ascription of contradictory that-clauses to the same person is problematic. However, Salmon analyzes the above sentences in the following way:

(12) There is a guise and Peter grasped the semantic content of "Paderewski is a talented musician" under that guise and Peter believes under that guise that Paderewski is a talented musician.

(13) There is a guise and Peter grasped the semantic content of "Paderewski is a talented musician" under that guise and Peter did not believe under that guise that Paderewski is a talented musician.

Given, Salmon's analysis, the ascription of the above that-clauses is not problematic in the case of Peter. Therefore, Salmon also provides a solution to Kripke's puzzle.

In his 1987 review, Graeme Forbes criticizes Salmon's solution of the puzzle. According to him, Salmon's solution smuggles in Fregean ideas such as modes of presentation which are not supposed to be used by a Russellian. It is true that Salmon's solution possesses some similarities with that of Frege; however, there is also an important difference. Guises are not part of what is expressed by that-clauses. Forbes notices this difference, but does not take it as an important difference. However, the difference results in two other significant differences. First, Salmon's analysis does not violate semantic innocence. The reason is that according to his theory, there is no difference between the semantic content of proper names inside or outside the scope of attitude verbs. The second difference is that he does not need to assume any sort of hierarchy of semantic properties in a way that Frege's theory needs.¹²

The main problem with Salmon's solution is that his notion of guise is not properly constrained. According to Salmon a propositional attitude report merely states that the semantic content of its that-clause is believed by the subject via a guise. The fact that the notion of guise is unspecified in his treatment makes his analysis of belief-sentences problematic. Consider the following scenario. Sabium, an ancient astronomer, was the first person to discover that Hesperus is Phosphorus. Therefore, both of the following sentences are true:

(a) Sabium believed that Phosphorus shines in the morning.

(b) Sabium believed that Hesperus shines in the morning.

¹²For a discussion of the hierarchy between senses and why Frege's theory might be committed to it, see the second chapter of this thesis.

However, in reading an older text, Sabium found some information about a star, called Xperus, which he could not identify in the sky. Hence, he came to the conclusion that the star ceased to exist many years ago. Therefore, the following sentence is also true:

(c) Sabium did not believe that Xperus shines in the morning.

Assume that Xperus is actually Venus. Therefore, there is a guise under which Sabium does not believe the information expressed by the that clauses of (a), (b) and (c)¹³. No information or text about the older text or Sabium's beliefs about Xperus is available for contemporary historians. The scholars of ancient astronomy just know that Sabium was the first astronomer who discovered that Hesperus is Phosphorus. Now consider the following problem. An ignorant modern historian, called Taylor, does not know about the famous discovery of Sabium. Hence, he writes (d) in his book about the history of astronomy:

(d) Sabium did not believe that Hesperus shines in the morning.

Intuitively, the above sentence is false. It conveys a false piece of information concerning Sabium's belief about Hesperus. Sabium's belief about Xperus seems to be irrelevant to the truth and falsity of (d). Other historians may rightly accuse the passage of stating a false proposition. It seems dubious that historians change their idea about the falsehood of (d), if they find some information concerning Sabium's belief about Xperus. Nevertheless, according to Salmon's analysis, (d) is true. The reason is that there is guise (Xperus) under which Sabium failed to recognize the information expressed by the that-clause of (d). For Salmon, the guise does not need to be related to the way that Taylor or other historians understand the singular proposition expressed by the that-clause. In particular, the fact that the historians do not know anything about Xperus does not play any role.

The problem is that the notion of guise in Salmon is unspecified. A comparison of Salmon's notion of guise and Frege's notion of sense can help us to understand the point. In Frege's theory, the sense of Hesperus and Xperus are different. The (d) is not an accurate report of Sabium's belief since the report, as stated by a modern historian, is related to his sense of Hesperus and not Xperus. However, in Salmon's theory, there is not such a requirement for the guise of the ascriber and the subject to be related in some way. This scenario has shown that Salmon's theory is not capable of satisfying some of our intuitions regarding propositional attitude reports.

3.4 Soames's Approach

So far, it has been taken for granted that one of the following assumptions needs to be rejected to solve the puzzle: 1. The substitution of co-referring terms within the scope of attitude verbs can change the truth-value of propositional

¹³Since Hesperus, Venus, Phosphorus and Xperus are the names of a single object, the that-clauses of (a), (b) and (c) express the same singular proposition (i.e. the same piece of information).

attitude reports (the Fregean assumption). 2. The semantic content of a name is its reference and therefore two co-referring names have an identical semantic content (the Millian assumption). The first assumption is mainly stressed by Fregeans, who use it to argue against the second assumption. The argument goes as follows. Two names with an identical semantic content are intersubstitutable *salva veritate*. If the intersubstitution of two terms changes the truth-value of a sentence containing either of them, they do not have the same semantic content. Co-referring names are not interchangeable *salva veritate* in attitude-report sentences. Hence, the Millian assumption is wrong.

The second assumption is usually emphasized by Naïve-Russellians such as Salmon and supported by arguments against descriptivism that were explained in the previous chapter. They reject the Fregean argument presented in the above paragraph by rejecting the first assumption. For instance, Salmon rejects that the intersubstitution of co-referring terms within a sentence can alter the truth-value of that sentence. Here, we can see that both Fregean philosophers and Salmon accept that if the intersubstitution of two names within a sentence changes its truth-value, they have different semantic contents (call this *the shared supposition*).

Soames argues that both of the Fregean and the Millian assumptions can be maintained at the same time, if we give up the *truth-conditional conception of semantics* (henceforth TCS), which is the reason behind the shared supposition. According to TCS, the semantic content of a sentence is a set of situations in which the sentence is true. Therefore, if two sentences have different truth-values in a situation, they cannot have an identical semantic content. Soames suggests that if we reject TCS, we can maintain that Fregean assumption is right, without rejecting the Millian assumption. We can hold that the substitution of two co-referring names can sometimes alter the truth-value of a sentence, but it never alters the semantic content of a sentence. In the next subsection, we explain TCS and Soames's criticism of it.

3.4.1 Truth-conditional Semantics

According to TCS, the semantic content of a sentence in natural languages is its truth-condition¹⁴, i.e. “the collection of circumstances supporting the truth of a sentence” (Soames 2009:35). In the literature, this collection is usually taken to be a set of metaphysically possible worlds. For instance, the truth-condition of a sentence such as “François Hollande is the current president of France” is the set of all possible worlds in which the sentence is true. Consequently, given two sentences, if there is a possible world in which one of them is true and not the other, they have different semantic contents.

This understanding of semantic content supports the shared supposition that any change in the truth-value of a sentence indicates the alteration of

¹⁴Instead of “its truth-condition”, it is possible to use the expression “a proposition expressed by it”. In fact, according to this conception of semantics, propositions are sets of possible worlds and a proposition expressed by a sentence is the set of possible worlds in which the sentence is true.

its semantic content. Consider the following examples:

- (i) Amy believes that Mark Twain was a great writer.
- (ii) Amy believes that Samuel Clemens was a great writer.

If there is a possible world in which (i) is true and (ii) is false, then TCS implies that the semantic contents of them cannot be identical. Hence, given TCS, accepting the Fregean assumption (i.e. (i) and (ii) can have different truth-values) implies that the Millian assumption is false (i.e. (i) and (ii) have different semantic contents). By questioning TCS, Soames aims to pave the way for the Fregean and Millian assumptions to be compatible.

TCS has been criticized for many different reasons¹⁵. For instance, it has been argued that the proponent of this view cannot distinguish between the semantic content of different necessary sentences, because there is no metaphysically possible world in which necessary sentences such as mathematical theorems are false. Therefore, the sets of metaphysically possible worlds in which these sentences are true are identical. Philosophers have tried to solve the problem by replacing possible worlds with possible situations which can be seen as partial possible worlds. Given a complete possible world, we can assign a truth-value to all (well-formed) sentences of a language. However, we cannot do the same by a partial possible world (i.e. a situation). Given a partial possible world or a situation, we can just determine the truth-value of some sentences. Therefore, there is a situation in which, for instance, Gödel's first incompleteness theorem is true, but Fermat's last theorem has no truth-value. Hence, such a situation will not be in the set of situations in which Fermat's last theorem is true. In this way, we can distinguish between the truth-conditions of different necessary sentences.

There are still other sentences whose semantic content cannot be identified with metaphysically possible situations. For instance, consider a belief report such as "Jeffrey believes that the first incompleteness theorem is false". Intuitively, this sentence has a semantic content and can be true or false. Given the principle of compositionality, the semantic content of this report is a function of the semantic content of its that-clause. Hence, in order to determine the semantic content of the report, a proponent of TCS first needs to determine the semantic content of "the first incompleteness theorem is false". However, there is no possible world or situation in which this sentence is true. Thus, the that-clause of the report and therefore the report itself do not have any content according to TCS. To solve this problem, it has been suggested that metaphysically *impossible* worlds or situations can also be the member of the collection of truth-supporting circumstances for a sentence. Hence, the semantic content of the that-clause is the set of (impossible) situations in which the first incompleteness theorem is false.

So far, we have surveyed two suggested modifications of TCS. However, Soames holds that these two modifications are not adequate and TCS should be rejected all together. According to him, the fact that indexicals and proper names are directly referential makes an insurmountable problem for TCS (Soames

¹⁵We will examine some of these criticisms in the fourth chapter.

2009:44).

In the remainder of this subsection, we try to explain his argument against TCS. His strategy is to give a sentence, which can be rationally believed by an agent. Then, he argues that for the report of such a belief to be true, we need to assign a truth-condition to that sentence. However, if the Millian theory is correct, the sentence cannot be true in any possible or impossible situation. Hence, TCS should be rejected. As will be seen, Soames example and his way of arguing are highly complicated and hardly satisfactory. The reader can therefore skip the remainder of this subsection. The only point that is important from this part for the rest of the chapter is the fact that Soames rejects TCS.

Soames gives the following example of a sentence which can be believed by an agent, but cannot be true in any (im)possible situation.

(iii) "Mark Twain is Herman Melville and Samuel Clemens is Stephen Crane and Mark Twain = the x such that Mark Twain=x". (Soames 2009:44)

The sentence can be believed by a person who identifies Mark Twain and Samuel Clemens (who are a single person) with two distinct men. Thus, there are two men such that the person believes one is Twain and Clemens is the other. The third conjunct says that whoever is Mark Twain cannot be a person other than Mark Twain. Now Consider (iv):

(iv) Maria believes that Mark Twain is Herman Melville and Samuel Clemens is Stephen Crane and Mark Twain = the x such that Mark Twain=x.

It seems possible for an agent to believe (iii), therefore there should be a set of possible worlds in which (iv) is true. However, if a proponent of TCS wants to assign a semantic content to (iv), he needs to specify the semantic content of its parts, including that of its that-clause, i.e. (iii). The semantic content of (iii) cannot be the empty set. Otherwise, there would be no difference for instance between (iv) and (v):

(v) Maria believes that her sister is her sister and at the same time her sister is not her sister.

Evidently, the semantic content of (iv) and (v) are not the same (since Maria can accept the that clause of the first one while rejecting that of the other). Therefore, a proponent of TCS cannot take both of the semantic contents of the that-clauses of (iv) and (v) to be the empty set. Hence, there should be at least a situation in which the that-clause of (v) is false, while the that-clause of (iv), which is (iii) is true. So far, Soames has argued that a proponent of TCS needs to assign a non-empty set of possible situations as semantic content to (iii). Now, he just needs to argue that such a situation cannot be given.

According to TCS, the semantic content of a conjunctive sentence is the circumstance that supports each of the conjuncts. Therefore, we need to have a(n) (im)possible situation, in which all three conjuncts of (iii) are true. For the first two conjuncts of (iii) to be true, the bearers of all these names, who are different, should be identical. Arguably, this is metaphysically impossible one, but the above modification allows us to assume that there is an impossible situation in which the sentence is true.¹⁶ However, the situation cannot at the

¹⁶This point is not an uncontroversial claim. One may argue that two different persons in

same time make the third conjunct true. The reason is that the third conjunct states that Mark Twain cannot be identified with a person other than himself. For the first two conjuncts to be true we need a situation, in which Mark Twain can be identical with a person other than himself. *In other words, for the third conjunct to be true, the two first conjuncts need to be false and vice versa.* Consequently, there is no possible or impossible situation in which all these three conjuncts (and therefore (iii)) are true. Hence, the semantic content of (iii) is the empty set (Somames 2009:45).

The above argument is supposed to show that TCS cannot provide an acceptable account of propositional attitude reports in general. Moreover, It has been said that TCS is the main principle behind the shared presupposition (i.e. if the substitution of two names within a sentence alters its truth-value, the semantic content of two names are not identical). By arguing against TCS, Soames opens the possibility of renouncing the shared presupposition. Based on his rejection of TCS, Soames makes a significant move. He disentangles the semantic content of a sentence from its truth-value: According to him, two sentences may have an identical semantic content while having different truth-values. In the next subsection, we will see his reasons for this move and its consequences for his theory of propositional attitude reports.

3.4.2 Soames's semantics of propositional attitude

In the previous subsection, we saw Soames's argument against TCS. As an alternative, Soames offers the following characterization of the semantic content of a sentence (a proposition semantically expressed by it):

“A proposition p is semantically expressed by (is the semantic content of) an unambiguous, noncontext-sensitive sentence s iff (i) p is included in the information a competent speaker would assert and intend to convey by an assertive utterance of s in any context in which s is used with its literal meaning by conversational participants who understand s , provided that (a) s is not used metaphorically, ironically, or sarcastically in C , and (b) the presumption that the speaker intends to commit himself or herself to p is not defeated by a conversational implicature to the contrary; and (ii) for any other proposition q satisfying (i) the fact that p satisfies (i) explains why q does as well, and not vice versa.” (Soames 2002:209)

In the above characterization, semantic content is characterized as the context-independent information asserted by a sentence. In this picture, the truth-condition of a sentence cannot be its semantic content, because the context-dependent elements influence the truth-value of a sentence. Therefore, the truth-condition of a sentence (the condition which makes the sentence true) cannot be determined independent of the context of the utterance. Thus, according to this analysis, the truth-value of a sentence is not the salient feature of a sentence with respect to its semantic content. It is also important to note

a possible world can be identical in another possible world. However, Soames maintains that this not metaphysically possible. We do not need to discuss this point in detail.

that a sentence can express different propositions. The semantic content is the proposition which is semantically expressed by a sentence. However, it can also pragmatically express other propositions.

The disassociation of the semantic content and truth-value opens up the possibility of offering a new solution to the puzzle. As has been explained, all solutions that we have examined so far concede what we called the shared presupposition. However, according to Soames, the fact that the substitution of co-referring names may alter the truth-value does not show that they make different semantic contributions. His view can be explained by the following example introduced in Soames2002. Imagine Harry and Tom and Dick, three neighbors of Carl Hempel, who know him as “Peter Hempel”. They are not aware of the fact that Peter Hempel is another name of Carl Hempel. However, they know that there is a famous philosopher whose name is Carl Hempel. Harry tells Tom that he read somewhere that Carl Hempel died last week. Consider the following reports of the beliefs of Harry’s beliefs by TOM to Dick:

- (vi) Harry believes that Carl Hempel died last week.
- (vii) Harry believes that the philosopher Carl Hempel died last week.
- (viii) Harry believes that Peter Hempel died last week.
- (ix) The elderly white-haired gentleman of our acquaintance, Peter Hempel, died last week.

Soames suggests that the information conveyed by (vi) as used by Tom to report Harry’s belief to Dick is more than its semantic content. The information conveyed by (vi) in this case is close to the semantic content of (vii). In other words, the conveyed information in this case *is not just the semantic content of the asserted sentence (i.e. (vi)), but also a proposition which is similar to the semantic content of (vii)*. This additional information is not part of the semantic content of the sentence; it is just pragmatically imparted by the use of that sentence in this particular context. Hence, propositional attitude reports can be used to assert different propositions in addition to their own semantic content. On the other hand, if Tom uses (viii) instead of (vi), the conveyed information is closer to the semantic content of (ix).

Here, we can see that Soames’s solution is similar to the standard naïve-Russellian view discussed in the second section of this chapter. Both views explain the difference between sentences such as (vi) and (viii) by appealing to the semantics/pragmatics distinction. However, there are two main differences between these two theories. *First*, the standard naïve-Russellian theory takes the pragmatically imparted information to be metalinguistic. By contrast, for Soames, the different pieces of information pragmatically conveyed by (vi) and (viii) are not metalinguistic but descriptive. For Soames the pragmatically imparted information contains the description of the reference of the names not metalinguistic information about the way that the subject of the report use the names. In this particular context, the hearer and the speaker associate different descriptions with “Peter Hempel” and “Carl Hempel”. These descriptions influence the information pragmatically conveyed by (vi) and (viii). However, Soames strongly rejects that these descriptions influence the semantic content of the reports.

Second, the standard naïve-Russellian theory rejects that the pragmatically imparted information can influence the truth-value of sentences. On the other hand, Soames maintains that the pragmatically conveyed information may “overshadow” the semantic content of the sentence and change the truth-value of the sentence.¹⁷ For instance, if Harry, Tom and Dick do not know that Peter Hempel (their neighbor) “also” died last week, (viii) will be false. The reason is that the information conveyed by using (viii), which is similar to the proposition expressed by (ix) is not true in this context (although the proposition semantically expressed by (viii) is true).

Soames concedes that (vi) and (viii) have the same semantic content, which is a singular proposition. However, he believes that the different information that can be conveyed by using them in the context of example makes their truth-values different. Consequently, the Fregean assumption that the substitution of two co-referring terms can change the truth-value is correct. Nevertheless, this cannot be seen as an argument against the Millian assumption since the truth-conditional conception of semantics was already rejected.

In this way, Soames’s theory provides a solution to Frege’s puzzle. Unlike other naïve-Russellians, he concedes that two sentences such as (3) and (4) can have different truth-values.

- (3) Ancient astronomers believed that Hesperus is Hesperus.
- (4) Ancient astronomers believed that Phosphorus is Hesperus.

However, he rejects that this difference indicates that the semantic content of the sentences are not identical. Therefore, two sentences with identical semantic content may have different truth-values.

In this section, we have examined Soames approach toward Frege’s puzzle. We have also showed that it has some similarities with the standard naïve-Russellian approach. In the next section, we explain Salmon’s criticism of the standard naïve-Russellian, which can also be directed at Soames’s view.

3.5 Salmon’s Criticism

In this section, we first consider Salmon’s criticism of the standard naïve-Russellian theory. Then, we argue that his criticism also challenges Soames’s view. Consider the following examples:

- (1) Hesperus is Hesperus.
- (2) Phosphorus is Hesperus.
- (3) Ancient astronomers believed that Hesperus is Hesperus.
- (4) Ancient astronomers believed that Phosphorus is Hesperus.

As explained, the standard naïve-Russellian view rejects our intuition that (4) is a false report of the ancient astronomers’ beliefs. They take the intuition to be based on the confusion between the semantic content of (4) and what is

¹⁷According to Soames, the additional propositions that can be pragmatically imparted by using a sentence in a given context cannot be fully determined. However, it can be said that these additional propositions are asserted due to the particular context of utterance and the background knowledge of the speaker and hearer.

pragmatically implied by using it. According to this view, the information pragmatically imparted by (4) is false but not its semantic content. If we distinguish these two kinds of information, we can see why the intuition that (4) is false is misplaced.

According to Salmon, appealing to the semantics/pragmatics distinction cannot show that the intuition is wrong. Further analysis is required to find a genuine solution. In order to show this, Salmon reformulates Frege's puzzle in a way that cannot be solved only by appealing to the distinction between different sorts of information conveyed by (3) and (4).

The puzzle, as originally introduced by Frege, was based on the difference in the informativeness or cognitive value of sentences such as (1) and (2). This difference presumably results in the difference between the truth-value of (3) and (4). Here, we can see that the puzzle was based on the assumption that the difference between the informativeness of (1) and (2) has a semantic significance for (3) and (4). By denying this assumption, the puzzle could be solved. In the version of puzzle that Salmon uses, the focus is on "the disposition to verbal assent in place of informativeness" (Salmon 1986:92). His puzzle does not focus on the difference between the cognitive values of (1) and (2). Instead, the puzzle focuses on fact that the ancient astronomer were disposed to assent to (1) but not (2).

Salmon reformulates of Frege's puzzle as follows. Imagine an ancient astronomer who is aware of the possible confusion between semantically and pragmatically conveyed information. For example he is able to see the difference between the semantic content of a sentence such as (5) (i.e. it is raining)¹⁸ and the pragmatic implication of its use in a particular context (e.g. the speech is boring). Thus, he can also distinguish between the metalinguistic information imparted by using (2) or (4) and its semantic content. Nevertheless, the astronomer will still reject (2), while conceding (1). Salmon notes that the astronomer's behavior cannot be explained just by appealing to the semantics/pragmatics distinction. He does not reject (2) because of the metalinguistic information imparted by it (e.g. the terms "Phosphorus" and "Hesperus" are not interchangeable). He rejects (2) since he thinks that Phosphorus and Hesperus are two different stars. For Salmon, the fact that the astronomer continues to reject the sentence after being informed about the semantics/pragmatics distinction shows that the problem cannot be solved just by noting the distinction. In this way, he rejects the standard naïve-Russellian theory.

Soames's approach faces the same problem. His approach might be able to provide a solution to Frege's puzzle in its original formulation. However, it seems not to be efficient in solving the reformulation of the puzzle offered by Salmon. In his reformulation, the focus is not on the difference between the pieces of information conveyed by the two sentences. Instead, the puzzle is formulated based on the difference between the dispositions to verbal assent. For instance, we can reformulate Soames's example (in the previous section) in the following way: Harry, Tom and Dick are competent linguists and are

¹⁸This example was introduced in the second section.

aware of the semantics/pragmatics distinction. Therefore, they do not take the semantic contents of (viii) to be the semantic content of (xi). They also assent to a sentence, when they really believe its semantic content. Hence, they do not care whether any other proposition expressed by using the sentence is true or false. Therefore, they refuse to assent to an ironic use of a sentence, if they do not believe its literal meaning. In this example, all of them still reject (viii) since they think that the very semantic content of (viii) is false and Peter Hempel is still alive. In Salmon's example, the ancient astronomer also continues to reject that Hesperus is Phosphorus after being informed about the distinction.

Soames's approach gives a more complicated version of the Naïve-Russellian view discussed in the second section. However, it is still incapable of solving the new formulation of Frege's puzzle provided by Salmon. The reason is that the subject of the ascription (Harry in the above example) rejects the that-clause of (viii) since he thinks that its context-independent semantic content is false not because he does not believe the other propositions expressed by using (viii). Therefore, the puzzle cannot be genuinely solved just by appealing to the semantics/pragmatics distinction.

The point of Salmon's reformulation is that the disposition of astronomers to reject (2) cannot be explained without appealing to a sort of medium between the agent and the semantic content of sentences. His reformulation shows that the agent cannot have a direct access to the very semantic content of the sentence if we take the semantic content to be a singular proposition. We have already discussed Salmon's suggested theory and its shortcomings. In the next chapter, we examine a theory which takes linguistic expression as "the mode of presentation" which mediates between an agent and a singular (/Russellian) proposition.

3.6 Conclusion

In this chapter, we have examined three versions of the Naïve-Russellian theory. The discussion of the standard view and Soames's view shows that merely appealing to semantics/pragmatics distinction cannot genuinely solve the puzzle. Salmon's reformulation of the puzzle clearly illustrates this inadequacy. In order to solve Salmon's version of Frege's puzzle, we need to appeal to a notion similar to "the mode of presentation".

Salmon suggests a theory in which the notion of guise plays a role similar to the role of mode of presentation in Frege's theory. However, his notion of guise is not clearly specified and therefore cannot satisfy some of our intuitions concerning propositional attitude ascription (see the example of Xperus at the end of third section). In particular, it seems that there is a relation between the "mode of presentation" of the subject and the ascriber and this relation plays a role in the truth-value of an ascription. An acceptable theory needs to specify this relation in order to successfully satisfy our intuitions. This is the second major point that we get from our discussion in this chapter. In the sixth chapter, we see that these two points help us in formulating a new theory of

propositional attitude reports.

Chapter 4

Sententialism and Linguistically Enhanced Propositionalism

In this chapter, we examine another approach to the semantics of propositional attitude reports. Consider the following example:

(0) Amy believes that Jane is the head of her high school.

In a semantic analysis of the above report, we need to determine the semantic content of each of its constituents. We can distinguish three features of a linguistic expression that may be relevant for a semantic theory. First, the constituents of (0) have representational relations with objects and properties in the world. For instance, the proper name “Jane” refers to an individual and “being the head of high school” represents a property. Some semantic theories take the semantic content of the constituents of (0) to be what they represent in the world (e.g. the Millian theory takes the referent of an expression as its semantic content).

The second aspect of a linguistic expression is the cognitive role which it plays in the mind of a speaker. It is possible to define the semantic content of a linguistic expression with respect to its cognitive role. For instance, as we have seen, Frege introduced the notion of sense alongside the reference of linguistic expressions to explain the difference between the cognitive values of sentences.¹ In his theory, language users need to grasp the sense of an expression to be able to use it. Hence, he takes (one of) the semantic content(s) of the linguistic expressions to be what a language user needs to grasp. This strategy is different from for instance the Millian approach, which takes the semantic content of names to be merely what they represent in the world.

¹As has been explained several times, the sense of a linguistic expression is not ontologically reducible to the mind of the language user. By saying that it explains its cognitive aspect, we mean that the language user needs to cognitively grasp the sense of an expression which is independent of his mind.

In addition to these two aspects, namely the linguistic expression itself. It is also possible to take the semantic content of the constituents of (0) to be the linguistic expressions themselves or take them to be part of the semantic content.

Two different kinds of theory have been developed that take the role of linguistic expressions in the semantics of propositional attitude reports seriously. The first kind, known as *sententialism*, analyzes propositional attitudes as a relation between an agent and a sentence. Hence, in such theories, sentences replace propositions as the objects of attitudes².

Another kind of theory still takes propositions to be the object of attitudes but in a new form. This new approach to propositions tries to provide an alternative notion of a proposition which is different from the theories formulated by naive-Russellians and Frege. As an alternative, the proponents of this approach give an account of propositions as an amalgam of linguistic expressions and their referential values. The term “sententialism” has been also used for this second approach. However, in this thesis we reserve that term for the first approach. Instead, we use the term “linguistically enhanced propositionalism” for the second approach. In this chapter, we first examine a version of sententialism formulated by Carnap. Then, we discuss a version of linguistically enhanced propositionalism articulated by Mark Richard.

4.1 Carnap’s Analysis

In his book *Meaning and Necessity*, Carnap explains the semantic properties of linguistic expressions, which he calls *the method of intension and extension*. In order to understand his theory concerning propositional attitude reports, we first need to explain his general method in semantic analysis. However, it is important to note that he does not primarily aim to provide an exact treatment of belief-sentences (Carnap 1958:58). Hence, his theory is more of an outline of a complete theory.

Carnap claims that each linguistic expression has both an *intension* and an *extension*. His first step is to determine the *intension* and the *extension* of each kind of linguistic expression. In this chapter, we just focus on what he takes to be the intension and extension of names and sentences. The extension of a sentence is its truth-value and its intension is the proposition expressed by it. According to Carnap, a proposition is not a linguistic expression or “a mental occurrence”. Instead, he defines them as entities which have “a certain logical type” that can be “expressed by a declarative sentence” (Carnap 1958:27). Hence, Carnap himself did not use the terminology of possible world semantics in his book. Nevertheless, his book is considered to be the predecessor of possible world semantics.³ *We use the terminology of possible world semantics to clarify his*

²As has been explained in the first chapter, the object of an attitude or a belief is what the belief or attitude is directed at.

³In fact, He uses the term “state-description”, which has some similarities with the notion of possible world.

theory. However, the reader should be cautious that Carnap himself did not use that terminology. Here, we define a proposition as a set of possible worlds in which the sentences expressing that proposition are true.

The extension of an individual term is its bearer and its intension is a concept called by Carnap *individual concept*. His example for an individual expression is "Walter Scott". The extension of this name is an individual, namely Walter Scott and its intension can be The Author of Waverley (Carnap 1958:41). Here, using the terminology of possible world can be useful again. An individual concept can be defined as a function from possible worlds to individuals, i.e. the function that gives us an individual in each possible world. For instance, the extension of "Cicero" is an individual, namely Cicero, and its intension is a function which determines the extension of "Cicero" in each possible world.

Based on these definitions, Carnap defines the notion of *equivalence* and *L-equivalence* (which is the abbreviation for logical-equivalence⁴). Two linguistic expressions are equivalent, if they have the same extension. For instance, "Cicero" and "Tully" are equivalent and two sentences are equivalent if they have the same truth-value. Two linguistic expressions are L-equivalent if they have an identical intension. Therefore, two L-equivalent names have the same individual concept and two L-equivalent sentences express the same proposition.

Now consider the relation between a sentence and one of its constituents. The sentence is extensional with respect to that constituent, if the extension of the sentence remains unchanged by the substitution of that constituent with an equivalent expression. For instance consider the following sentence:

(1) Cicero was a famous Roman orator.

The above sentence is extensional with respect to "Cicero" since the substitution of Cicero with a term equivalent to it (e.g. Tully) does not change the extension of the sentence (i.e. its truth-value). In this case the constituent is *interchangeable* with respect to the sentence.

A sentence can also be intensional with respect to one of its constituents. Such a sentence satisfies two conditions: 1) it should not be extensional with respect to that element 2) the intension of the sentence should remain unchanged by the substitution of that constituent with an L-equivalent expression. In this case, the constituent is *L-interchangeable* with respect to the sentence containing it.

Carnap uses the above definitions to provide a semantic analysis of modal contexts. For Carnap, two sentences such as "The earth moves" and "The earth moves or it does not move" have the same extension since they both have the same truth-value. However, their intensions are different since they express different propositions. Now consider two sentences containing a modal element:

(2) It is necessary that the earth moves or it does not move.

(3) It is necessary that the earth moves.

Intuitively, (2) is true but (3) is not since the that-clause of (3) states a contingent fact, where that of (2) does not. The that-clauses of the above sentences have the same extension (they are both true). However, the intersubstitution

⁴In this section, following Carnap "L-" is used as the abbreviation of "logical-"

of them changes the truth-value of the sentences containing them. This shows that the that-clauses in modal sentences are not interchangeable.

To see whether (2) is intensional or not, we need to examine whether its that-clause can be substituted by an L-equivalent expression or not. For a sentence to be L-equivalent to the that-clause of (2), it needs to express the same proposition, i.e. it needs to be true in those possible worlds in which the that-clause of (2) is true. The that-clause of (2) is necessarily true and therefore it is true in all worlds. Therefore, an L-equivalent sentence with (2) is true in all possible worlds. Hence, the substitution of that sentence with the that-clause of (2) will not change the extension or intension of (2). For instance, assume that we substitute the that-clause with “ $2+2=4$ ”:

(4) It is necessary that $2+2=4$.

The above sentence is true and therefore its extension is not different from (2). Moreover, it is true in all possible worlds in which (2) is true. Therefore, both (2) and (4) also have the same intension.

However, there are sentences which are neither intensional nor extensional as Carnap understood these terms. As an example, we can consider belief-sentences. Carnap initially suggested the semantic analysis of (i) as (ii):

(i) John believes that D.

(ii) “John is disposed to an affirmative response to some sentence in some language which is L-equivalent to “D”.

According to this analysis, a propositional attitude states a relation between a sentence (e.g. D) and the subject. Hence, this analysis is different from the semantic analyses that we have examined in the previous chapters. According to this analysis, one believes a sentence if he is disposed to accept a sentence L-equivalent to it. As has been explained above, for two sentences to be L-equivalent, they need to express the same proposition (which is the intension of the sentence). We defined the proposition expressed by a sentence as the set of possible situations in which that sentence is true. Hence, all necessary truths express the same proposition since they are true in all possible situations. Therefore, all necessary truths are L-equivalent to each other. The problem is that one may believe a necessary truth without believing many of the sentences that are L-equivalent to it. Consider the following example:

(5) The second incompleteness theorem is true.

(6) $2+2=4$

The above sentences have the same extension (they are both true). They also have the same intension since both of them are true in all possible worlds. However, it is possible for an agent to believe one without believing the other. Imagine Amy believes (6) without believing (5). Now consider the following reports of her beliefs:

(7) Amy believes that the second incompleteness theorem is true.

(8) Amy believes that $2+2=4$.

Given our discussion, (7) is a false report of Amy’s beliefs and (8) is a true report. The that-clauses of these reports have the same extension and intension however they are not interchangeable *salva veritate* in this context.

The semantic content of the ascription (7) and (8) will be the following sentences according to the Carnap's initial suggestion:

(9) Amy is disposed to an affirmative response to some sentence in some language which is L-equivalent to "The second incompleteness theorem is true".

(10) Amy is disposed to an affirmative response to some sentence in some language which is L-equivalent to " $2+2=4$ ".

The intensions of " $2+2=4$ " and "The second incompleteness theorem is true" are the same. If Amy is disposed to an affirmative response to a sentence L-equivalent to one of them she is also disposed to an affirmative response to a sentence L-equivalent to the other. In fact, the set of L-equivalent sentences to " $2+2=4$ " and "The second incompleteness theorem is true" are identical. Hence, it is not possible for (10) to be true while (9) is false. However, we saw that (8) is a true ascription and (9) is not. Therefore, (9) and (10) cannot be a correct semantic analysis of (7) and (8).

The upshot of the above discussion is that the that-clauses in belief-sentences are neither interchangeable nor L-interchangeable. In other words, as Carnap says, belief-sentences are neither intensional nor extensional. Carnap modifies his initial analysis by introducing the notion of *intensional isomorphism* which he considers to be close to the notion of "synonymous". Two terms have the same intensional structure if they are constructed out of constituents with the same intension in the same way. Carnap compares " $2+5$ " and "II sum V" as an example (Carnap 1958:56). These two terms are intensionally isomorphic since they both have three constituents and each of these constituents is L-equivalent with one of the constituents of the other and they have been built up in the same way. Therefore, these two sentences are not simply L-equivalent; they also have the same intensional structure. A term such as " $1+6$ " is L-equivalent with " $2+5$ ", but not intensionally isomorphic since its constituents are not isomorphic with the constituents of " $2+5$ ".

Carnap gives a characterization of intensional isomorphism similar to the following: He first gives the condition under which two simple expressions are intensionally isomorphic. Two simple expressions⁵ (in the same or different languages) that have no other simple expression as their parts are intensionally isomorphic if they are L-equivalent. For instance, two names are L-equivalent if they have the same individual-concept.

His next step is to consider compound linguistic expressions. He considers two kinds of compound linguistic expressions. A compound linguistic expression can be constituted by what he calls a *sub-matrix* and its arguments. A sub-matrix can be a predicate, connective or functor. Each sub-matrix has one or few arguments which can be filled by linguistic expressions. For instance a predicate such as "... is bald" is a sub-matrix with one argument which can be filled by a simple linguistic expression e.g. Picasso. Two compound linguistic expressions constructed out of a sub-matrix and n expressions as arguments are intensionally isomorphic under the following conditions: a. the two sub-matrices need to be intensionally isomorphic; b. The i th ($i < n$) argument of the first

⁵Carnap uses the term "designator" instead of "simple expression" (see Carnap 1958:59).

expressions needs to be intensionally equivalent with the *i*th argument of the second.

Another kind of compound linguistic expression consists of an *operator* and its scope. An operator can be a quantifier, description or abstraction operator. Two compound linguistic expressions of this kind are intensionally isomorphic under the following conditions: (a) their scopes need to be intensionally isomorphic (b) the two operators need to be L-equivalent and their variables need to be correlated (Carnap 1958:59).

By using the notion of “intensional isomorphism”, Carnap gives a new analysis of belief sentences. (i) is analyzed by Carnap in the following way:

(iii) “There is a sentence *U* in a semantical system *S* such that (a) *U* is intensionally isomorphic to “*D*” and (b) John is disposed to affirmative response to *U*”

In the above analysis, Carnap’s strategy is to take beliefs to be sensitive to the intensional structure of the sentences. This modification helps Carnap to avoid the problems of his initial suggestion in which he offered (ii) as the analysis of (i). The *that*-clause in a belief-sentence can only be replaced by a sentence having not only the same extension and intension, but also the same intensional structure. Sentences such as (5) and (6) are not intensionally isomorphic since they have different intensional structures. Thus, they are not interchangeable *salva veritate* in the belief sentences.

Carnap’s suggestion has been famously criticized by Alonzo Church (Church 1950). Consider the following sentence:

(11) Amy believes that Cicero was a Roman orator.

The semantic analysis of (11) according to Carnap is the following:

(12) There is a sentence *U* in a semantical system *S* such that (a) *U* is intensionally isomorphic to “Cicero was a Roman Orator” and (b) Amy is disposed to affirmative response to *U*.

Church points out that a sentence such as (12) states factual information which is not expressed by (11). The sentence (12) states that there is a sentence *U* such that it “is intensionally isomorphic to “*D*””. However, (11) does not express that such a sentence exists and therefore (12) cannot be seen as the semantic analysis of (11).

One might reject Church’s argument and take the information concerning the existence of a sentence *U* as a part of the semantic content of (11). The result of such a view is that the following sentences cannot have different truth-values:

(13) Jane believes that Amy believes that Cicero was a Roman Orator.

(14) Jane believes that there is a sentence *U* in a semantical system *S* such that (a) *U* is intensionally isomorphic to “Cicero was a Roman Orator” and (b) Amy is disposed to affirmative response to *U*.

It seems possible for an agent to believe the *that*-clause of (13), while disbelieving the *that*-clause of (14). It is not directly obvious how Carnap would have handled the above cases. Hence, a proponent of Carnap’s view needs to explain why this is not the case.

In his 1950 essay, Church introduces a criterion for judging the adequacy of a semantic analysis (originally proposed by Langford). According to Church, the

translation of a sentence and its semantic analysis to another language should express the same meaning. For instance, if S is the semantic analysis of D and both of them are in English, the French translation of S should be the semantic analysis of the French translation of D. Consequently, the translation of the semantic analysis should be the semantic analysis of the translation of the sentence in the new language.

However, the translation of (14) to another language would not be the semantic analysis of (13) in that language. The reason is that the very that-clause of (13) which is mentioned in (14) would remain untouched in the correct translation. In a correct translation, we just translate those expressions that are used not the expressions that are mentioned. To understand the point consider the following examples:

(15) "Bachelor" in English means unmarried man.

(16) "Bachelor" in Inglese significa uomo non sposato.

(17) "Scapolo" in Italiano significa uomo non sposato.

Intuitively, the correct translation of (15) is (16) and not (17). The point is that we do not translate linguistic terms when they are mentioned. In Carnap's analysis the very that-clause is mentioned and therefore it remains untouched after the translation into another language (Church 1950:98). For the translation of (14) in French to be the semantic analysis of (13) in French, it needs to mention the that clause of (13) in French, however this is not the case.

The structure-sensitivity of Carnap's analysis generates additional problems in the case of direct translation. As will be discussed extensively in the next section, some languages use reflexive verbs to express what can be expressed in other language with ordinary verbs. Such sentences do not satisfy the criteria of Carnap for intensional isomorphism, while they seem to be interchangeable in belief-context:

(18) John believes that le soleil se couche.

(19) John believes that the sun sets.

The above two sentences seem to express the same semantic content and their that-clauses are interchangeable. However, the that-clauses are not intensionally isomorphic according to Carnap's criteria. The reason is that there is not an equivalent expression for the reflexive pronoun "se" in the that-clause of (18).

However, a proponent of Carnap's theory may reject the above objection by pointing that (18) is not stated in a single language. Therefore, it is not clear why the that-clauses of (18) and (19) should be consider interchangeable. We do not discuss here whether the reply is satisfactory or not. Carnap considers his theory not as an exact and complete treatment of belief-sentences. Therefore, his theory as is stated in *Meaning and Necessity* is more of a sketch of a complete theory rather than a complete theory. It might be possible to develop his theory in a way that neutralizes the above objection. However, the development of his theory is not our concern in the remainder of this chapter. Instead, we will see another response to the problem of attitude-sentences which has some similarities to Carnap's position.

4.2 Richard's Approach

In his book *Propositional Attitudes*, Mark Richard articulates a theory which explains propositional attitudes without using “sense or conceptual role or any other cognitive crutcher”. His goal is to formulate an “un-Fregean” theory of propositional attitudes (Richard 1990:149). The main aim of this section is to argue that Richard’s theory creeps in cognitive elements into his theory. Hence, he was not successful in formulating a purely “un-Fregean” view.

In the first subsection, we examine his reasons for taking propositions to have a sentence-like structure. In the next subsection, we examine his notion of propositions and the theory of propositional attitude reports which he formulates based on that notion. At the end, we critically examine his view.

4.2.1 Structured Propositions

Richard’s theory mainly tries to tackle the puzzle by formulating a new conception of propositions as the object of attitudes. In the previous chapter, we have examined the characterization of propositions according to the possible-worlds semantics. Possible-worlds semantics takes propositions as sets of possible worlds (or situations) in which the sentence expressing the proposition is true. In the previous chapter, we mentioned some of the criticisms formulated by Soames against such a notion of propositions. Richard also starts his theory by arguing against such a characterization of proposition.

The main concern of Richard is that propositions as the semantic content of sentences need to “reflect” their internal structures. However, the structural differences of sentences, such as differences between logical constants, cannot be detected and shown by possible-worlds semantics (Richard 1990:10). For instance the that-clauses of the following sentences express the same proposition according to possible-worlds semantics:

- (1) Erick believes that Richard is not married or Jane is not in London.
- (2) Erick believes that it is not both true that Richard is married and Jane is in London.
- (3) Erick believes that if Richard is married then Jane is not in London.

Intuitively, the subject of the above ascriptions can believe each of the above that-clauses without the other. Hence, it is possible for one of the above ascriptions to be true, while the others are false. However, if we take the above that-clauses to express exactly the same proposition, then the that-clause are intersubstitutable *salva veritate*.⁶

In the previous section, we saw that Carnap was also aware of this problem. However, he did not solve the problem by giving an alternative characterization for propositions (which he considered as the intension of sentences). Instead, he tried to solve the above problem by introducing the notion of intensional isomorphism, which is more sensitive to the very structure of the sentences. According to him for two sentences to be intersubstitutable *salva veritate* in the

⁶We have already seen that there are theories such as Soames’s theory which rejects this claim. However, we take this to be true at this stage.

scope of attitude verbs, they need to be intensionally isomorphic. Therefore, he denies that the that-clauses of the above sentences are intersubstitutable *salva veritate* since they are not intensionally isomorphic.

By contrast, Richard tries to formulate an alternative conception of propositions to solve the problem. The problem with seeing the propositions as a set of possible worlds is that this conception does not properly individuate propositions (since this conception is indifferent to their internal structure). As an alternative, he suggests that propositions have a sort of sentence-like structure, which helps to properly individuate them. In the literature, this second view sometimes has been called “sententialism” or “semantic sententialism” (Richard 1990:8). This view has some similarities with that of Carnap. However, in order to avoid any confusion, following Soames 2002, we use the term *linguistically enhanced propositionalism* for Richard's view (henceforth LEP). According to LEP, two that-clauses name two different propositions, provided that they have different structures.

An important question to answer is what should be considered as the structure of that-clauses. Richard suggests taking the structure assigned by “an adequate grammar for English” as the structure of a sentence (Richard 1990:18). More specifically, he takes the phrase structure marker of a that-clause (henceforth, PMS) as its structure. The PMS of a sentence depicts its syntax and the way its constituents are syntactically related to each other. Following Richard, we can consider the PMS of “A and B” (in which A and B are two independent sentences):

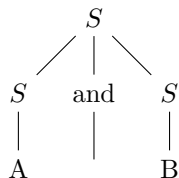


Figure 4.1: The PMS of "A and B"

At the base of the tree are the linguistic expressions and at the head of each one is S indicating their syntactic role. In the above example, A and B are two sentences and “S” is an abbreviation for “sentence”. The term “and” indicates the syntactic structure connecting two sentences which is a conjunction. Based on this syntactic structure, it is possible to formulate a structured notion of proposition. According to such a notion two that-clauses having different PMSes are the names of two different propositions. Note that we have *not yet* given the complete characterization of the structured propositions. We have just taken their structures to be similar to the PMS of the that-clause expressing them. This formulation already avoids the problem of possible world semantics, namely, it can distinguish between sentences such as the that-clauses of (1), (2) and (3). The reason is that their that-clauses have different PMSes and therefore the that-clauses of these sentences express different propositions.

Hence, they are not interchangeable *salva veritate*. In this way, we can avoid the counterintuitive result that Erick cannot believe one of these that-clauses without believing the others.

Perhaps the most serious problem for this approach is that any two sentences having a minor structural difference are taken to express two distinguished propositions. Intuitively, not any difference between the syntactic structures of two sentences indicates a difference between their semantic content. For instance, sentences such as “ $7+5=12$ ” and “ $12=7+5$ ” or “A and B” and “B and A” intuitively express the same propositions, while possessing different structures (the examples are taken from Richard 1990:20). This point is supported by the observation that these sentences seem to be intersubstitutable *salva veritate* in the scope of attitude verbs such as “say” and “believe”. Therefore, if we accept that sentences such as “A and B” and “B and A” express the same proposition, then assigning two different propositions to them is not acceptable. However, LEP ascribes different propositions to sentences such as “A and B” and “B and A” since they have different PMSes.

According to Richard, this argument rests on the assumption that necessarily if an agent believes that A and B, he believes that B and A. However, he claims that this assumption cannot justify that A and B express the same proposition. The argument shows that there is a certain relation between the propositions expressed by these sentences, which makes believing one of them result in believing the other. But, it cannot be concluded from this fact that these propositions are identical. Richard even claims that two beliefs might be identical, while their objects are two distinct propositions⁷, i.e. if two propositions A and B are in a certain relation then the belief that A is identical with the belief that B (Richard1990:33).

Furthermore, the observation that is used to justify the claim is solely based on attitude verbs such as “belief” and “say”. It might be true that these attitude verbs are not sensitive to the substitution of “A and B” for “B and A”. Nevertheless, there are other verbs such as “deduce” after which the substitution might change the truth-value of the sentence. As Richard rightly notes, a student, newly exposed to propositional logic, might be hesitate whether he can infer “A and B” from a set of premises, from which he has already inferred “B and A”.

Further criticism may be directed towards sentences in different languages which different PMS, while expressing the same semantic content. Many English verbs correspond to reflexive verbs in French and German. For instance the PMS of “Ich rasiere mich” and that of “I’m shaving” are different. Therefore, they express different propositions according to LEP. However, this seems to be a counterintuitive result. This raises a major problem for Richard’s account of propositions, which is sensitive to differences between the syntactic structures. In particular, the translation of the sentences containing reflexive

⁷“... it in no way follows that the belief that A and B is different from the belief that B and A, given the distinctness of the propositions that A and B and that B and A. There is no reason at all that we might not characterize the same psychological state (in some broad sense of psychological state) by reference to a relation to different propositions” (Richard 1990:33).

verbs from French or German to English would be inexact. Richard circumvents the problem by noting that in these cases “the appearance is, semantically, illusion” (Richard 1990:36). Therefore, the propositions expressed by sentences containing reflexive verbs do not strictly reflect the syntactic structure of the sentences. He also holds similar position regarding idioms, i.e. he believes the semantic contents of idioms are not isomorphic to their syntactic structures.

4.2.2 Richard's conception of Propositional Attitude Reports

In the previous section, we have discussed Richard's reasons for taking propositions to have a structure similar to PMS of that-clauses. In this section, we examine his understanding of propositional attitude reports and his final picture of propositions.

According to Richard, the content of that-clauses and the object of attitudes are propositions. Richard calls his conception of propositions *Russellian annotated matrix* (henceforth RAM). According to him a RAM is an amalgam of Russellian propositions and linguistic expressions. To use his own example, a sentence such as “Mark Twain is dead” can be analyzed in the following way:

(1) $\langle\langle$ “is dead”, being dead \rangle, \langle “Mark Twain”, Mark Twain $\rangle\rangle$

Each RAM consists of several pairs of linguistic expressions and their referential values. These pairs are called *annotations*. For instance, the linguistic term “Mark Twain” is paired with an individual object, namely Mark Twain. This pair makes \langle “Mark Twain”, Mark Twain \rangle , which is an annotation in (1). A RAM of a sentence pairs each of its constituents with its referential value. As was explained, Richard requires propositions to reflect the linguistic structure of sentences expressing them. By pairing each constituent of a sentence with its referential value, a RAM reflects the PSM of that sentence. For instance, two sentences that have different logical connectives as their constituents do not express the same RAM since the linguistic expressions and the extensions of these connectives are not identical. Therefore, his conception of proposition is different from both Russellians and Fregeans. Unlike Fregean propositions (thoughts), quasi-cognitive elements⁸ play no role in Richard's proposal. He does not explain propositions in terms of what can be grasped by the mind of the language users (i.e. Fregean sense or thoughts). Moreover, unlike Naïve-Russellians, he does not take the referential values of the constituents of a sentence to be the sole constituents of proposition expressed by it.

So far, we have explained Richard's conception of propositions. The next step is to examine his theory of propositional attitudes. Consider the set of all sentences to which an agent is disposed to assent. Given the strengthened disquotational principle, the set of propositions expressed by these sentences is the set of propositions believed by that agent. Then, Richard introduces the

⁸I used the term “quasi-cognitive element” to avoid the impression that thoughts are ontologically reducible to individual minds in Frege's theory. However, it is important to note that they can be grasped by the mind of language users.

notion of *representational system* (RS), which is the set of RAMs expressed by these sentences. For instance, if an agent believes that Mark Twain is dead, he is disposed to assent to the sentence “Mark Twain is dead”. The RAM (i.e. proposition) expressed by this sentence is (1) and therefore (1) is in the set of her RS. According to Richard, *a propositional attitude ascription is accurate if the RAM of its that-clause would be a correct translation of a member of subject’s RS.*

Here, we see another significant difference between Richard and the theories we have discussed so far. In the theories that we have discussed, the that-clause of a *true* ascription needs to express the proposition which is the object of the attitude which was reported. Thus, the relation of the object of attitude and the content of a that-clause is considered to be identity. However, Richard maintains that they need to be a correct translation of each other. Hence, according to Richard, the that-clause of a correct report of an agent’s attitude does not necessarily express the proposition believed by that agent. It should just be a correct translation of what is believed by the agent. It is important to note that for Richard, two sentences can be correct translation of each other without expressing the same proposition. Hence, the next question is what should be considered as a correct translation of what is believed by an agent.

At this point, Richard introduces some rules to determine what can be counted as accurate translations of RAMs. For a RAM to be a correct translation of another RAM, first they need to have identical referential elements. For instance, no RAM whose linguistic expressions refer to a person other than Mark Twain can be a translation of (5) in any context. However, this restriction is not enough to solve cases such as Frege’s puzzle. Therefore, Richard introduces *correlation functions*, which map annotations to annotations with identical referential values. Given a RAM and a correlation function, we get another RAM whose annotations are the images of the annotations of the first RAM under that correlation function (Richard 1990:139). For a RAM to be an accurate translation of another RAM, its annotations need to be images of the translated RAM under any correlation function.

The introduction of correlation functions enables Richard to provide an account of the context-sensitivity of propositional attitude reports. According to Richard, the correlation function cannot be used unconditionally. Each context imposes some *restrictions* on correlation functions, which can be used to determine the plausible translations. These restrictions consists of “*a* person *u*, an annotation *a*, and *a* collection of annotations *S*” (Richard 1990:140). In a context imposing such restrictions, the attitudes of *u*, which their RAM contains *a*, can be only reported by using the annotations in *S*. For instance, assume *a* context with the following restriction: (the ancient astronomers, <“Phosphorus”, Phosphorus>, <“Phosphorus, Phosphorus”>). Now consider these examples:

- (2) Ancient astronomers believe that Phosphorus shines in the morning.
- (3) Ancient astronomers believe that Hesperus shines in the morning.
- (4) << “shines in the morning”, shining in the morning >> “Phosphorus” , Phosphorus >>
- (5) << “shines in the morning”, shining in the morning >> “Hesperus” ,

Phosphorus >>

In the above list, (4) and (5) are the RAMs of the that-clauses of (2) and (3). The reports can be true, if they are accurate translations of what was believed by ancient astronomers. Hence, there need to be a correlation function between the RS of astronomers (which determines what they believed) and (4) and (5). By examining the restriction imposed by the context, we can see if there is such a function for both (4) and (5) or not. Assume that the following RAM is the only RAM in the RS of astronomers:

(6) << “shines in the morning”, shining in the morning >> “Phosphorus”, Phosphorus >>

Now, we should examine whether (4) and (5) pass the restriction. The restriction imposed by context allows < “Phosphorus”, Phosphorus > as the only replacement for < “Phosphorus”, Phosphorus >. Thus, any translation using another annotation instead of < “Phosphorus”, Phosphorus > would be inadequate in this context. Therefore, (5) is *not*, and (4) is an acceptable translation of what is believed by the astronomer.

At the beginning of this section, we mentioned that Richard's goal is to give an “un-Fregean” account of propositional attitudes. Hence, he tries to avoid using any cognitive element in the formulation of his theory. Here, we see that Richard gives a context-sensitive account of attitude verbs by introducing correlation functions. Moreover, his theory offers a technical way to block the substitution of co-referential terms in problematic cases without *explicitly* appealing to their cognitive role or any sort of descriptivism. Instead, he uses linguistic expressions to exclude the unwanted substitutions.

However, a Fregean may point out that Richard's theory actually explains the context-sensitivity of attitude-ascriptions by taking into consideration the cognitive roles of what is expressed by that-clauses. In particular, Richard's conception of correlation function and restrictions seems to creep in cognitive elements into his theory. The reason is that what motivates us to impose a restriction on correlation function is the difference in the cognitive values of these expressions in a particular context for a particular agent⁹. For instance, in the case of ancient astronomers, the reason that we need to impose a restriction on correlation functions is the difference in the cognitive values of sentences such as “Hesperus is Hesperus” and “Hesperus is Phosphorus” for those agents. If this observation is correct, then Richard could not accomplish his goal, i.e he could not formulate an “un-Fregean” theory of propositional attitudes.

Richard strongly rejects that his theory is a variation of Fregean theory. He argues that his theory does not explain attitude reports as “a match of a nonreferential, cognitive content between a that-clause and some state of, or sentence accepted by, the subject of ascription” and therefore cannot be seen as a Fregean theory (Richard 1990:150). However, I suppose the fact that he does not explicitly mention the role of cognitive elements in attitude ascriptions does not mean that his theory does not implicitly appeal to such elements. It

⁹Remember that each restriction consists of three element, one of which is an agent whose beliefs should be reported in the way that restriction implies.

seems that cognitive factors play a significant role in determining the contextual elements that impose restrictions on correlation functions.

Furthermore, his treatment of cases such as reflexive verbs mentioned above reveals more clearly his commitment to a sort of Fregeanism. In the last section, we mentioned that one problem for Carnap's theory is that sometimes other languages such as French use reflexive verbs to express what is expressed in English without using such verbs. Since the RAM of a sentence is sensitive to its PMS, the RAM of the French sentence has an annotation of the reflexive pronoun which the English sentence lacks. Richard relegates the superficial form of reflexive verbs as "semantically illusion" (Richard 1990:36). The claim cannot be ad hoc and therefore Richard needs a justification for this claim. However, his claim cannot be justified based on the referential values of the verbs, i.e. he cannot justify his claim by stating that the French verb and its English equivalent have the same referential values. Because in his theory, the semantic contributions of expressions cannot be determined merely based on their referential values. Furthermore, the linguistic appearances of the verbs are not identical. Therefore, it is not also possible to take the semantic contribution of these two verbs to be equivalent based on their linguistic structures. The only reason for his claim can be that the cognitive role of French reflexive verbs and their equivalent verbs English are the same. Whether this option works for Richard or not is not subject of our discussion. Our point is that merely considering linguistic expressions and their referential values does not suffice to substantiate Richard's claim.

Now, we can examine another objection formulated by Soames. Soames accuses Richard of the misidentification of the real root of the problem (Soames 2002:165). According to Soames, merely considering linguistic expressions and their referential values does not reveal the real source of the puzzle. Consider the following examples:

- (7) Ancient astronomers believed that Phosphorus shines in morning.
- (8) Ancient astronomers believed that Hesperus shines in morning.

Ancient astronomers concede the that-clause of (7), while rejecting that of (8). According to Soames, the reason why ancient astronomers would have rejected the that-clause of (8) is that they did not believe its descriptive content. By the term "descriptive content", Soames does not mean the Russellian proposition expressed by these that-clauses. Instead, he means the different descriptive contents, which ancient astronomers associated with "Hesperus" and "Phosphorus". They described Venus in two different ways without realizing that these are the description of the same star. Therefore, sentences such as the that-clauses of (7) and (8) had different descriptive content for them. It is important to note that Soames does not take this descriptive content as part of the semantic content of the that-clauses. As explained in the previous chapter, he takes this descriptive information to be pragmatically imparted by sentence such as the that-clauses of (7) or (8). However, he takes them to be the real source of the puzzle.

The upshot of Soames's point is that the source of the puzzle is not the fact that astronomers were reluctant to use the term "Hesperus" in certain contexts.

However, Richard's theory explains this phenomenon in terms of contextual restrictions on and correlation functions between linguistic expressions. Contextual restrictions specify which names can be used by the ascriber to have an accurate translation of what is believed by the subject. Therefore, these restrictions are based on metalinguistic considerations. They mainly state which linguistic expression can be used to reflect an agent's propositional attitude and which linguistic expression cannot be used. Richard's theory is successful in blocking the problematic substitution by appealing to these metalinguistic factors. However, as Soames notes, the real motivation behind the reluctance of language users is the difference that these substitutions make in the descriptive content of sentences. This difference in the descriptive content of, for instance (7) and (8), is the reason that we take one to be true and other to be false. Thus, metalinguistic considerations are not the primary concern in such cases, but the "different information we derive from" the sentences using each of these co-referring words is the real source of the problem (Soames 2002:166).

In this section, we have explained Richard's theory of propositional attitude reports. Moreover, we surveyed some of objections against it. We argued that he actually creeps in cognitive factors into his theory. Therefore, he was not successful in formulating a purely "un-Fregean" theory. We also mentioned Soames objection. His objection points out that the source of the problem is not merely metalinguistic. Thus, Richard's theory does not reveal the real source of the puzzle. A successful theory needs to explain why an agent takes two sentences expressing the same Russellian propositions to have different contents. According to Soames, this explanation cannot be based merely on metalinguistic considerations such as contextual restrictions on correlation functions.

Our claim is that considering cognitive factors can help us to formulate such a theory. In the next two chapters, we will present a theory of propositional attitude which solve the puzzle based on considering cognitive elements.

4.3 Conclusion

In this chapter, we examined the theories aim to explain propositional attitude reports by taking into consideration the linguistic expressions used by the subject and the ascriber. Carnap's theory has not been fully developed. In its current form, it faces few objections that we mentioned. Richard's theory faces more serious objections. In particular, it could not achieve its goal in formulating a purely "un-Fregean" theory of propositional attitudes.

In the next two chapters, we will develop a theory of propositional attitude reports which solves the puzzles by appealing to cognitive factors, without facing the problems that Frege's theory has.

Chapter 5

A justificationist theory of reference and meaning of Proper Names

5.1 Introduction

In the last three chapters, we have surveyed various solutions which have been suggested to solve Frege's puzzle and their shortcomings. In this chapter, we focus on a broad strategy employed by both Fregean theories (the second chapter) and Richard (the fourth chapter). One of the assumptions used in the formulation of Frege's puzzle is the interchangeability of co-referring proper names. This assumption is based on two other assumptions: (1) the semantic content of a name is its referent (2) two linguistic terms with an identical semantic content are interchangeable *salva veritate* (the substitution principle). A common way to solve the puzzle is to reject the first assumption, i.e. to reject that the semantic content of co-referring names is the same. If we reject this assumption, we can block the intersubstitution of co-referring names (e.g. Phosphorus with Hesperus).

As we have seen, a way to differentiate the semantic contents of two co-referring names is to enrich the semantic content of proper names by the notion of "mode of presentation", i.e. by taking the semantic content of names to be something more than their referential values. The concept of "mode of presentation" indicates the way that the referent is presented to the language user. An agent can have two different attitudes about a single object, provided that the object is presented to him via two different modes. This definition is deliberately kept vague. Because, different theories take different elements to play the role of the "mode of presentation". The important point is that by taking the "mode of presentation" to be part of the semantic content of names, a semantic theory can reject the first assumption mentioned above and solve

the puzzle (henceforth this strategy to solve the puzzle is called MP). Those theories that reject any difference between the semantic content of two names such as “Hesperus” and “Phosphorus” need to solve the puzzle in other ways, as discussed in the third chapter (see the discussion of Soames’s theory).

There are two main understandings of the conception of “mode of presentation”: as a linguistic and as a cognitive element. In the fourth chapter, we have discussed a variant of MP (suggested by Richard) which uses the linguistic variant to solve the puzzle. As explained in the previous chapter, Richard takes linguistic expressions, for instance, “Phosphorus” and “Hesperus” to be the mode of presentation of the referent. He uses the concepts such as translation and contextual factors to block the unwanted substitutions and allow for wanted ones.¹

Other solutions appeal to the cognitive variant of MP. Frege’s own solution uses the notion of thought and sense to explain the difference between the semantic content of that-clauses in attitude-sentences. Although Frege insists that these notions are *not* psychological, he maintains that they can be grasped by language users to present the world. His solution can be seen as an instance of the cognitive version of MP. As we have seen, both the linguistic and the cognitive formulations of MP have their own shortcomings. In particular, Kripke’s criticism of descriptivism and of Frege’s theory of proper names seriously challenges the plausibility of cognitive formulation of MP (see the second chapter).

In this chapter and the next one, we rearticulate the cognitive formulation of MP in a novel way. However, we do not use the concept of “the mode of presentation” to enrich the semantic content of co-referring names. Instead, we try to formulate a new theory of reference and **meaning** for proper names.² We will show that the puzzle can be solved by revising our theory of reference and **meaning**.

In this chapter, we focus on our theory of **meaning** and reference for proper names. We start by explaining Kripke’s alternative for descriptivism. Then, we argue that a name as used by a language user refers if she associates with that name *a description used in a particular way*. Without such a description,

¹Larson and Ludlow, which suggested a theory using a strategy similar to Richard’s, explicitly uses the term “the linguistic mode of presentation” (Larson and Ludlow 1993:305).

²As has been explained in the second chapter, we need to differentiate between the semantic content and the **meaning** of a linguistic expression. Both **meaning** and semantic content are part of meaning in general. The **meaning** of a linguistic expression is the information which a language user needs to grasp in order to use the expression competently. On the other hand the semantic content of an expression is part of its meaning (in general) that determines the truth-value of a sentence containing that expression. For instance, the referent of a name is considered to be its semantic content by the Millian theory, i.e. the referent of the name is part of its meaning that influences the truth-value of a sentence containing that name. However, the very referent, which is an object in the world, cannot be a part of the information that the language needs to grasp to use the name competently. Therefore, there is a significant difference between the **meaning** and the semantic content of a linguistic expression, although they might be the same according to some theories. In this chapter, we use the term meaning for the theory of meaning in general and **meaning** for the specific purpose that was just outlined.

the name lacks any reference. In order to find out which kind of description needs to be associated with names, we briefly survey a part of the literature in the philosophy of language concerning different uses of descriptions. The referential and attributive uses of descriptions will be discussed in section 5.4, as candidate for descriptions that need to be associated with names. Here, we suggest a new approach toward the referential use of descriptions. At the end, *the justificationist theory of reference*³ is explained based on our discussion of descriptions. In the next chapter, we see how our discussion in this chapter can help us to solve the puzzles.

5.2 Anti-Descriptivism Account of Names

Descriptivism is the label of both a theory of reference and of a theory of semantic content for proper names.⁴ The descriptivist theory of semantic content (henceforth DTC) takes the semantic content of names to be a definite description of their bearer. The descriptivist theory of reference (henceforth DTR) holds that a name refers via the definite description associated with it. The description singles out an object which satisfies it and that object is the reference of the name associated with that description. Hence, DTR takes the mechanism of reference to be dependent on the description associated with the name. As has been clarified in the second chapter, one may believe either of these theories without accepting the other. For instance, one may hold that names refer via the descriptions associated with them, while denying that these descriptions are part of the semantic content of the names.

Kripke proposed three arguments against descriptivism, two of which (the modal and epistemic ones) concern only DTC whereas the other one is an argument against both versions of descriptivism⁵. In the second chapter, we have surveyed these arguments. Here, we focus on the theories suggested by Kripke and his followers as alternatives for both DTC and DTR.

In *Naming and Necessity*, Kripke formulates a theory about the mechanism of reference, known as *the causal theory of reference*. In his theory, the language user does not need to associate any particular description with a proper name for the mechanism of reference to work. According to the causal theory, a proper name refers to its bearer, provided it is connected to it via a *causal-historical chain*. The chain starts with a baptism, in which the bearer is fixed by a definite description. It is also possible for the baptizer to just point to the bearer and say “this is called n”, without using any description. However, even

³We borrowed the term “justificationist” from the title of Dummett 2005

⁴Readers need to be cautious that a theory of semantic content determines the semantic content of a name. By contrast, a theory of reference determines *the way* that a term refers to its bearer. Hence, the latter specifies the mechanism of referring. In Frege’s terminology, the term “a theory of reference” is used to indicate what we call “a theory of semantic content”. In other words, Frege’s theory of reference does not specify how terms refer, but their semantic content.

⁵Readers should be cautious that by DTC, we mean the descriptivist theory about the semantic content and not **meaning**.

if the baptizer uses a description to fix the reference, the description does not play any semantic role in the further usages of the name. The next language user in the chain can borrow the name by communicating with the first person and intend to use the name to refer to the same thing. It is important to note that the borrower does not need to “be able to identify the lender⁶” (Reimer 2009). Consequently, the other language users in the chain are not required to know any specific description of the bearer or the previous person in the chain. Hence, according to Kripke, the mechanism of reference is not dependent on any description. In this way, his causal theory of reference provides an alternative for DTR.

In addition to rejecting DTR, Kripke also rejects DTC. According to Kripke, any semantic analysis of names should respect the fact that they are rigid designators. As has been explained in the second chapter, the modal argument mainly focuses on the fact that DTC does not fulfill this requirement. Given such a requirement, the Millian theory of names (explained in the first and second chapters) can be an option since names are taken as rigid designators in this theory. However, there are also alternative options, for instance taking rigidified descriptions as the semantic content of names. Kripke himself does not take a side on this issue; however, some philosophers such as Salmon and Soames, inspired by Kripke’s work, tried to defend a version of Millian theory in their books (Salmon 1986 and Soames 2002). In this thesis, *we accept the Millian theory concerning the semantic content of names. Therefore, we take the semantic content of names to be their reference.*

So far, we have explained Kripke’s alternatives for DTC and DTR. However, this is not enough to have a comprehensive picture of names. In order to have a comprehensive theory of names, we need to explain three points: 1. the semantic content of names 2. the mechanism of reference of names 3. the **meaning** of names. DTC and DTR and their alternatives explain the first two points, i.e. they explain how the names refer and what their semantic content is. We also need to formulate a theory concerning the **meaning** of names. In other words, we need to explain what a language user needs to learn in order to competently use a name. Soames realizes this requirement, when he talks about the other conception of the meaning of the names which he defines as the “information grasp of which explains speakers’ ability to understand it, and to be able to use it competently” (Soames 2002:56). In the remainder of this section, we first introduce the descriptivist theory of **meaning**. Then, we explain, Soames’s alternative for it, which is supposed to be compatible with the Millian theory of names and the causal theory of reference.

In order to investigate the **meaning** of a linguistic expression, we need to ask what a language user needs to know in order to competently use that expression. In the descriptivist theory, the description associated with the name is the information that a language user needs to know, in order to be able to use the name. Without knowing the description, the language user cannot use the names to refer. For instance, assume that Maria associates a description

⁶The person who has introduced the name for the first time to the user.

with the name “Aristotle”. Then, the name as used by her refers to person who satisfies the description. For instance, it can refer to “the author of *Metaphysics*” or “the second husband of Jacqueline Kennedy”. However, the name fails to refer if Maria does not associate it with any definite description of an individual. Here, we can see a close correlation between DTC, DTR and what we may call *the descriptivist theory of meaning*. The descriptivist theory of **meaning** can be formulated in the following way: a language user needs to know a definite description of the referent to be able to use the name competently. In this way, DTR, DTC and the descriptivist theory of **meaning** together give us a comprehensive theory of names since they explain all three points mentioned above.

This descriptivist theory of **meaning** matches with DTR and DTC. Now, we can ask which theory of **meaning** matches with the Millian theory and the causal theory. The theory suggested by Soames to answer this question is called *the minimalist theory of the meaning of names* (henceforth the minimalist theory⁷). According to Soames, grasping the **meaning** of names is part of the competence conditions that a language user needs to fulfill to be able to use the name. He holds that any language user needs to pass two competence conditions. *First*, she needs to gain “a referential intention that determines *o* as the referent of *n*” (*o* is an abbreviation for an object which is the reference of a name *n*.). This can be gained by learning the name from other language users and intending to use the name to refer to the object that they intend to refer to. The other option is that she herself is the first person in “the causal chain of the reference borrowing” who fixes the reference. *The second competence conditions* is that she needs to know that stating that *n* is *F* “is to say of the referent, *o*, of *n* that it “is *F*”.” (Soames 2002:65). In other words by stating that “*n* is *F*”, she takes the referent of *n* to have the property expressed by *F*.

Given Soames’s competence condition, although the language user might actually associate some descriptive information with a name, she *is not required* to have any specific information concerning the bearer of the name or the previous person in the chain of reference borrowing. The first person or the subsequent language users may even completely forget the description or perceptual experience (in the case of fixing the reference by pointing or by using demonstratives) used to fix the reference in the baptism ceremony. For instance, a mother may completely forget the very first moment that she called her child by his name, without losing her competence in using the name. The fact that the agent needs to be linked to a borrowing chain has no significant consequence for the **meaning** of the names, since *the person does not need to grasp any information other than the very linguistic expression (i.e. the proper name) from the previous person in the chain*. According to the second competence condition, the language user needs to know a basic fact concerning names. However, this fact is nothing more than the fact that by predicating on names, the agent ascribes the property expressed by the predicate to the referent. Hence, the information

⁷The term “minimalist theory of meaning” has been used for other theories in the literature. The reader needs to be cautious not to confuse those theories with the theory as it is described in the text.

that an agent needs to grasp to use a name competently (i.e. the **meaning** of that name) is the very linguistic expression and some basic linguistic facts concerning names and their function in the sentence.

For instance, assume that Amy wants to state the following sentence:

(1) Plato and Aristotle were Greek.

In order to state (1), she needs to competently use “Plato” and “Aristotle”. Amy might associate different descriptions with each of these names. Moreover, she might have been introduced to these names by two different persons. However, the minimalist theory does not require Amy to have any of these pieces of information in mind to competently use “Plato” or “Aristotle”. In order to state (1), she needs to remember the expression “Plato” and “Aristotle”. She also needs to remember that they are names and to know the basic facts about names that were mentioned above. Therefore, there is not much of difference between the information that she needs to know when she wants to use “Plato” and when she wants to use “Aristotle”. Soames also notes that in his theory, there is no important difference between the pieces of information that an agent needs to grasp regarding each name (Soames 2002:56).

In this section, we examined alternatives for DTC, DTR and the descriptivist theory of **meaning**. The alternative for DTC was the Millian theory of names, which we accept in this thesis. However, in the next section, we argue that the other two alternatives, namely the causal theory of reference and the minimalist theory of **meaning**, need to be rejected.

5.3 Fixing the Reference

In the previous section, we have examined in detail what is suggested as theory of names by the opponents of descriptivism. In this section, we introduce an argument against both the minimalist theory and Kripke’s causal theory of reference. In order to argue against these theories, we introduce a scenario. In the scenario, we see that an agent fails to use a name competently, although she has grasped what is required by the minimalist theory. Based on this scenario, we argue that an agent needs to grasp more than the minimal information required by the minimalist theory to competently use a name. Moreover, we argue that that Kripke’s account of the mechanism of reference is not plausible.

Before starting the discussion, there is one important point about the terminology used in this chapter that we need to explain. Consider the linguistic expression “Aristotle”. Many individuals can be called “Aristotle”. Hence, this linguistic expression can be used as the proper name of different individuals. One can use the linguistic expression “Aristotle” to refer to the author of *Metaphysics* or the second husband of Jacqueline Kennedy. In this thesis, we use the expression “different usages of “Aristotle”” to differentiate these cases. Alternatively, we can say “Aristotle” has two (or many) different usages as a proper name. One can consider each usage of a linguistic expression as a name.

Let us now consider the scenario: Emma hears the name of John Smith on a Sunday morning from a person walking behind her on the street. The

next day, she overhears this name for a second time at work from one of her colleague. *The speakers on each of these occasions were talking about different persons*; however, Emma is not aware of this. Therefore the linguistic expression “John Smith” has two different usages as a proper name each of which refers to a particular individual. After a while, Emma forgets about both occasions on which she was introduced to the name without forgetting the name itself. Emma has not formed any belief such as the following “the people on these two occasions were talking about the same person”. She just forgot that she heard the name on two different occasions and she also forgot any particular information about each of these occasions. She just knows that she heard the name and she intends to use the name to refer to the same individual. Assume that Emma asserts the sentence “John Smith might live in this town.” What is the truth-condition of this sentence? The name should designate an individual for the sentence to have a truth-condition. So it is more accurate to ask how it is possible to determine the referent of the name “John Smith” in this case.

The first point that one can notice by examining the above scenario is *the inadequacy of the minimalist theory of meaning*. The reason is that the above scenario implies that a language user needs to be able to distinguish different usages of a linguistic expression as a proper name. The minimalist theory implies that the information that a language user needs to grasp in order to competently use a name does not vary from one name to the other. However, a language user needs to grasp more than the minimal information which is suggested by the minimalist theory to differentiate different usages and being able to competently use a name. Hence, the minimalist theory of **meaning** cannot be accepted.

Now, we can focus on the implication of the above scenario for Kripke’s theory of reference. Our claim is that *a plausible theory of reference should explain why the name as used by Emma fails to refer*. The task of the theory of reference is to explain the mechanism of reference. It is crucial for a mechanism of reference to just designate a single object. In fact, one of Kripke’s objections against DTR was that most language users have incomplete descriptions of the bearer of names. Since these incomplete descriptions designate more than one object, the mechanism of reference cannot be explained by appealing to them. In the case of Emma, the expression as used by her passes all the conditions posed by the causal theory of reference; therefore it should refer according to this theory. However, it seems that just borrowing a name from a causal-historical chain of reference and having the intention to refer to the individual referred by the previous person is not a sufficient condition for the mechanism of reference to designate a single object.

So far, we have seen that the above scenario challenges both the minimalist theory and Kripke’s causal theory. However, a proponent of Kripke’s causal theory may try to save his theory while suggesting an alternative for the minimalist theory. One may suggest that we can solve the problem by just a minor modification. This new theory may require the language user to associate the name with a piece of information about the referent or the previous person in the chain. However, this piece of information should not play any significant role in the mechanism of reference other than helping the language user to dis-

tinguish different usages of a single expression as a proper name. For instance, in the above scenario, Emma needs to be able to distinguish two different usages of the expression “John Smith” as a proper name. Then, she can refer via a causal chain associated with either of them. In this way, the causal theory of reference can be restored just by a minor modification.

The problem with this suggestion is that the piece of information cannot be arbitrarily chosen, otherwise the very problem reemerges. For instance, assume that in the above scenario Emma associates the same incomplete description of John Smith with both usages of the expression. The same problem emerges again. Therefore, we need the information to be in a particular relation with the object, which is suspended in the cases of Emma. We need to formulate a theory of reference, whose conditions cannot be fulfilled in the case of Emma.

The descriptivist theory can handle the problem. However, the descriptivist theory of reference seems to be undermined by the semantic argument formulated by Kripke. One may suggest that we may accept descriptivism as a theory of **meaning** while rejecting DTR. In this new approach, *each name refers via a causal historical chain but having a definite description of the referent is a competence condition that a language user needs to fulfill*. In this new formulation, the name does not refer via a description, although for using the name, the language user needs to have the description.

The problem with this suggestion is that it is too demanding. As Kripke notes, language users usually lack any definite descriptions of referents. Therefore, we need to formulate another alternative for Kripke’s theory of reference and the minimalist theory. In the next section, we will examine whether we can have a conception of description where it is possible to formulate a descriptivist theory that is immune to Kripke’s criticism.

5.4 Two Uses of Descriptions

So far, we have explained the causal-historical theory of reference and the minimalist theory of **meaning**. In the previous section, we criticized these theories. In the remainder of this chapter, we try to formulate alternative theories about the mechanism of reference and **meaning** of names. However, we first need to discuss different uses of descriptions. This discussion will help us to formulate our alternative theory in the next section.

In the second chapter, Russell’s theory of descriptions was briefly discussed. The theory is an attempt to explain the semantic content of definite descriptions. We have already seen Kripke’s arguments against Russell’s analysis of proper names. However, Russell’s semantic analysis of descriptions has also been criticized from multiple angles (See Ludlow 2013). In this section, our aim is to scrutinize some criticism and see whether it is possible to adumbrate a new theory of descriptions. The theory helps us to suggest a new theory about proper names in the next section.

In a well-known essay written by Strawson, Russell’s theory of description has been criticized for giving a false picture of the truth-condition (Strawson

1950). Consider the following example:

- (a) The present King of France is bald.

Strawson's main criticism is that contrary to what Russell claims, sentence (a) does not semantically express anything about the existence of the present King of France. The claim about the existence is not part of the truth-condition of (a). Strawson concedes that the truth-value of (a) depends on "the existence of the present king of France", i.e. the sentence lacks any truth-value if the king does not exist. However, this fact is not tantamount to saying that the "the existence of the present king of France" is part of the truth-condition of (a). For this to be part of the truth-condition of (a), (a) should logically imply or entail the existence of a king (Strawson 1950:330). Strawson rejects that (a) *logically* implies that "the present king of France exists". Therefore, he concludes that it is not correct to analyze a sentence containing a definite description as an existential proposition.

Strawson instead treats the existence claim (i.e. the claim that the person satisfying the description exists) as the *presupposition* of a particular *use* of the sentence. According to Strawson, it is not the very sentence but its use that can be true or false. For instance, the use of the sentence "the current president of the US is an African-American" is true at the moment, but it was false a hundred years ago. The language user can use the sentence "truly or falsely", if the presupposition of the sentence is satisfied.⁸ For instance, according to Strawson, (a) cannot be used truly or falsely, if the King of France does not exist. However, the presupposition should not be considered as the semantic content of the sentence. The upshot is that for Strawson, descriptions are referring expressions and their semantic contribution should be analyzed in this way. The role of presuppositions is that their failure might block the referring mechanism and in this way influence the truth-condition. This point is significant for our discussion since *it shows that sometimes certain presuppositions might influence the truth-value without being a part of the semantic content*. It might be correct that presuppositions in Strawson's theory are not part of the **meaning** of the linguistic expression⁹. However, the theory helps us to see the role of factors other than semantic contribution of each term in determining the truth-value.

Finally, Strawson treats descriptions as referential expressions, i.e. he takes their semantic content to be the very object described by them. The contribution of a description to the sentence containing it is just its reference. The description fails to contribute to the sentence if its presupposition fails, i.e. if the object described by it does not exist. We can see that there is a significant difference between Russell's analysis and Strawson's analysis of descriptions.

In his 1966 essay, Donnellan argues that both Russell and Strawson have restricted their attention to a single use of definite descriptions and therefore

⁸Here (and also in the discussion of Donnellan's theory), the term "use" signifies the semantic use and should not be confused with the common use of the term which is limited to the information pragmatically imparted by a sentence.

⁹There are some passages in the essay suggesting that he considers presuppositions to be believed by the agent who uses the name. However, it is not clear whether this is required or not (Strawson 1950:332).

ignored the other. According to Donnellan descriptions have two different uses: attributive and referential. The contribution of a description to the semantic content of the sentences containing it is different in each of these cases. Russell takes the existence claim¹⁰ to be part of the semantic content of a definite description. Donnellan also concedes that it is possible to use a description in a way that it *semantically* expresses the existence of what satisfies the description as Russell claims. A description can also be used referentially in a way that Strawson suggests. As an instance of the referential use of a description, Donnellan gives the following example: At a party a man sees “an interesting-looking person holding a martini-glass” (Donnellan 1966:287). Then, he asks who the person drinking the martini is. Even if the martini-glass contains water rather than martini, the description still concerns the “interesting-looking person”. In this case the description “the man drinking a martini” is used to refer to the person, not to describe him. Therefore, the contribution of the description to the sentence is just the object itself. The sentence containing a description used referentially will not be false if what is described by the description does not exist. In this way, Donnellan suggests that both semantic analyses of Russell and Strawson are correct, but they are about two different phenomena i.e. two different uses of descriptions.

Donnellan’s theory has been criticized by Kripke (Kripke 1977). Kripke has *methodological* worries about Donnellan’s theory. According to him, it is methodologically wrong to take any piece of information conveyed by a sentence to be part of its semantic content. The very fact that a sentence in the above example (the man with the martini) is used to impart a piece of information does not imply that the information is semantically asserted by the sentence. A sentence or description may also be used ironically; however, ironic use of an expression has no semantic significance. Kripke notes that a semantic theory should not be made unnecessarily complicated by taking definite descriptions to have two different semantic contributions dependent on the context (Kripke 1977). It is possible to just treat the referential use as a pragmatic phenomenon rather than a semantic one. According to Kripke, a referential account is plausible as a semantic theory at least in the case of incomplete definite descriptions since they do not uniquely characterize an object. Nevertheless, a semantic theory can accept Russell’s explanation with respect to complete definite descriptions and treat the referential use of them as a pragmatic phenomenon¹¹.

Kripke also presents an argument against taking the referential use of descriptions as a semantic phenomenon. He argues that the referential use is not limited to descriptions and that proper names can also be used in this way. Consider the following example: one may see a person called Johnson running in the distance and takes him to be John and say “John is really working up a sweat today”. Then, it can be said that the name John was used referentially in this context and that it semantically refers to Johnson not John (the example is

¹⁰By existence claim, we mean the claim according to which the object described by the description exists.

¹¹In one passage, Kripke says that the fact that Russell’s theory cannot explain incomplete definite descriptions might be a good enough reason to abandon his theory.

from Ludlow 2013). Here, we can see that names can also be used referentially. Hence, we can also take names to have two different uses. However, in the case of proper names, taking the different uses as two different semantic phenomena leads to a very implausible result: the semantic content of names varies from context to context. The semantic content of a name such as “John” can be John or Johnson depending on the different uses of the name. This is at odds with Kripke’s commonly accepted thesis that names are rigid designators. Thus, the referential use of names cannot change their semantic content and therefore is not semantically significant. Based on this point, Kripke concludes that the referential use of description also lacks any semantic significance, i.e. it does not change their semantic content.

In order to defend Donnellan’s position, we need to neutralize Kripke’s arguments. One way to do this is to doubt that Ludlow’s example really illustrates whether the same phenomenon also occurs with proper names. The reason is that in the case of proper names the very sentence “Jones is really working up a sweat today” seems to be false, while this is not the case with the sentence “the man drinking martini is interesting-looking” in Donnellan’s example. The readers may reject this reply and still consider Ludlow’s example plausible. The disagreement about the plausibility of the example or the extension of the phenomenon to proper names may just be an instance of so-called intuition swapping. Some language users have a particular intuition and there are others who do not share this intuition. However, even if we reject this specific example, it is true that Donnellan owes us an explanation why the referential use of descriptions is a semantic phenomenon. *We can see whether it is possible to draw the same distinction within different uses of proper names only after further clarifications concerning the distinction with respect to definite descriptions.* Therefore, it is not certain whether names can also be used referentially in the way that the descriptions can be used. Hence, the opponents of Donnellan’s distinction at least need to strengthen the objection as formulated by Kripke. We leave the discussion of the referential use of names at this point. In the remainder of this subsection, we focus on descriptions.

So far, we have discussed the Russell-Strawson debate and Donnellan’s attempt to converge their views. We have also examined Kripke’s criticism of Donnellan’s distinction. We left out one of Kripke’s objections, namely the objection concerning the referential use of names. However, we still need to address his methodological worries. In the remainder of this section, we try to provide an analysis of the referential use of descriptions. The analysis shows that the mechanism by which a definite description singles out an object is different when the description is used referentially from when it is used attributively. Then, we show that our analysis of the mechanism by which a complete definite description (e.g. “the present king of France”) singles out an object when it is used referentially is similar to the analogous mechanism for incomplete definite descriptions (e.g. “the lady in the street”). At the end, we argue that Donnellan was right in taking the two uses of definite descriptions to have different semantic analyses.

We can continue our discussion by the following question: which relation

between a speaker and an object allows the speaker to use a particular description of that object referentially? In Donnellan's example, it is dubious that the speaker could referentially use the description "the man holding a martini-glass", while not being in the party. Thus, there should be a specific relation that allows the man to use the description referentially. Without such a relation the description "the man holding a martini-glass" will not concern the man in the party. By contrast, the language user does not need to be in any particular relation to the object in order to use a description of it attributively. The description "the queen of England who was contemporary of Shakespeare" singles out Elisabeth since Elisabeth satisfies the description.¹² The speaker does not need to be in any particular relation with Elisabeth to use this description attributively. However, in Donnellan's example, the man does not satisfy the description. Therefore, the question is in virtue of which factor the description concerns the man. By examining the relation of speaker and object which make the referential use of a description possible, we can find out whether the referential use has any semantic significance or not. In order to examine this relation, we need to examine *how a description can be about a particular object*. My suggestion is that there are two ways for a description to concern an object: 1. A description can be about an object by *truly* describing it. 2. A description can be about an object by describing it in a *justified* way. Compare the following scenarios:

1. Mr. Jones is a fan of science fiction and particularly those about the extraterrestrial life. He wonders whether there is one Martian on Earth or not. He thinks such a creature would be particularly interesting if it was the one and the only Martian on the earth. Once, he tells one of his friends "the only Martian on Earth is an extremely interesting creature"

2. Mr. James is suspicious of his neighbor. He found some evidence that she might be the only Martian alive on Earth. Assume that those pieces of evidence justify him in his belief about her. He has a justification for his description of her (she is the only Martian on Earth), although the description is not true. Mr. James also finds her quite interesting. He tells the story and his reasons for believing it to one of his friends and adds "The only Martian on Earth is an extremely interesting creature."

The above scenarios resemble the examples that are usually used in the literature to explain the distinction between the referential and the attributive use of a description. There is a difference between the use of "the only Martian on Earth" when it is used by Mr. Jones and when it is used by Mr. James. My claim is that Mr. Jones cannot use the description to refer to the neighbor of Mr. James without her being a Martian. The reason is that the description as used by Mr. Jones can concern her solely by *being true of her*. On the other hand, the fact that Mr. James has a justified belief about his neighbor enables him to use the expression "the only Martian on Earth" in a way that Mr. Jones cannot. Therefore, the epistemic situation of Mr. James (being justified in tak-

¹²Here, we leave out the discussion of indexical term which can be used in descriptions, e.g. "the present King of France"

ing his neighbor to satisfy the description) enables him to use the description in a way that Mr. Jones cannot. This point will seem more acceptable, if you compare it with Russell's conception of logical names. In Russell's theory, we can see that different epistemic relations to the objects generate different semantic possibilities. If a language user knows something by acquaintance, he is able to directly refer to it without using any particular description (see the third chapter). Hence, we have already had semantic theories which take fulfilling a certain epistemic conditions as a prerequisite for having certain semantic relations (in the case of Russell directly referring to the referent). Our claim is that being in what I call the justificatory relation is the prerequisite for the referential use of a description. This condition can be formulated in the following way:

The justificatory relation is a three-placed partial function¹³ which takes a description d and a language user A and a justification j to an object o , which determines the object o , which A is justified in virtue of j to describe by d .

In the above definition, we take the *justificatory relation* as a primitive relation, i.e. we do not discuss which understandings of the nature of justifications fit our definition. We just take the relation as a four-placed relation (three-placed partial function) between an agent, an object, a justification and a description, which makes the agent justified in thinking that the object satisfies the description. *A very important point about the relation is that this relation is a partial function. It cannot have two different objects as its output.* If a single justification at the same time makes an agent justified in taking two different objects to satisfy a description, we do not have a justificatory relation between either of the objects and the agent. In the above scenario, there is a justificatory relation between Mr. James, his neighbor and the description "the only Martian on Earth".¹⁴

Here, a description is a linguistic representation of a feature that the agent attributes to the object. However, it is important to note that the same linguistic expression can be used to describe two objects. For instance, we may use the description "the pencil in my bag" for many different objects. The role of justifications is to differentiate between these descriptions. *Another way* to formulate the justificatory relation is to merge these two arguments (i.e. justification and description) into a single argument, which we can call "a justified description". In this case, a justified description is not a mere linguistic entity. It is correlated with a justification that individuates it. Two justified descriptions are different

¹³Here, we used the set theoretic notion of function and relation in which a function is a special sort of relation. A reader who dislikes this understanding of function and relation can easily rearticulate the definition according to the understanding of these concepts that he prefers.

¹⁴It is important to note that justifications play two roles simultaneously: epistemic and semantic. When an agent sees a book on a table, her perceptual experience at the same time performs two functions: a. it makes the person justified in taking the description to be true b. it makes the content of a description as used by the person to be about what he sees. Our focus is on the semantic role of justifications. Therefore, the cases such as the Gettier problem which show that in some cases, a justification may fail to perform its epistemic role or may perform it by chance do not concern us.

if they are justified for an agent in two different ways.

As already mentioned, in this thesis, we do not discuss epistemic or metaphysical problems concerning the nature of justifications. We can provisionally take them to be events rather than objects. However, any detailed discussion of their nature goes beyond the scope of this thesis.¹⁵

The notion of justificatory relation explains how a description can be used referentially. An agent who is in a justificatory relation with an object and a description can use the description to refer to that object, without the description being true of the object. In the above example, Mr. Jones cannot referentially use the description “the only Martian on Earth” about Mr. James’s neighbor. The reason is that there is no justificatory relation between Mr. Jones and the neighbor of Mr. James. He can just use the description attributively and the description will concern the neighbor of Mr. James if she actually satisfies it.

This explanation can also provide a plausible account of incomplete definite descriptions e.g. “the computer in the room”. There is consensus that incomplete definite descriptions are referential expressions, i.e. that their semantic contribution to the sentence is their reference. The question is how a language user can use an incomplete description to refer. The relation of satisfaction (that the object satisfies the description) cannot do the job since there might be numerous objects that satisfy an incomplete description. Our suggestion is that an incomplete description can only be used as a referential expression, if the speaker is justified in describing an object by that description. It is not possible to use incomplete descriptions without being in a justificatory relation with the referent. Therefore, each time that an incomplete description is used, its semantic content is determined via a justificatory relation.

If the above point is true, the main difference between complete and incomplete definite descriptions is that a complete definite description can also be used attributively. The reason is that they can uniquely pick up an object which satisfies it. However, that does not entail that their referential use has no semantic significance. The referential use of a description is an option for any language user who is in a justificatory relation with it and an object regardless of the fact whether the description is complete or incomplete. The opponent of this view needs to give an alternative semantic explanation of incomplete definite descriptions and explain why complete definite descriptions cannot play the semantic role of incomplete descriptions.

Now, we can see that Kripke’s methodological worry is not compelling enough to rule out Donnellan’s theory. The reason is that we see a similarity between an incomplete and a complete definite description (both can be in a justificatory relation with an agent and an object). Hence, if an incomplete definite description semantically refers due to for example a causal or epistemic relation, it is not clear why a complete definite description cannot perform the same semantic function. Moreover, we see that a complete definite description can be used in a way that an incomplete description cannot. It is possible to designate a single

¹⁵Readers should note that we also do not discuss metaphysical issues concerning causation when we explain Kripke’s causal theory

object by a definite description without being in any sort of causal or epistemic relation with the object. However, one cannot do the same job with an incomplete definite description since numerous objects satisfy it. Therefore, we can recognize two different semantic functions for complete definite descriptions.

Finally, it is important to note that the competence conditions of referential and attributive uses are not the same, i.e. the language user needs to grasp different information if he wants to competently use a definite description referentially or attributively. To use a description attributively one needs to know the conventional meaning of the words and how they can compositionally form a linguistic expression. To use a description referentially, in addition to knowing all of these, one needs to have a justification to think of an object as being described by that description.

In this section, we have argued, following Donnellan, that complete definite descriptions have two uses: referential and attributive. Moreover, we argued that incomplete definite descriptions single out objects in the way that complete definite descriptions do when they are used referentially. Notice that, this mechanism is independent of whether the object actually satisfies the definite description or not. In the next section, we try to provide an account of the mechanism of reference of proper names based on our discussion in this section.

5.5 The Justificationist Approach Toward Names

In the previous section, we have sketched how a definite description refers when it is used referentially. In this section, my aim is to offer a theory of reference and **meaning** of proper names based on the discussion in the previous subsection. Any plausible theory, which takes descriptions to play a role with respect to proper names, needs to also address Kripke's arguments against descriptivism formulated in *Naming and Necessity*. Our suggested theory does not concern the semantic content of the names. Therefore, we do not need to discuss the epistemic and modal arguments formulated by Kripke. However, we do need to provide a response to the so-called semantic argument.

In this section, we first reconsider the example of Emma and the two John Smiths (mentioned in section 5.3). Then, we discuss its implications for our theory of reference and **meaning**. Subsequently, we formulate a theory of reference and we mention some possible criticism against it. At the end, we explain our conception of the **meaning** of names which is important for our discussions in the next chapter.

In the discussion of the scenario of two John Smiths (discussed in the third section), we argued that an agent should recognize when a single expression is used as the name of two individuals. For instance, imagine Maria who has been introduced to both "Aristotle the philosopher" and "Aristotle Onassis". Now, consider the following sentence stated by her:

- (i) Aristotle was a great man.

For the above sentence to have a clear truth-condition, it needs to be about "Aristotle the philosopher" or "Aristotle Onassis". Maria as the speaker needs

to be in a position to refer to just one of the Aristotles by using the above sentence since she aims to talk about a single person. Therefore, she is required to have more than merely the linguistic expression “Aristotle” to competently use the name and state (i). Here, we can see that she needs to associate different pieces of information with “Aristotle the philosopher” and “Aristotle Onassis”. Moreover, she needs to *intend* to talk about one of these two Aristotles and not the other when she states (i). Otherwise, the name “Aristotle” fails to correctly single out an object. If after the utterance of (i), the hearer asks the following question: “which Aristotle do you mean? “Aristotle the philosopher” or “Aristotle Onassis?”” She needs to be able to answer. If she says “Sorry, I have not decided yet”, then (i) does not have any clear truth-condition. Therefore she needs to fulfill two requirements: a) she needs to distinguish names by using different pieces of information associated with them and b) she needs to intend to refer to the reference of one of the names.

These requirements are primarily related to the mechanism of referring and our theory of reference. However, they also have immediate consequences for our theory **meaning** of proper names. A theory of reference which requires language users to grasp certain information and associate it with proper names is not compatible with the minimalist theory of **meaning** of names. The reason is that according to such a theory of reference, the information which a language user needs to grasp to competently use a name is more than what the minimalist theory states.

The first question that one needs to ask is what sort of information one needs to associate with a name. We have already excluded some options in subsection 5.3. The first candidate might be a proper description of the bearer, which is both unique and true (the traditional descriptivist theory of **meaning**). Such a piece of information guarantees that the name unmistakably designates the bearer and the troublesome cases such as two John Smiths will be avoided. However, it is excessively demanding to require language users to have a true and unique description of all bearers of the names that they know.

To give a proper alternative to the traditional descriptivist theory for **meaning**, it is useful to start with a simple observation. From the perspective of an agent, individual objects in the world appear to be in one way or another. These appearances can be captured by descriptions which may be true of the object or not. Therefore, descriptions are linguistic formulation of appearances. Here, I use the term appearance in a broad sense, as what an agent can attribute to a particular object, which may also include its essential features. Consequently, the set of appearances of an object includes all descriptions of it which have been recognized by an agent. *It also includes those false descriptions that agents have been justified to ascribe to that object.* The significant feature of appearances is that they need not to be complete in order to single out a particular object. For instance, imagine that there were two famous orators in the ancient times, one Roman and the other Persian, and that both were killed by the king of their countries. However, the second one was forgotten and nobody knows about him today. Now imagine a layman who has read something about Cicero in his high school searching for more information concerning “the famous orator who

was killed by the king of his time". The description as used by the layman is true of both orators. However, Cicero (the roman orator) is the person about which the layman has heard something in high school. He is the one that has appeared to the layman to have this or that characteristics. Therefore, as a piece of information, the description concerns the roman Orator *in a way* that it does not concern the Persian one. Therefore, the appearance of an object (e.g. Cicero) can also be formulated by an incomplete definite description.

The concept of appearance as used here and the notion of justification are related. The layman is justified in believing that the Roman orator, namely Cicero, had this feature, while lack any justified description that describes the Persian orator. The description might have been justified for the layman in various ways e.g. by the testimony of his teacher in high school. Thus, the set of justified descriptions about an object is at least a subset of the set of its appearances.¹⁶

Such a justified description can also concern the occasion where the language user was introduced to the name, for instance "the writer whose name I heard for the first time from my aunt yesterday". Therefore, the justified description can also be about the names and the way that the person was introduced to them.

It is important to note that justified descriptions might also be wrong, for instance I might characterize Aristotle "as the author of Nicomachean Ethics", while the real author of this work is another Greek philosopher. The reason is that the description concerns Aristotle not because it is true of him, but because a particular person who has it in mind is justified in considering Aristotle as having this characteristic. Now, we can introduce our theory of reference.

A justificationist theory of reference is a theory which holds that a particular usage of an expression as proper name can refer via one or a set of descriptions associated by the user with that name and each of these descriptions are in a justificatory relation with a particular justification, a same object (i.e. the referent of the name) and the user of the name. All descriptions of a single set are in relation with the same object and the same speaker, even though their justifications are different. For instance, Maria may have "the greatest philosopher of ancient times" and "the author of philosophical dialogues"¹⁷ in the set of descriptions associated with the linguistic expression "Plato". Both of these descriptions concern Plato and they are possessed by Maria. Therefore, the agent who possessed these descriptions and the object described by them are the same. However, Maria may come to know each of them in a different way. She might have one of these descriptions in a book and heard the other one from her teacher. Thus, her justification for each of them is different. However, this does not generate any problem as far as both of these descriptions would be about the same object, namely Plato. Maria can use the linguistic expression "Plato" which is associated with a set containing these two descriptions to refer

¹⁶We said subset since one may hold that an object might have appearances not discovered by anybody.

¹⁷Notice that this description is not complete.

to Plato.¹⁸ The introduction of the concept of justification helps us to tackle the two main problems: Kripke's semantic argument and the scenario of the two Smiths.

Kripke's semantic argument as discussed in the second chapter raises two problems. First, the definite descriptions used in our theory of reference might be incomplete and therefore do not uniquely characterize an object. Second, they might be false and do not characterize the object that we intuitively take as the referent of the proper name. The readers might have already recognized that both of these objections can be solved by the justificationist approach. In the previous section, we have outlined a theory that explains how a definite description might be semantically correlated with a unique object, regardless of whether it is complete or incomplete. It has been also explained that a description can be about an object not only by truly describing it, but also by being in a justificatory relation with it. Therefore, the semantic objection does not refute the justificationist theory.

Concerning the scenario of Emma and two John Smiths, our theory should show why the name "John Smith", when it is used by Emma, fails to refer. In this scenario, Emma lacks any justified description of the referents and she is therefore not able to refer to the object. Thus, Emma is in a justificatory relation with neither of the referents. The reason is that she does not have a justified description of any kind in her mind associated with the different usages of the linguistic expressions as a proper name. Therefore, she cannot refer to the individuals by using the same linguistic expression.

However, a scenario can be suggested in which the agent associates an identical justified description with the usages. Consider the following example: Jane and Jill are identical twins. Jane dances in a dancing club on Fridays and Jill dances there on Mondays. Alain saw both of them several times, without realizing that they are different individuals. After a while, he is disposed to concede to the following sentence "the girl in the club is a professional dancer." One may be inclined to say that in this scenario Alain is justified to take the girls to be professional dancers. He has perceptual experience of both girls and is therefore justified to take the descriptions justified by the perceptual experience to be true. Hence, one may hold that he is in a justificatory relation with both of them. However, the justificatory mechanism is impaired in this case. It is true that the agent's justification can play a semantic role for him. Nevertheless, it ceases to play such a role, if the agent takes two justifications to concern the same object, when they are in fact about two objects. In this scenario, Alain has two perceptual experiences concerning two different individuals. However, he fails to realize that and takes both justifications to justify the same thing.

¹⁸There are some interesting similarities between this theory and Evans's theory of reference (Evans 1973 and 1982). Evans treats the belief "as a filing system" and names as labels. Then, he takes the referent of the labels to be the causal source of the beliefs. However, his theory and its further modification cannot explain problems such as two John Smiths scenario. The reason is that Emma might have some information caused by these two persons. However, she still fails to distinguish them since the pieces of information are also identical. This problem might be tractable for Evans's theory, but it needs to be addressed. Furthermore, his theory takes the linguistic expression as the mark of different files of descriptions not their usages.

Therefore, both justifications cease to perform their semantic function.¹⁹

The upshot of the above discussion is that the semantic role of justification is also sensitive to the subject's view. In the above example, the subject takes two different justifications to be related to the same object. He takes his perceptual experience of Jane and Jill in different nights to concern the same object. However, the justifications were actually about two different objects, namely Jane and Jill. Therefore, the justifications cease to perform their semantic role. Another point is that the justificatory relation between an agent and an object does not depend on genuine features of the object. Hence, a justified description can be about an object, while not being true of it. This feature of the justificatory relation helps us to neutralize Kripke's semantic argument. The justificationist theory of reference is also consequential for our theory of **meaning** of proper names. According to the justificationist theory, the language user can use a linguistic expression to refer, if he has a justified description of the object. Thus, a language user needs to have a justified description of the object in order to competently use its name. This can be considered as the justificationist theory of **meaning** of proper names. The theory takes a justified description of the referent as the information that the agent needs to grasp to be able to use the name. Therefore, *the meaning of a name grasped by an agent is a set of justified descriptions associated by that agent with the name.* However, it is important to note that an agent might think that he is in a justificatory relation with the object without actually being in such a relation. For instance, in the above case Alain really thinks that he has a justified description of the dancer. Therefore, an agent might actually think that he has grasped the **meaning** of a name and can competently use that name, without actually being able to do so.

There are two questions that we have not addressed in this chapter. *First*, one might ask whether it is possible for an agent to be in a justificatory relation with a non-existent object, e.g. Pegasus. The sentences containing such names seemingly possess truth-condition and truth-value. Therefore, a plausible theory should also provide an explanation also for them. The *second* question that might be asked is whether we can be in a justificatory relation with a group of people who introduce themselves by a single name. For instance, *Logic, Language, and Meaning* was written by a group of academicians who call themselves *L. T. F. Gamut*. Assume Maria a student of philosophy states the following sentence.

(ii) Gamut wrote a nice textbook.

It is not clear how the expression "Gamut" in (ii) refers. In order to answer the above questions, we need to clarify the justificatory relation. However, this goes beyond the scope of this thesis. Hence, we leave both of these questions unanswered in this thesis.

In the next chapter, we will examine the consequence of this theory for the semantics of propositional attitudes.

¹⁹The reason that the referential/attributional distinction cannot be extended to proper names is also the same. A proper name has already been associated with a set of justified descriptions. If an agent mistakenly uses them for another referent, they cease to refer.

5.6 Conclusion

In this chapter, we first introduced Kripke's theory of reference and the Minimalist theory of **meaning**. We saw that the scenario of Emma generates problem for both of these theories. The scenario shows that a language user needs more than the minimal information suggested by Soames to competently use a name. Based on these considerations, we formulated a new theory about the **meaning** and the mechanism of reference of names. These theories are refuted by Kripke's arguments and can properly explain the scenario of Emma. In the next chapter, we discuss the semantics of propositional attitudes based on our discussion of proper names in this chapter.

Chapter 6

Propositional Attitudes Reconsidered

The main topic of this thesis is the semantics of propositional attitude reports whose that-clauses contain proper names (henceforth we call this sort of propositional attitude reports PN). So far, we have discussed various theories concerning the semantics of propositional attitudes and proper names. As mentioned in the previous chapter, the strategy that we are going to use to tackle the puzzles is using the concept of the “mode of presentation”. In our theory, we take the **meaning** of the names to play the role of the “mode of presentation”. However, unlike Frege or Richard¹, we do not take our conception of the “mode of presentation” to be part of the semantic content of the that-clause of PNs.

In order to provide an account of PNs, we first needed to develop a theory about the **meaning** and reference of proper names. The reason was that proper names are constituents of the that-clause of PNs which generate Frege’s puzzle. In the previous chapter, a new theory, called the justificationist theory, about the reference and **meaning** of proper names was formulated. In this chapter, we examine its consequences for our understanding of PN and finally we articulate a theory to solve the two puzzles that have concerned us throughout this thesis. The theory will be just an outline of a fully satisfactory solution and in its current formulation may not satisfy all our intuitions about the role of proper names in the that-clauses of PNs. However, it gives us new insights on the subject of PNs, which might help us to provide more accurate accounts of PNs.

Before starting the discussion, it is useful to remind the meaning of two terms frequently used in this chapter. By the term “subject”, we mean the subject of the report, i.e. the person whose attitude is reported. By the term “object of attitude”, we mean what the attitude is directed at, which we take to be the semantic content of the that-clause of the report.

¹Richard does not use the term the “linguistic mode of presentation” in his text. The term is used by Larson and Ludlow in their 1993 essay to describe their own a theory which is very similar to that of Richard.

6.1 Semantic Content and Meaning

In the previous chapter, we formulated a theory about the **meaning** of proper names. According to this theory, unlike the semantic content of proper names,, their **meaning** may vary from language user to language user.² Moreover, we tried to show that the theory of **meaning** and reference of proper names are related. If two names have two different semantic content, they are different names. However, a single name can be associated with **meanings** for different agents. A language user who has not grasped a **meaning** of a proper name³ cannot use it competently. Hence, the name as used by that language user fails to refer.

For a **meaning**⁴ of a name to play the role of the “mode of presentation”, it needs to be related to the semantic content of that name. By saying that it needs to be related to its semantic content, we do not mean that it needs to be part of it. However, it should play a role in the determination of the semantic content in order to capture what Frege originally meant by using the term “mode of presentation”. In the previous chapter, we saw that our discussion of **meaning** and reference was consequential for the semantic content of names and sentences containing them. A proper name, used by a language user who does not possess any justified description of the referent, lacks semantic content. Thus, *there is a relation between the semantic content of names and their meanings, without them being identical.*

This relation resembles the relation of sense and reference in Frege’s theory. According to Frege, the reference of a linguistic expression is determined by its sense. In our theory, the **meaning** of a name as grasped by a language user contributes to the mechanism of referring, which determines the reference. If we accept that the reference of a proper name is its semantic content, we can say that the **meaning** of a proper name as possessed by a speaker determines the semantic content of that name. As already explained, a single name can be associated with different **meanings** by different persons which all determine a single object, namely the semantic content of the name.

However, there is also a crucial difference between Frege’s theory and our approach to proper names. In Frege’s theory, the sense is treated as a semantic property (or one may say as a semantic content) alongside reference, whereas in our theory the **meanings** of a proper names are not semantic properties. In Frege’s theory, the sense of a proper name directly contributes to the proposition (i.e. thought) expressed by the sentence containing that name.⁵ Therefore,

²In the previous chapter, we accepted the Millan theory about the semantic content of names. This is the reason that we maintained that the semantic content of names does not vary from speaker to speaker.

³The phrase “grasping a **meaning**” might be misleading to some extent since one may tempted to take the notion of **meaning** in our theory to be similar to Fregean sense which exists in a third realm. However, the readers should keep in mind that **meaning** in our theory is merely a justified description. By the phrase “grasping a **meaning**”, we mean becoming justified in using a description for an object.

⁴Each name has more than one **meaning**.

⁵In Frege’s theory, the exact relation of the thought expressed by a sentence and the sense

the sense of an expression is “part of”⁶ the piece of information conveyed by using a sentence. By contrast, in our view, the **meanings** of a name⁷ are not part of “the semantically encoded information” conveyed by using the sentence. However, having a **meaning** of the name is required for the sentence as used by the speaker to have a clear truth-condition. The speaker needs to have a **meaning** in order to *competently* use the sentence.

In this thesis, we take the semantic content of a sentence to be its truth-condition, the condition under which the sentence is true. We also conceded that the semantic contribution of a name to the truth-condition of the sentence is merely its referent (the Millian theory). The set of justified descriptions, by which the agent refers to the referent of a name (i.e. the **meaning** of the name as possessed by a person), is *not* part of the semantic content of the sentence containing that name. Therefore, two language users may have different **meanings** of “Aristotle”, i.e. they might associate different sets of justified descriptions with the name “Aristotle”. However, the sentence “Aristotle is a Greek philosopher” is used to express the same semantic content (i.e. truth condition) by either of them, if any.

Here, we need to distinguish between truth-condition and what we may call *competence-condition*. Each declarative sentence is supposed to have a clear truth-condition; otherwise it fails to have a determined truth-value. The competence condition is a condition which a language user needs to fulfill in order to state a sentence having a truth-condition. *A promising way to investigate the competence-condition is to see under which condition a sentence as used by a speaker fails to clearly have a truth-condition*. This is the method that we use in this chapter to investigate the competence-condition of PNs.

In the previous chapter, we argued that a language user needs to possess a **meaning** of a name in order to competently use it. Consider the following example:

(a) Plato was Greek.

According to the justificationist theory of **meaning**, a language user needs to have a justified description of Plato (i.e. a **meaning** of Plato) in order to competently use the above sentence. Otherwise, (a) as used by her lacks any truth-condition. Therefore, *the competence-condition of a sentence containing proper names is having a **meaning** of those proper names*. A proper name can have different **meanings** and therefore there are various ways by which a person can fulfill the competence condition of a sentence. For instance, a person can fulfill the competence condition of (a) by being justified in describing Plato as “the pupil of Socrates”. Another person may fulfill the competence condition by being justified in describing him as “the teacher of Aristotle”.

Now, our way to tackle the puzzles is to take an approach similar to Salmon’s

of proper names in that sentence is not clear.

⁶As said in the previous footnote, it is not clear whether Frege took thoughts to be constituted by senses.

⁷Here, “the **meanings** of a name” is used instead of “the **meaning** of a name” since different individuals may associate different **meanings** (i.e. different justified descriptions) with a single name

theory (which was explained in the third chapter). Consider the following example:

(b) Amir believes that Plato was Greek.

Salmon introduces the notion of guise as a medium between the semantic content of the that-clause and the subject of a report. He takes these guises to be part of the semantic content of PNs but not part of the semantic content of the that-clauses of PNs. For instance, assume that we take the information semantically expressed by the that-clause of (b) to be grasped by Amir via a guise. We can take the **meaning** of Plato, which is possessed by Amir, to influence the guise under which Amir believes the proposition expressed by the that-clause of (b). Therefore, two persons may believe (a) under different guises. The guise is not part of the semantic content of the that-clauses of PNs. In this way, we do not need to take (a) and the that-clause of (b) to express different propositions.⁸ Assume that we have two PNs whose subjects and the semantic content of their that-clauses are the same. We can still distinguish between the semantic contents of these two PNs if the semantic content of their that-clause is understood via different guises.

However, before explaining our strategy in detail, we first need to examine the competence-condition of PNs. For a sentence, such as (a), the language user just needs to have one of the **meanings** of each proper name occurring in that sentence, i.e. he just needs to have a justified description of the referent of all those names. In the next section, we are going to argue that this is not the case with PNs. Therefore, the subject of section 6.2 is the competence-condition of PNs. This discussion will be important for our examination of the semantic content of PNs in section 6.3. At last, we try to solve the puzzles in the fourth section.

6.2 The competence-condition of the that-clause of PNs

In the previous section, we defined the competence-condition of a sentence to be what a language user needs to fulfill for the sentence, as stated by her, to express a proposition. Now, we can (partially) characterize the competence-condition of sentences containing proper names. A language user needs to have a **meaning** of the names occurring in such sentences to use these sentences competently.⁹ The role of **meaning** is to help the language user to keep track of intended reference (semantic content). According to the Millian theory, the reference of a name is its semantic content. Thus, we can say each person needs to have a **meaning** of a name in order to track its semantic content. Otherwise, the name as used by her lacks semantic content. For instance, reconsider the example of

⁸The readers can see that the semantic innocence is not violated by this theory, i.e. the semantic content of a name is constant within and outside the scope of attitude verbs.

⁹It is important to note that this not the only condition that a language user needs to fulfill in order to competently use a sentence.

two Aristotles¹⁰. The agent who has been introduced to these two names can distinguish them by the **meaning** associated with each of them in her mind. Without their **meaning**, she is not able to keep track of the semantic content of the names when she uses them. Our claim is that language users do not track the semantic content of names in the scope of attitude verbs in the normal or customary way. In other words, they use a different kind of **meaning** to track the semantic content of names in these contexts.

The **meanings** of a name that a language user can use to track the semantic content of names *outside the scope of attitude verbs* can be called the *customary meanings*.¹¹ So far, in this thesis, we have just discussed the customary **meanings** of names since we have not examined their **meanings** in the scope of attitude verbs. The that-clause of PNs also contains proper names. Therefore, it may seem intuitive to take the competence-condition of PNs to be similar to other sentences containing proper names. However, in this section, we are going to argue that grasping the customary **meaning** of names is *not* (part of) the competence-condition of PNs.

We can start our discussion by reconsidering the example of Emma, which was introduced in the previous chapter. Emma was confused about two John Smiths and therefore she could not use the name “John Smith” to refer to either of them. Consider the following examples:

- (a) John Smith lives in this Town.
- (b) Emma believes that John Smith lives in this town.

For a language user to competently use (a), she needs to know (at least) a customary **meaning** of one of the John Smiths and intend to refer via that **meaning**. Emma cannot competently use (a) since she does not know any customary **meaning** of either of John Smiths. Therefore, any de dicto report of her beliefs (such as b) whose that-clause contains the name “John Smith” is simply false. This is a significant observation for our discussion of the semantic content of PNs. The subject of a *true* PN needs to possess a customary **meaning** which determines the reference of all proper names in the that-clause of that PN. However, readers should note that this is just a necessary condition and not the sufficient condition for the report to be true.

There are two questions that should be addressed. The *first* question is whether the ascriber (who is the person who actually states the report) also needs to know the customary **meaning** of the names in the that-clause. In the previous section, we explained that a name does not refer if the user of the name (who is the ascriber in this case) lacks a customary **meaning** of that name since the name refers via a customary **meaning**. In this section, we are going to argue that the names in the that-clause do not refer via the customary **meaning** possessed by the ascriber. It refers via the customary **meaning** possessed by the subject. The ascriber just needs to be able to *designate* the **meaning** grasped by the subject. Then, she needs to intend to refer via that **meaning**.

¹⁰Aristotle Onassis the second husband of Jacqueline Kennedy and Aristotle the philosopher (page 69)

¹¹We borrowed the term “customary” from Frege who coined the term “customary sense”. Alternatively, we can use the term “normal **meaning**”

According to this theory, the customary **meaning** of the proper name in the that-clause possessed by the ascriber (who is the speaker) does not play a crucial role in the way that the name refers. Hence, the answer to the first question is that the ascriber does not need to know a customary **meaning** of the name in order to competently use it in a that-clause. The *second* question is whether the ascriber needs to grasp any other **meaning** for the name to refer in the that-clause. In other words, what is the **meaning**¹² of a name in the that-clause of a PN?

The second question will be answered in the subsection 6.2.3. For the moment, it is enough to know that we need to introduce a new kind of **meaning** whose role is to help the ascriber to designate the customary **meaning** possessed by the subject of report. Thus, we can describe this new kind of **meaning** as the **meaning** which tracks the **meaning** of the name possessed by the subject. Hence, what the ascriber needs to grasp is a **meaning**, which designates the **meaning** of the name instead of its reference. Henceforth, we use the expression “*A-meaning*” for this kind of **meaning** as an abbreviation for “the ascriber’s **meaning**”. The ascriber needs to have an *A-meaning* of the name to be able to designate its customary **meaning** grasped by the subject in order to competently use a PN.

In the subsection 6.2.1, we elaborate our theory about the mechanism of reference for the names inside the scope of attitude verbs. Two questions will not be answered in this subsection. (1) Why do we hold that the mechanism of reference is different for the names in the that-clause of PN? (2) How can an agent designate the **meaning** grasped by the subject of a PN? The first question will be answered in the subsection 6.2.2 and the second in the subsection 6.2.3. Therefore, the readers need to be patient to know our answers to these questions.

The discussion of *A-meaning* in subsection 6.2.3 clarifies what an ascriber needs to grasp in order to competently use a name in the scope of attitude verbs. Therefore, we can have a clear picture of the competence-conditions of PNs by the end of that subsection.

6.2.1 The Biphasic mechanism of Reference

In this subsection, we just explain our view about the mechanism of reference of proper names in the that-clause of PNs, *without justifying it*. In the next subsection, we give some reasons why the mechanism of reference is different for the names in the that-clause of PNs.

The mechanism of reference, outlined in the previous chapter, can be called *monophasic*. In this mechanism, the speaker needs to grasp a set of justified descriptions of an object in the world, by which he is able to refer to that object. Hence, he just needs to intend to refer to what is described by these justified

¹²**Meanings** are what the ascriber needs to have in order to use terms competently. In the previous section, I suggested that the customary **meaning** of name is a set of justified descriptions. Nevertheless, one should not conclude that this is true about all other kinds of **meaning**. As we will see in the subsection 6.2.3, the ascriber might be able to competently use a name in the that-clause of a PN by different forms of **meaning**.

descriptions. For instance, if he is justified in describing Plato as “the pupil of Socrates”, he can refer to Plato by using the linguistic expression “Plato” and intending to refer to what is described by the description.¹³ By contrast, the mechanism of reference for the names in the that-clauses of PNs is *biphasic*, i.e. it has two complementary stages. In the *first stage*, the ascriber needs to be able to designate the **meaning**, by which the subject refers to the reference of the **name**. In the *second stage*, he needs to intend to refer via the **meaning** possessed by the subject of the report. Hence, the ascriber refers to the reference via the **meaning** of the subject that he has *designated*. *The process of designation* (which will be explained in section 6.2.3) is a process by which the ascriber designates the customary **meaning** grasped by the subject.

This mechanism can be illustrated by the following example. Maria, a historian of astronomy, reads a script written by an ancient astronomer Emisus. Now consider the following sentences written by Maria in her article about Emisus.

- (1) Hesperus is Phosphorus.
- (2) Emisus believed that Hesperus is Phosphorus.

The term “Hesperus” in (1) refers to Venus, provided that Maria (who is the speaker) can competently use the name. Hence, she needs to be in a justificatory relation with the referent of the name. The name “Hesperus” in (1) would not refer, if Maria was confused about the term (in the way that Emma was confused concerning John Smiths).

Therefore, the name refers if the person who use it has grasped its **meaning**. However, our claim is that the term “Hesperus” in the scope of attitude verb does not refer via Maria’s justified descriptions of the referent. Instead, the term refers via the set of the justified descriptions possessed by Emisus (who is the subject of the above ascription). For the term to successfully refer, Maria needs to correctly designate the set of justified description possessed by Emisus and to intend to refer via that set.

This theory has some similarities to the modified picture of Frege’s theory suggested in the second chapter, without involving the notion of semantic content.¹⁴ In the modified version of Frege’s theory of PN, the reference of the name in the that-clause is the sense of the name grasped by the subject. Therefore, the ascriber needs to grasp the sense of sense to understand or use belief-sentences. Consider the following example:

- (3) Ancient astronomers believed that Hesperus shines in the morning.

In Frege’s theory, the sense of “Hesperus” in the that-clause of (3) determines its customary sense possessed by the subject. Therefore, the sense of the name in the that-clause is different from its ordinary sense. We can also see the **meaning** possessed by the ascriber as the **meaning** of the customary **meaning**¹⁵ of the name possessed by the subject. Moreover, we outline a the-

¹³As explained in the previous chapter, these descriptions are not necessarily true of what they describe.

¹⁴In order to neutralize the arguments against Frege, we suggested an important modification to his theory: the reference of names in the scope of attitude verbs is the customary sense possessed by the subject not the sense possessed by the ascriber.

¹⁵The customary **meaning** is what designates an object and the **meaning of meaning**

ory which takes *the mechanism of reference in the scope of attitude verbs to be different from the customary mechanism, without taking the reference determined by these two mechanisms to be necessarily different*, e.g. according to our theory, the reference of “Hesperus” in both (1) and (2) is Venus, but the term refers to Venus in two different ways. The reason is that the way that a speaker tracks the semantic content¹⁶ of names that she uses in the scope of attitude verbs is different from the way that she tracks them outside these scopes. That does not imply that the semantic content of names varies in these contexts. The semantic content of a name is constant in all these contexts. Otherwise, it will not be the same name. However, our claim is that the way that the speaker tracks semantic content is different in different contexts. Therefore, our theory does not violate the semantic innocence.

In this subsection, we have outlined the biphasic theory of reference for the names in the scope of attitude verbs. In the next section, we try to give some reasons why the names in the scope of attitude verbs refer through the **meaning** of reference possessed by the subject instead of the **meaning** possessed by the ascriber.

6.2.2 Two Tolstoys

In the previous section, the biphasic mechanism of reference was explained. Our claim was that the mechanism of reference for the names in the scope of attitude verbs is biphasic rather than monophasic. Moreover, we claimed that the names in that-clauses do not refer via their customary **meaning** (which is a set of justified descriptions possessed by the ascriber). In this subsection, our aim is to argue for these two claims. These two claims are interrelated. For the monophasic mechanism to function, having a customary **meaning** is both sufficient and necessary. If we successfully argue that grasping the **meaning** by the ascriber is neither sufficient nor necessary for the names in the that-clause of the PN to refer, we can claim that the mechanism of reference for these names is different. In order to achieve this goal, we need to show that a language user can competently use a PN, without knowing a justified description of the referent of the name in its that-clause. Moreover, it should be argued that a PN as used by a language user, who knows a justified description of the referent, may fail to express a clear semantic content.

Let us first show that grasping a customary **meaning** is not sufficient for a PN to have semantic content (i.e. truth-condition). We can argue that this is true by using an example. The example can be a scenario in which the ascriber cannot competently use a name outside the scope of attitude verbs. Hence, he does not have any justified description of the referent of that name. However, the PN, whose that-clause containing that name, as stated by him has semantic content. By presenting this scenario, our aim is to show that the **meaning** of names that a language user needs to have in order to competently ascribe a belief is different from their customary **meaning**.

(i.e. A-meaning) is what designates the customary **meaning**.

¹⁶We accept the Millian theory. Therefore, the semantic content of a name is its reference.

The scenario goes as follows: Arthur is a teenager interested in the Russian literature. However, he is confused concerning two famous Russian authors: Aleksey Tolstoy and Leo Tolstoy. He does not know that they are two distinct individuals and think that their novels are actually written by a single person. Given our discussion in the previous chapter, the name Tolstoy fails to refer to any of these writers as used by Arthur. Therefore, the following sentence as stated by him does not have any truth-condition:

(4) Tolstoy is a great writer.

Arthur attends a speech about Leo Tolstoy. After the speech, he meets the scholar of Russian literature who delivered the speech. This is a part of his conversation with the scholar:

(a) Arthur: "It seems to me that you believe that Tolstoy is a great writer."

(b) The scholar: "Yes, I do. I indeed believe so."

(c) Arthur: "You also said in your speech that Tolstoy is a greater writer than Dostoyevsky."

(d) The scholar: "Yes, I did."

(e) Arthur: "So, you believe that Tolstoy is a greater writer than Dostoyevsky."

(f) The Scholar: "Yes. You are right."

In this conversation, Arthur (who is confused about Tolstoys) ascribes two beliefs to the scholar ((a) and (e)). Imagine how Arthur would evaluate his sentences after being informed about his confusion. Our intuition is that he would consider (4) (which is his own assessment about Tolstoy) as an instance of confusion. He might say "I did not know what I was talking about". However, he will continue to consider the above ascriptions to be true. Therefore, it is possible to say that the above ascriptions ((a) and (e)) express a proposition (i.e. they have semantic content), despite the fact that the ascriber is confused about Tolstoy.¹⁷ Our intuition can be supported by examining the case of indirect discourse in the above conversation (i.e. (c)). In the above conversation, Arthur states that the scholar said something about Tolstoy. The statement of Arthur seems to be true. Even if one informs Arthur about his confusion about two Tolstoys, he will still insist that he was right in saying that the scholar said so. Attitude-report sentences have a structure similar to the instance of indirect discourse that we just mentioned. In fact, in the above conversation, the second belief-ascription is based on the instance of indirect discourse (compare (c) and (e)).

If we concede that the above ascriptions have clear semantic contents ((a) and (e)), then it will be clear that the mechanism of reference of names is different in the scope of attitude verbs. The reason is that Arthur in the above example is incapable of referring to either of Tolstoys. However, for the ascriptions to be true, the names in the that-clauses need to successfully refer. If we accept that the mechanism of reference in the belief ascription (and indirect discourse) is biphasic, we can explain how Arthur could successfully refer in the above case. We can say he could successfully designate the customary

¹⁷For a sentence, to have semantic content is equivalent to express proposition.

meaning of Leo Tolstoy possessed by the scholar and refer via that set of justified descriptions. This argument is supposed to show that the subject does not need to have a customary **meaning** of a name in order to competently use it in the scope of attitude verbs. We still need to explain how is it possible for the ascriber to designate the customary **meaning** possessed by the subject. This process, which is called the *process of designation*, will be explained in the next subsection. Before that we need to see why it is also not sufficient for the subject to have a customary **meaning** of the name.

In order to show that grasping the customary **meaning** is not sufficient, we need to give an example of an ascriber possessing the customary **meaning** of the name in the that-clause of PN without being able to fulfill the competence-condition of that PN. By this, we mean that the PN as used by him does not have a clear truth-condition.

In the Paderewski puzzle¹⁸, Peter mistakenly thinks that there are two men whose names are Paderewski. Peter thinks one of the Paderewskis is a famous musician (who has musical talent) and the other is a politician (who lacks musical talent). Despite Peter's belief, these two Paderewskis are the same person (Kripke 1979). Now, we add a (small) twist to Kripke's story. Assume that James can competently use the name Paderewski. James has never been exposed to the term "Paderewski" as used by Peter and he does not know that Peter mistakenly takes Paderewski to be two different persons. Consider the following report of Peter's beliefs by James:

(5) Peter believes that Paderewski has musical talent.

If customary **meaning** were sufficient, (5) as stated by James should have a clear truth-condition. The reason is that as we said, James possesses the customary **meaning** of "Paderewski" and the name as used by him refers to Paderewski. However, the linguistic expression "Paderewski" has two completely different usages in Peter's mind. He has two contrary beliefs about Paderewski. It is *not determined* that the above report is about which of Peter's beliefs. This indeterminacy does not allow assigning a truth-condition to (5). We first need to determine that the above ascription is about which of Peter's attitudes.

We can see here that the semantic content of the above ascription cannot be determined without considering the fact that Peter has two different **meanings** of Paderewski in his mind. Therefore, the ascriber (i.e. James) needs to designate one of the **meanings** possessed by Peter. Grasping the customary **meaning** is not sufficient for James to competently use a name in the scope of attitude verbs. In other words, he does not fulfill the competence-condition of (5) by just knowing the customary **meaning** of Paderewski. He needs to intend to talk about one of the **meanings** possessed by Peter and therefore he needs to be able to at least designate one of them (in the way that will be explained in the next subsection).

It is important to note that the customary **meaning** of the name as possessed by the ascriber, sometimes plays a peripheral role by helping the ascriber

¹⁸The puzzle was discussed under the title of Kripke's puzzle in the first chapter

to designate the **meaning** possessed by the subject (as will be explained in the next section). To say that grasping the customary **meanings** is neither sufficient nor necessary for the mechanism of referring to work does not mean that they can never contribute to the biphasic mechanism of referring.¹⁹ The aim was to show that the monophasic mechanism of referring cannot correctly describe the way that proper names refer in the scope of attitude verbs.

The scenario of Two Tolstoys and the case of Paderewski show that the mechanism of reference and the **meaning** is different regarding names in the scope of attitude verbs. The notion of A-**meaning** and biphasic mechanism of reference fulfill some of our intuitions about the names in these scopes.

In the next section, we explain how an ascriber can designate the customary **meaning** possessed by the subject.

6.2.3 The Process of Designation

In this subsection, we are going to examine two ways by which the ascriber can designate the **meaning** possessed by the subject of report. There are at least two ways by which an ascriber can designate the customary **meaning** possessed by the subject: 1. by referring to her usage of the name 2. by using a definite description of the **meaning** possessed by the subject. We explain both of these ways in this subsection.

When a language user uses a name, she does not explicitly state the **meaning** of that name grasped by her. For instance, assume that a language user is justified in knowing Plato as “the pupil of Socrates” and refers to Plato via this justified description. She does not explicitly express this description, namely “the pupil of Socrates”, each time that she uses the name “Plato”. Therefore, the hearer may not know by exactly which justified description the speaker is referring. However, it is possible to designate the **meaning** grasped by her by designating her usage. Without the **meaning** of a name, the language user cannot competently use that name. Hence, each correct usage of a name is associated with the **meaning** of that name grasped by that user.

The primary way for an ascriber to designate the customary **meaning** of a name possessed by the subject is by being exposed to the subject’s usage of that name. Each usage of a name is associated by the justified description(s) of the reference of that name which is known by the user of the name. Hence, the **meaning** of a name possessed by a language user can be referred to by referring to her usage of that name.

For instance, consider Amy who just spoke with Peter about Paderewski as a musician and does not know anything about Peter’s other set of descriptions of Paderewski. By referring to Peter’s usage of “Paderewski”, Amy can designate

¹⁹It is possible to compare the role of customary **meaning** in the biphasic mechanism with the role of definite description in causal-historical theory of reference. In Kripke’s theory definite description may play a role in fixing the reference in the baptizing ceremony. However, the baptizer can also baptize the object by pointing to it. Therefore, in Kripke’s theory descriptions can also play a role in the mechanism of reference but knowing them is neither sufficient nor necessary for the causal-historical mechanism to function.

one of the **meanings** of Paderewski possessed by Peter. She does not need to know the other **meaning** by which Peter refers to Paderewski.²⁰ The following ascription as stated by her will be about Paderewski-the-musician and not the other one.

(5) Peter believes that Paderewski has musical talent.

Now assume that an ascriber has been exposed to the subject's usage of the name. The question is what the ascriber needs to know in order to refer to that usage. Our suggestion is that the ascriber can refer to that usage in the way that we refer to objects in the world: by knowing a justified description of that usage. For instance, we can refer to the **meaning** of Plato as possessed by Aristotle since we can provide a justified description of his usages, e.g. we can quote his usage of the name in his book *Metaphysics*.

Hence, the A-**meaning** of the name can be a justified description of the usage of the subject. Thus, the ascriber will be able to refer to the **meaning** associated with a particular usage by referring to that usage. In this case, *the ascriber does not need to have any explicit information about the very justified description used by the subject of the report*. This is the way by which Arthur is able to designate the customary **meaning** of Tolstoy possessed by the scholar of Russian literature in the case of two Tolstoys. In the conversation, he is exposed to the scholar's usage of name and therefore he can have a justified description about his usage of the name and therefore he can designate the **meaning** of Tolstoy as grasped by him.

However, there is also a second way to designate the **meaning** possessed by the subject. We are also able to ascribe a belief to subjects, without being exposed to their usages of names. For instance, we might talk about the beliefs of Aristotle concerning Zoroaster:

(6) Aristotle believed that Zoroaster was Persian.

As far as I know, there is no text in which Aristotle talked about Zoroaster. Assume that Aristotle actually possessed a **meaning** of Zoroaster. We can not refer to that **meaning** via designating Aristotle's usage of the term "Zoroaster" since his usage is not available for us. However, we can also designate Aristotle's customary **meaning**, by which he refers to Zoroaster, by the aid of a *definite description* of that **meaning**. For instance, "*the meaning by which Aristotle refers to Zoroaster*" denotes the set of justified descriptions that Aristotle associated with the a linguistic a linguistic expression whose reference was Zoroaster.²¹ In this case the A-**meaning** of the name is that definite description. For the ascriber to use this kind of descriptions, he needs to be able to competently use the name "Zoroaster". Nevertheless, if an ascriber is confused about Zoroaster, he will *not* be able to designate the **meaning** by which Aristotle referred to Zoroaster by using this description. The reason is that she uses the very name

²⁰If Amy is exposed to both of the usages (Paderewski-the-politician and Paderewski-the-musician), she needs to realize that the term "Paderewski" **is used** with the intention to refer to two different persons. Otherwise, she will be confused about the **meanings** possessed by Peter in the way that Emma was confused about two John Smiths.

²¹We do not need to know the linguistic expression used by Aristotle as the name of Zoroaster.

“Zoroaster” in the definite description to denotes the **meaning** possessed by Aristotle. In case, she cannot use the name “Zoroaster”, she will not be able to formulate that description. Therefore, we can see that the customary **meaning** possessed by the ascriber can play a role in the biphasic mechanism of reference by contributing to the process of designation.

However, the problem with the designation of the **meaning** with definite descriptions is that it might fail to designate a single **meaning** if the agent has associated two set of justified description with the name which refer to the same individual. For instance, imagine an ascriber who can competently refer to Paderewski, but has not been exposed to Peter’s usages of Paderewski and does not know that he has associated two different sets of justified descriptions with Paderewski. In this case, the ascriber cannot designate the **meaning** possessed by Peter by using the following definite description: “the **meaning** of “Paderewski” that Peter has grasped”. Two different **meanings** satisfy this description and the ascriber cannot distinguish them without knowing that for instance Peter thinks there are two Paderewskis: one of them is politician and the other is musician.

According to our discussion in this subsection, the A-**meaning** of the name in the that-clause of PNs is what the ascriber needs to know in order to refer to the **meaning** of that name possessed by the subject. It has been suggested that the ascriber can refer to that **meaning** either by knowing a definite description of it or by knowing a justified description of the usage of the name associated with that **meaning**. These two can be seen as the A-**meanings** of a name.

In this subsection, we tried to explain two different ways that an agent can designate the **meaning** possessed by another agent. The explanation is not complete and needs further elaboration. However, it gives an outline of the way that such a process can be characterized. In the next section, we will discuss the consequence of the theory that has been outlined in this section for the semantic content of PNs.

6.3 The semantic content of PNs

In the previous section, we formulated a theory about the competence-condition of PNs. It has been said that the ascriber needs to designate the customary **meaning** possessed by the subject of the report in order to competently use a PN. In this section, we aim to examine the consequence of that discussion for the semantic content of PNs.

It is suitable to first briefly review some of our conclusions from the discussions of the other theories in the previous chapters. In the second chapter, we showed that those theories which reject the Millian theory of names²² face serious problems. In particular, we mentioned arguments formulated by Kripke in his book *Naming and Necessity*. Therefore, we took the semantic contribution

²²As has been already explained, according to the Millian theory the semantic content of a name is its reference.

of the names to that-clauses (or any other sentences) that contain them to be just their reference.

In the third chapter, we argued that a notion similar to “the mode of presentation” is needed to provide a plausible account of PNs. Without using such a notion, it is not possible to solve the reformulation of Frege’s puzzle provided by Salmon. It has been argued that such a notion should not be unconstrained. Otherwise, it cannot exclude irrelevant cases such as the one that we saw in the example of Xperus (see the discussion of Salmon’s view in the third chapter).

In the fourth chapter, we saw that Richard provided an account of PNs by taking linguistic expression to be part of the content of that-clauses. We argued that his approach is also misguided since it tries to neglect the role of cognitive factors in explaining attitude-ascriptions.

In this section, we try to formulate a theory which respects the above observations. The theory that we are going to formulate has some similarities with that of Salmon. Therefore, we first briefly repeat his analysis of attitude-report sentences and its shortcomings. Consider the following ascription as stated by Maria who is a historian of astronomy:

(i) Ancient astronomers believed that Phosphorus shines in the morning.

Salmon claims that the “semantically encoded information”²³ of the that-clause of (i) is a singular proposition. However, this proposition is grasped under a certain guise. He analyzes (i) in the following way.

(ii) There is a guise and ancient astronomers grasped the semantic content of “Phosphorus shines in the morning.” under that guise and ancient astronomers believed under that guise that Phosphorus shines in the morning.

The important point about his analysis is that the ascriber (who is Maria in the above example) does not need to know that guise. The report, as stated by her, just says that the content of “Phosphorus shines in the morning” is believed by astronomers under a certain guise. Therefore, there is no difference between the semantic content of (i) and (iii) as stated by Maria:

(iii) Ancient astronomers believed that Hesperus shines in the morning.

According to Salmon, an ascription is true if the subject believes the singular proposition expressed by its that-clause under a certain guise. Since there is no difference between the singular proposition expressed by the that-clauses of (i) and (iii), they have an identical semantic content and truth-value. This is the first counterintuitive consequence of Salmon’s view: He denies the Fregean point that (i) and (ii) might have different truth-values. As can be seen, Salmon’s analysis is not sensitive to the very guise used by *the ascriber* to grasp the content of that-clause. For him, the ascriber just needs to express a singular proposition which is believed by the subject (under a certain guise). Therefore, it is possible that the proposition expressed by the that-clause is grasped via two completely different guises by the ascriber and the subject.

Salmon’s theory has also another counterintuitive result. In the last section, we reexamined Paderewski’s puzzle. It has been said that intuitively for a report to have clear truth-condition, it needs to be about one of Peter’s conceptions

²³By “semantically encoded information”, Salmon means semantic content.

of Paderewski and not the other. This is not the case in the analysis provided by Salmon. For instance, assume that James has talked about Paderewski-the-politician with Peter and does not know anything about Peter's other understanding of Paderewski. Given Kripke's description of his scenario, intuitively, the following ascription is false as stated by James:

(iv) Peter believes that Paderewski has musical talent.

Peter might have numerous names for an object, without realizing that they are names of a single object and he might have different and even contrary beliefs about that object associated with each of these names. Normally, we do not take all those beliefs to be relevant in the evaluation of a report of his beliefs. In the above case, James report concerns the only understanding of Paderewski by Peter to which he has been exposed: Paderewski-the-politician. Peter's belief about Paderewski-the-musician is not relevant to our evaluation of the above report. As has been said, Peter might have countless different names for Paderewski without realizing that they are the name of the same person. In the evaluation of a report of Peter's belief, we first need to determine about which of the names the report is. Therefore, the ascriber needs to intend to talk about one the names or guises possessed by Peter. Otherwise the report lacks a clear semantic content.

Assume that we accept Salmon's point that the semantic contribution of a that-clause to the PN containing it is just a singular proposition. A theory that satisfies all our intuitions about PNs has the following characteristics: 1. it needs to be sensitive to the guise by which the subject grasps the singular proposition 2. it holds that a report is true if the subject believes the content of that-clause under the guise that is intended by the ascriber. Such a theory will consider a report true, provided that the subject believes the content of that-clause under the relevant guise. By the relevant guise, we mean the guise which by is designated the ascriber. Here, we repeat that guises are part of the semantic content PNs; however, they are not part of the semantic content of the that-clauses of PNs.

In the discussion of the competence-condition of sentences containing proper names, we said that the agent needs to grasp the **meaning** of names in those sentences to competently use and understand them. Here, we can see some similarities between Salmon's conception of guise and **meaning** of the names in sentences. The guise is something *under* which the agent grasps "the semantically encoded information" expressed by a sentence. We also suggest that in order to understand and use a sentence containing proper names, we need to grasp the **meanings** of the names in that sentence. The **meaning** of the names in a sentence helps us to determine the reference of those names and therefore they help to determine the truth-condition of that sentence. The truth-condition of the sentence is "the semantically encoded information" expressed by it. Thus, it is plausible to say that we grasp the "the semantically encoded information" expressed by a sentence containing proper names *under*²⁴ the **meanings** of

²⁴The expression "grasping under the **meaning**" might seem rather unfamiliar to the readers. By using this expression, our aim is to keep the analogy between Salmon's formulation

those names.

Our suggestion is to take **meanings** to play the role that guises play in Salmon's theory. Assume that we want to report an attitude of a subject by a PN. In reporting an attitude, two **meanings** are involved. The customary **meaning** possessed by the subject of the report and the A-**meaning** possessed by the ascriber. As has been said the **meaning** can be designated by the A-**meaning**. These two notions can help us to analyze (i) in the following way:

(v) There is a **meaning**²⁵ which is designated by the ascriber and ancient astronomers grasped the semantic content of "Hesperus shines in the morning." under that **meaning** and ancient astronomers believed under that **meaning** that Hesperus shines in the morning.

The above characterization has two important differences from Salmon's characterization. First, we used the notion of **meaning** instead of guise, which has been clearly defined. Second, it states that the ascriber needs to designate the **meaning** under which he claims the semantic content of that-clause is believed by the subject.

In the next section, we try to solve the puzzles by using this analysis of the semantic content of PNs.

6.4 Two Puzzles reconsidered

In this chapter, we tried to develop a theory about the competence condition and semantic content of PNs. The upshot was that the ascriber needs to grasp the A-**meaning** which helps him to designate the customary **meaning** possessed by the ascriber. Moreover, we tried to take the **meaning** to be part of the semantic content of PN, without taking it to be part of the semantic content of that-clause. In this section, we examine the consequence of our theory for the puzzles.

6.4.1 Frege's Puzzle reconsidered

At the beginning of the previous chapter, we said that the assumption that two co-referring proper names are intersubstitutable *salva veritate* is based on two assumptions: (1) the semantic content of names are their referents (2) the substitution principle. Most of the theories that appeal to the notion of the "mode of presentation" reject the first of these two assumptions. Frege takes the sense as the semantic content of names in the scope of attitude verbs. Richard takes the *vey* linguistic expression to be part of the semantic content of the name within and outside these scopes. Therefore, we can see that philosophers have tried to solve the puzzle by giving an alternative theory about the semantic content of that-clauses.

This option is not available for us since we have already said that **meaning** is not part of the semantic contribution of a name to the that-clause. However,

and our theory.

²⁵Here, by **meaning**, we mean the customary **meaning**, which is a set of justified beliefs.

considering the **meaning** of names might help us to provide a more accurate explanation of the case. Assume that Maria is able to distinguish the **meanings** of Venus possessed by ancient astronomers. Consider the following reports as stated by Maria.

- (i) Ancient astronomers believed that Hesperus shines in the evening.
- (ii) Ancient astronomers believed that Phosphorus shines in the evening.

The intuition behind Frege's puzzle is that the truth-values of the above ascriptions are different. Now, consider the following analysis of (i) and (ii):

(iii) There is a **meaning** which is designated by the ascriber and ancient astronomers grasped the semantic content of "Hesperus shines in the evening" under that **meaning** and ancient astronomers believed under that **meaning** that Hesperus shines in the evening.

(iv) There is a **meaning** which is designated by the ascriber and ancient astronomers grasped the semantic content of "Phosphorus shines in the evening" under that **meaning** and ancient astronomers believed under that **meaning** that Phosphorus shines in the evening.

According to the above analysis, (iii) is true since ancient astronomers believed the content of its that-clause under the **meaning** which is designated by the ascriber (i.e. Maria). (iv) is not true since ancient astronomers did not believe the content of its that-clause under the **meaning** designated. Therefore, "Hesperus" and "Phosphorus" are not interchangeable *salva veritate*.

There is one important point that should be mentioned here. The linguistic expression that is used in the report by the ascriber does not matter. What makes a report true or false is the **meaning** of the subject through which the ascriber intends to refer. We can imagine a language in which they do not have the two terms for "Venus" and are still able to distinguish (i) from (ii). Exactly in a way that we can distinguish between two uses of the expression "Aristotle"²⁶.

However, we can see that "Hesperus" and "Phosphorus" are exceptional to some extent. We usually define a term based on its semantic content. For instance, we define the term "tiger" as the name of the kind animal which has this or that descriptive feature. Usually, we do not define a term as the name for an object about which certain people have this specific belief. In other words, we do not take one of the **A-meanings** of an expression to be part of the definition of a name. In this respect, "Hesperus" and "Phosphorus" are exceptions. They are defined based on a **A-meaning** associated with them. Hence, using one of them by the ascriber also informs us about the **A-meaning** that she has in mind. This is the reason that we stated that "Hesperus" and "Phosphorus" are not interchangeable *salva veritate*.

Here, we can see that our account accomplishes the goal that Soames tried to achieve. He tried to make the following assumptions compatible: a) two co-referring are not interchangeable *salva veritate* b) the semantic content of names are their referents. We tried to solve the puzzle without rejecting either

²⁶As used to refer to the great ancient philosopher or to the second husband of Jacqueline Kennedy.

of these assumptions. In our theory, the semantic contents of both “Hesperus” and “Phosphorus” are their referent which is Venus. However, they are not interchangeable *salva veritate*. In the next subsection, we examine Kripke’s puzzle.

6.4.2 Kripke’s puzzle reconsidered

In this subsection, we suggest a solution to Kripke’s puzzle. In the example introduced by Kripke, Pierre does not know that the references of “Londres” and “London” are the same. He rationally has contrary beliefs about them. He takes the first one to be pretty and the second one not to be pretty. The question is how it is possible for an ascriber to report Pierre’s attitudes. Assume that an ascriber state the following ascription:

- (i) Pierre believes that London is pretty.

It is not clear whether the above ascription is the report of Pierre’s beliefs about “London” or “Londres”. There are two problems concerning Kripke’s puzzle that need to be solved. First, we need to clarify in which sense Pierre is rational in believing that “Londres est jolie” and “London is not pretty” at the same time. Moreover, we need to explain how it is possible to meaningfully report Pierre’s attitudes.

In order to solve the first problem, we can say that the two seemingly incompatible attitudes are not about the same object²⁷ since the semantic content of “Londres” and “London” as used by Pierre is different. The *other* way is to say that they are about the same object *but in different ways*. By this, we mean that Pierre *characterizes London in two different ways*. The difference in his beliefs about “London” and “Londres” are not due to the different semantic contents of these two names but due to different way that he refers to these objects. A subject can rationally have different attitudes about the single object, provided that she characterizes that object in different ways and does not realize that they are different characterization of the same object.

As has been said, the notion of **meaning**²⁸ is related to the way that a language user refers to an object. For instance, the reference of “Cicero” in the sentence “Cicero was an orator” as stated by James is determined by James **meaning** of Cicero. Kelly might have a different **meaning** of Cicero and therefore determine the reference in another way. These different ways of determination does not necessarily influence the content as far the mechanism of referring properly functions. It is also possible to say that a person may have different **meanings** of a single object. Therefore, the content of his beliefs²⁹ about that object are determined in two different ways. In the above example, Pierre has

²⁷The object of an attitude is what the attitude is directed at.

²⁸Here, we mean customary **meaning**.

²⁹By the expression “the content of his belief”, we mean the proposition which is believed by him. For instance, if Jay believes “Paris is the capital of France”, the content of his belief is the proposition expressed by this sentence (i.e. the truth-condition of this sentence). Given this explanation, the **meaning** of “Paris” is not part of his content of belief, although it functions like a guise under which Jay grasp the truth-condition of “Paris is the capital of France”.

two different **meanings** which refer to London and the content of his beliefs are determined in two different ways. It is true that the very content of his beliefs “Londres est jolie” and “London is pretty” are not compatible. However, Pierre rationally believes both of these contents since he has different **meanings** of London.

According to the above picture, the subject can rationally have contrary beliefs about a single object if he characterizes it by different **meanings**. However, it is *not* rational for a single agent to have contrary beliefs concerning an object that he characterizes in a single way. Hence, we cannot take **meanings** (which are our ways of characterizations) to be definite descriptions. The reason is that, as Kripke rightly notes, Pierre might use a single definite description to characterize London and still be rational. For instance, he might use “the capital of England” and its French equivalent to characterize the city without realizing that they have the same meaning. Therefore, *merely* appealing to definite descriptions as the ways of characterization cannot help us to explain why Pierre is rational.

The theory of **meaning** that was developed in the previous chapter can help us to solve the above problem. According to the justificationist theory, an agent can refer to an object by grasping a justified description of it. An agent might have two set of justified descriptions in mind whose descriptions have the same content but have been justified in different ways. Two justified descriptions are different as far as they are in different justificatory relations. In the above example, Pierre is not in a unique justificatory relation with London. He can rationally have contrary beliefs about London as far as he takes those two sets of descriptions to be about two different cities.

So far, we have distinguished between Pierre’s attitude based on the **meanings** by which Pierre characterizes London. Now, we can address the second problem. According to our theory about semantic content of PNs, the ascriber needs to designate and to intend to refer to one of the **meanings** possessed by Pierre. In this way, the semantic content of (i) will be the following:

(ii) There is a **meaning** which is designated by the ascriber and Pierre grasps the semantic content of “London is pretty” under that **meaning** and Pierre believes under that **meaning** that London is pretty.

The truth-value of the above ascription depends on the ascriber. If the ascriber has designated the **meaning** associated with “Londres” and intend to report on beliefs of Pierre concerning that, the report is true. However, if he intend to report about Pierre’s beliefs which is associated by the **meaning** of “London”, the report is false.

6.5 conclusion

In this chapter, we tried to develop a theory about the semantic content and competence-condition of PNs. We tried to take into account our conclusions from the discussions of other theories in previous chapters into account. At the end, we used these two theories to solve both puzzles about PNs.

Chapter 7

Conclusion

This thesis was concerned with de dicto reports of propositional attitudes whose that-clause contains at least one proper name. In the first chapter, we explained two puzzles formulated by Frege and Kripke concerning these reports. Then, we categorized different theories about propositional attitude reports based on their strategy to solve Frege's puzzle. We critically surveyed these solutions in the second, third and fourth chapters. In the fifth chapter, we outlined a theory about referential use of descriptions. Then we sketched a theory about the mechanism of reference and the **meaning** of proper names. These theories are not yet fully developed. Particularly, because we left open the question about the nature of justifications, which play an important role in our theory. In the last chapter, we outlined a semantic theory of propositional attitude reports based on our discussion in the fifth chapter. At the end, we showed that the two puzzles can be solved by the help of our theory about semantics of propositional attitude reports.

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