Is Kripke's Puzzle about Belief a Genuine Puzzle?

Denis Kazankov
University of Leeds

1. Introduction

According to strict Millianism, the meaning of proper names is exhausted by their reference. In other words, the content of a name such as 'J.S. Mill' is nothing more than the actual referent of the name, i.e. the very person who is J.S. Mill. This position entails the principle of substitutivity of co-referential names, meaning that if two names are co-referential, then they are mutually substitutable in all contexts without the change in the truth value of the sentence in which they occur. However, one can provide the following reductio ad absurdum argument of this principle when it is applied to attitude reports[1]:

---

1 Attitude reports are reports on attitudes of a speaker X with the content expressed by a 'that'-clause Y, such as 'X believes that Y', 'X doubts that Y', or 'X assumes that Y'.

1. The principle of substitutivity of co-referential names obtains. (Assumption for Reductio ad absurdum)

2. Smith believes that George Orwell was a writer. (Premise)

3. Smith does not believe that E.A. Blair was a writer. (Premise)

4. (Unbeknownst to Smith) 'George Orwell' and 'E.A. Blair' are co-referential names. (Premise)

5. 'George Orwell' and 'E.A. Blair' are mutually substitutable in all contexts. (1, 4, Modus ponens)

6. Smith does not believe that George Orwell was a writer. (1, 3, 5)

7. Smith believes that George Orwell was a writer and Smith does not believe that George Orwell was a writer. (2, 6, Conjunction introduction)

8. The principle of substitutivity of co-referential names does not obtain. (4, 7, Reductio ad absurdum)

As we can see, this argument severely threatens the principle of substitutivity of co-referential names, which is assumed at line 4 and subsequently denied at line 8 because the line 7 shows that a contradiction can be derived from it. However, the principle is a necessary condition for strict Millianism to be true, so the reductio ad absurdum, at least, appears to object to strict Millianism. Consequently, strict Millianism about proper names appears to be an untenable theory.

Kripke (1979, 248-283) attempts to show that the above reductio argument does not undermine strict Millianism. This is because, regardless of whether we accept strict Millianism, the same kind of contradiction as in the aforementioned argument can be derived even without the principle. If that is the case, then the occurrence of proper names inside 'that'-clauses presents a more general problem about the behaviour of 'that'-clauses which does not stem from the principle of substitutivity. Accordingly, the fact that the principle of substitutivity leads to the contradiction is merely one of the consequences of this problem instead of its primary cause.

In this paper, I argue that Kripke's puzzle does not present a genuine puzzle because Kripke's attempt to derive a contradiction from 'that'-clauses without the principle of substitutivity is in fact fallacious. In Section 2, I introduce the puzzle. In Section 3, I lay out the idea of multiple references and semantic entities called 'constructions'. In addition, I explain how constructions differ from less fine-grained semantic entities called 'propositions'. In Section 4, I employ these two concepts for arguing against Kripke's puzzle. I argue that 'that'-clauses refer to either propositions

or constructions. I also contend that the decision regarding which of these two entities 'that'-clauses refer to depends on how accurately the speaker wants to describe the understanding of the subject towards the content of her attitude. I then show that if 'that' clauses refers to propositions, the contradiction in Kripke's puzzle turns out to depend on the principle of substitutivity after all. By contrast, if she refers to constructions, the contradiction cannot be derived, so the puzzle does not arise. In Section 5, I discuss possible objections to my argument.

2. Kripke's Puzzle about Belief

Kripke (1979, 248-252) introduces the following two principles, which are supposed to be unrelated to Strict Millianism:

Principle of Disquotation: If a normal speaker, on reflection, sincerely assents to a sentence P, then she believes that P.

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).

With this in mind, Kripke (1979, 253-254) asks us to imagine the following case:

There is a French speaker called Pierre that has lived all his life in France, has nearly zero knowledge of English and has never heard about the city called 'London' but only about the city called 'Londres'. Therefore, Pierre does not realise that the two cities are identical. As he has repeatedly heard that Londres is pretty, he assents to the statement 'Londres est jolie'. Then, one day, he suddenly moves to London and starts learning English directly on the spot. After a time, Pierre masters English but still does not realise that 'Londres' and 'London' are translations of each other. Moreover, he finds the city in which he now lives extremely unattractive, and therefore he is likely to assent to the statement 'London is not pretty'. Using the principle of disquotation, we can now infer the following two propositions:

(1) Pierre croit que Londres est jolie.[2]
(2) Pierre believes that London is not pretty.

_____
2 'Pierre croit que Londres est jolie' is the French translation of 'Pierre believes that London is pretty'.

Next, using the principle of translation, we can infer from (1):

(3) Pierre believes that London is pretty.

And from (2) we can infer:

(4) Pierre does not believe that London is pretty.

It is apparent that (3) and (4) are contradictory propositions, to which we now become committed. So according to Kripke (1979, 254-267), these two principles, in conjunction, challenge the principle of substitution. Therefore it is reasonable to seek a deeper common source of the problem that lies behind all these seemingly unrelated principles rather than to put blame on any of them separately. However, Kripke leaves it open as to what this source could be.

3. The Thesis of Multiple References and Constructions

In this section, I will briefly introduce the idea of multiple references and the concept of constructions, as both of them will figure in my argument in the following section.

Firstly, the idea of multiple references can be summarised as follows: Expressions can refer to not only extensional objects, but also higher semantic entities such as intensions.[3]

The possibility of referring to higher-level semantic entities can be expressed as follows: It is a mistake to think of higher-level semantic entities as nothing more than mediators between words and extensional objects to which these words become related by means of reference. But what is a possible reason for believing this idea?

The first person who expounded this idea was Frege (1997, 153-161) when he argued that the reason why the principle of substitutivity does not work in the attitude reports is because 'that'-clauses refer not to their truth values but to their ordinary senses. Consequently, all words in 'that'-clauses refer to their ordinary senses instead of their ordinary referents. Frege's view that words in 'that'-clauses refer to their ordinary senses instead of their ordinary referents seems to be the ad hoc move, which

3 In accordance with Strawson's view (1950, 326) that expressions cannot refer by them-
selves but must be used for referring by someone, I deliberately mention the speaker who
uses expressions.

was contrived mainly in order to preserve the principle of substitutivity. Many argue that it retains the principle of substitutivity at the expense of the equally important principle of semantic innocence: the reference of an expression should remain constant regardless of the context in which it is embedded.[4] In order to justify the idea of multiple references, we need to show that there is a better reason for depriving our language of semantic innocence than preserving the principle of substitutivity. Otherwise, the debate will reach deadlock because each side will just hold to one of the two principles, insisting that their principle plays a more pivotal role in semantics than the other. A breakthrough solution for the defenders of the idea of multiple references is to provide a deeper explanation of why semantic innocence should be sacrificed. That is to say, there must be something about the reality of the referred things that makes the speaker shift the direction of her reference. Presumably, as the shift of reference only regularly happens in attitude reports, it must be grounded in the speaker's decision to capture some distinctive aspect of the cognitive relation between the content of the given attitude and its bearer. In the next section, I will try to provide such an explanation.

Secondly, I will adopt in this paper a particular account of structured propositions as 'constructions' which was developed by Tichý (1988, 1-41). Structured propositions are traditionally understood as complex entities that are semantic values of sentences that can be parsed into constituents that are connected in a certain structured way.[5] One example that shows that constructions are not redundant semantic entities is that they enable us to explain why the sentences 'Pierre is French' and 'Pierre is French and London is London' have distinct semantics. As long as the meanings of these sentences are equated to intensional propositions, i.e. functions from possible world-times to truth values, it follows that the two express the same proposition as they have the same truth value in every possible world-time. However, once we acknowledge that sentences also depict procedures of how these propositions are constructed, it becomes clear that the two sentences differ in their constructions. For example, the structured proposition expressed by the sentence 'Pierre is French' can be broken down into two constituents, namely, Pierre himself and the property of being French that is ascribed to him. This conception of propositions runs against the intensional account of propositions, according to which propositions are nothing but the bearers of truth-values. The intensional account of propositions is less fine-

4 See, for instance, Barwise and Perry (1981) or Davidson (1968).
5 See Soames (1986), or Creswell (1985) for some examples of the standard explication of structured propositions.

grained than the structural one because nothing about the structure and constituents of propositions is taken into account there.

Tichý takes the conception of structured propositions one step further by arguing that there is a systematic relation between constructions and intensional propositions. In particular, Tichý (1988, 14) introduces constructions as entities that present a step-by-step structured process that leads to the formation of intensional semantic entities. Since intensions are defined as functions that map one extensional entity to another one (for example, propositions are functions mapping world-times to truth values), constructions can be said to present the process through which intensions are applied or abstracted from their extensional values.[6] One reason why constructions are not redundant semantic entities is that they enable us to explain why the sentences 'Pierre is French' and 'Pierre is French and London is London' have distinct semantics. As long as the meanings of these sentences are equated to intensional propositions, it follows that the two express the same proposition as they have the same truth value in every possible world-time. However, once we acknowledge that sentences also depict procedures of how these propositions are constructed, it becomes clear that the two sentences semantically differ in the way they are constructed. This is because the latter sentence depicts an additional identity-relation that London, as its constituent, bears to itself. Hence, it follows that the procedure of constructing the proposition expressed by 'Pierre is French' is clearly different from the procedure of constructing the proposition expressed by 'Pierre is French and London is London', even if the two propositions have equivalent truth values.

4. The Argument against the Puzzle

We are now equipped with all the necessary conceptual resources for solving Kripke's puzzle. It is reasonable first to ask what kind of entity Pierre's beliefs are related to in the puzzle. To answer this question, we need to scrutinise what the 'that'-clauses in attitude reports are used to refer to.

Four options come into view:

I. They refer to truth values.

---

6 Tichý (Ibid, 63-77) then provides a very elaborate explication of the process of constructing intensions, which is however beyond the scope of this paper.

II. They do not refer to anything; Pierre is in direct relation to 'that'-clauses.[7]

III. They refer to propositions as intensional entities. [8]

IV. They refer to the constructions of propositions.

The first option is obviously unsatisfactory because it is unfathomable how truth values could serve as the contents of beliefs. In that case, we could not distinguish between the various contents of a belief since truth values, unlike other candidates for reference, do not reveal any discriminate piece of information.

Regarding the second option, 'that'-clauses are not semantic entities, so they cannot be the contents of beliefs, but only their objects. Therefore, the second option would at best lead us to acknowledge that in (1) and (2), Pierre can have beliefs, the objects of which are the clauses 'Londres est jolie' and 'London is not pretty,' without necessarily understanding their meanings. In fact, Pierre could believe these clauses even without any knowledge of the languages to which they belong; for example, because they were uttered by a person whose opinion Pierre gives high credence to. However, Kripke himself (1979, 249) notes that Pierre in (1) and (2) understands the meaning of the clauses when he specifies the principle of disquotation:

'The qualification "on reflection" guards against the possibility that a speaker may, through careless inattention to the meaning of his words or other momentary conceptual or linguistic confusion, assert something he does not really mean, or assent to a sentence in linguistic error.'

For this reason, we should be able to derive (1) and (2) from the principle of disquotation only if Pierre understands the meaning of the clauses to which he assents. Therefore, it is better to relate Pierre to a semantic entity which, unlike 'that'-clauses, reflects Pierre's understanding of the clauses.

We are left with two remaining options. I think that it is possible for both propositions and constructions to represent the content of Pierre's beliefs, but the better representation is the one that more accurately reflects how the subject understands the content of 'that'-clauses. We should first ask whether the reference to a proposition or reference to a construction of the proposition as the content of Pierre's beliefs better reflects his understanding of that content. I want to argue that

---

7 Perhaps the most famous proponent of the view that the objects of attitudes are 'that'-clauses is Davidson (1968).

8 This position corresponds to the one that was defended by Frege (1997).

there are two kinds of understandings, and both of them must be primarily related to constructions.

Firstly, I stipulate the definition (A) of what I call 'the minimal understanding of the meaning of a sentence'.

(A) X minimally understands the meaning of a sentence in a language if and only if X knows what construction a given sentence depicts in that language.

Minimal understanding is the kind of understanding that a speaker possesses in relation to a sentence and a construction depicted by that sentence in the particular language to which this sentence belongs, and for possession of which one does not have to minimally understand any translation of the sentence to another language. As we have seen, Pierre has the minimal understanding of 'that' clauses in (1) and (3) even if he does not realise that they are translations of each other.

Secondly, I want to formulate what it means for a speaker to understand that a sentence in one language is identical to a sentence in another language. I call this kind of understanding 'the relative understanding of a meaning of a sentence', and I suggest that the understanding of 'London is pretty' relative to the French language can be defined by (B):

(B) X understands the meaning of the sentence 'London is pretty' relative to the French language if X has a minimal understanding of the sentence and knows that this sentence is translatable to the sentence 'Londres est jolie'.

Relative understanding of the meaning of a sentence can be assessed only in relation to a particular language. It requires that the speaker knows that a sentence in a particular language is translatable to a different one. This is the condition that Pierre does not fulfill because he understands neither 'London is pretty' relatively to French nor 'Londres est jolie' relatively to English.

Now, why do constructions have to be mentioned in the definitions of minimal understanding and relative understanding? Well, imagine that we would modify our definition of the minimal understanding to (C) by replacing the role of constructions with propositions.

(C) X minimally understands the meaning of a sentence in a language if and

only if she knows what proposition a given sentence expresses in that language.[9]

Next, let us introduce the following two sentences:

(5) London is not pretty.
(6) Londýn nie je krásny. (the translation of (5) to Slovak)

(5) and (6) express identical propositions since they have the same truth value in each possible world-time to which they are applied.

By applying our definition to Pierre's minimal understanding of (5) we get

(C*) Pierre minimally understands the meaning of the sentence 'London is not pretty' in English if and only if he knows that the sentence expresses the proposition that London is not pretty.

Next, even if we reject the principle of substitutivity of co-referential names by the reductio argument in Section 1, we can still stipulate the restricted principle of substitutivity of co-referential expressions: If two expressions which are co-referential are embedded in the 'that'-clause of attitude reports, they are mutually substitutable provided that the possessor of the attitude knows that these expressions are co-referential.

The restricted principle of substitutivity is not subject to the same kind of the reductio argument as the original principle, as Smith in this argument does not know that 'George Orwell' and 'E.A. Blair' are co-referential. Therefore, it seems acceptable.

Now, we can imagine that Pierre is a fluent speaker of both Slovak and English and knows that (5) and (6) express identical propositions. By the restricted principle, we should be able to infer salva veritate:

(C**) Pierre minimally understands the meaning of the sentence 'London is not pretty' in English if and only if he knows that the sentence expresses the proposition expressed by 'Londýn nie je krásny'.

9 This is not the only way how we can formulate a definition of understanding which is based on propositional knowledge. For alternative models of understanding, see Longworth (2009).

33

The reader has probably mixed feelings towards (C**). Even if we would like to argue that it is true, it still seems to be at least misleading. After all, even though Pierre knows that the propositions (5) and (6) are identical, we would wonder why (C**) suggests that any knowledge about the Slovak sentence 'Londýn nie je krásny' is required for Pierre's understanding of the English sentence. However, this time it is not so easy to claim that (C**) presents just the reductio ad absurdum of the restricted principle. In the original reductio argument of the principle of substitutivity, we could say that the principle of substitutivity does not work because Smith does not realise that 'George Orwell' and 'E.A. Blair' are co-referential. In contrast, even if we judge (C**) as being false and (C*) as being true, it is difficult to give an equally sensible and generalisable explanation of this phenomenon.

Why do I think that (A) and (B) do not lead to an equally troublesome consequence? As mentioned at the end of the third section, constructions (defined as procedures through which intensional entities such as propositions are formed) are more fine-grained semantic entities than propositions, thanks to which we are able to tell that the construction depicted by the sentence 'London is not pretty' is different from the construction depicted by the sentence 'Londýn nie je krásny'. Yet, this claim is controversial. Tichý (1988, p.222) himself thinks that two translatable sentences in different languages depict the same construction. I doubt this view for the following reason: It seems plausible that the construction depicted by the sentence 'not P and not Q' is different from the construction depicted by the sentence 'It is false that P or Q', where P and Q are propositional constants. This is because while two sentences depict identical propositions mutually derivable by one of De Morgan's laws, these propositions are constructed by different procedures. In the case of the former sentence, P and Q are firstly separately negated, upon which they are bound by the conjunction. In the case of the latter sentence, we first bind P and Q by the disjunction, upon which we negate the resultant proposition. So, there is a clear difference in the procedure of constructing these two propositions. In a similar vein, it seems obvious that the same structural change may easily happen in the process of translation between two languages. It is possible to imagine a language which would contain no conjunctive operator such as 'and'. In that case, we could not translate the sentence 'not P and not Q' to this language without a structural modification, and the result of the translation would have to be a sentence which expresses an identical proposition but depicts a different construction. Or else, we can imagine that the sentence '¬∀xPx' ('not everything is P') would be translated to

a language that contains no universal quantifier as '∃x¬Px' ('something is not P').
Again, '∃x¬Px' would be a legitimate translation of '¬∀xPx' even though it depicts a
different construction. Furthermore, it seems that similar cases can be found also in
the translations to actually existing languages. Take the sentence (7) as an example.

(7) The chair is broken.

For the sake of argument, let's accept here Russell's theory of definite
descriptions (1997, p.331) according to which (7), as a sentence containing the definite
description 'the chair', is equivalent to the longer sentence 'there is exactly one chair
and every chair is broken'.[10] Next, imagine that someone wants to translate (7) to
the Japanese language. Since the Japanese language contains no definite or indefinite
articles, the direct translation of (7) 'isu ga kowarete iru' is ambiguous between 'the
chair is broken' and 'a chair is broken'. So if one wants to produce an unambiguous
translation of (7), she had better turn to Russell's theory and translate it instead as (8).

(8) Isu ga chōdo ikkyaku ari, subete no isu ha kowarete-iru (There is exactly
one chair and every chair is broken.)

Consequently, (8) seems to be acceptable as an unambiguous translation
of (7) even though the two sentences radically differ in their structure. Therefore,
translation is a process that can involve a change in the constructions depicted by
translated sentences. If I am right, construction turns out to be the only available
semantic entity which can grasp a possible structural change in translation between
two sentences expressing the same proposition. Therefore, if we applied (A) and
(B) to Pierre's case, we could not substitute the construction depicted by (5) for
the construction depicted by (6). Consequently, constructions seem to be a better
candidate than propositions for featuring in the definitions of minimal understanding
as well as of relative understanding.[11]

---

10 Expressed formally, '∃x (Cx ∧ ∀y (Cy → x=y) ∧ Bx)' where C denotes the property of
being chair and B denotes the property of being broken.
11 Another fact that makes construction a better candidate for the object of understanding
than proposition is that, as Fricker (2003, pp.331-332) points out, it is possible for a hearer
to know what proposition is expressed by a sentence in a foreign language by relying on
someone's else testimony even if the sentence itself sounds to her like meaningless noise,
and thus she does not understand it. By contrast, she does not know what construction the
sentence depicts because this knowledge requires also the knowledge of how different words

It turns out that the understanding of a sentence by a speaker must always be related to constructions, otherwise we can derive by the restricted principle of substitutivity that understanding requires holding the belief which the believer does not seem to hold. Therefore, it follows that only constructions can accurately represent the understanding of the content of an attitude. Before discussing the consequences of this conclusion for Kripke's puzzle, I would like to show that the puzzle fails even if we construe propositions as the representations of the contents of Pierre's beliefs. Even under this reading, the principle of translation implies a variant of the principle of substitutivity applied to sentences belonging to different languages. This is because it requires that we are able to judge when two sentences are mutual translations of each other. One obvious implication of the principle is that two sentences in different languages are mutually translatable only if they are mutually substitutable in all contexts without the change of their truth value. But there are also other less obvious requirements for mutual translatability. For example, even though 'thirty-five plus thirty-five equals seventy' and 'deux plus deux égalent quatre' have the same truth value in all possible world-times, they are not mutually translatable.[12] I suggest that what these two sentences do not fulfil is the additional requirement that all constituents, including names, of the first sentence have to be co-referential with their respective counterparts in the second sentence.[13] So the principle of translation presupposes the principle of substitutivity of co-referential names. Therefore, Kripke does not succeed in showing that contradictions follow from the attitude reports even without the usage of the principle of substitutivity.

Let's now move to the constructional interpretation of the content of attitude reports. Whereas under the propositional interpretation Kripke's puzzle is inefficient, under the constructional interpretation it does not arise in the first place. From our argument above, it follows that the constructions which 'that'-clauses in (1) and (3) refer to are distinct. Thus, (1) and (3) are not substitutable without the change of their truth value, as Pierre can believe that the construction depicted by 'Londres est jolie' without believing the construction depicted by 'London is pretty.' Subsequently, the principle of translation is not applicable to (1) and (3). In response to that, it can be objected that the claim that (1) and (3) cannot be mutually translatable only because

in the sentence are structurally arranged in relation to one another.

12 'Deux plus deux égalent quatre ' is the French translation of 'two plus two equals four'.
13 'It should be noted that even the addition of this requirement does not guarantee the correctness of a translation. As Burgess (2005, 200-201) points out, 'Stalin remained in Moscow' definitely cannot be translated to French as 'Djougachvili restait à Moscou' even though 'Stalin' and 'Djougachvili' are co-referential.

they are attitude reports is untenable. Do I attempt to argue that we should blatantly reject all translations of attitude reports that have been made until now as fallacious? Not at all. To explain, I do not argue against the possibility to refer to propositions instead of constructions by 'that'-clauses. In accordance with the thesis of multiple reference discussed in the previous section, I defend the view that a speaker has the freedom to decide to which of these two semantic entities she wants to refer. When, for example, the speaker ascribes the belief content to Pierre in (1), the decision whether to refer to a construction or to a proposition depends on what implications she wants the sentence to have.[14] On the one hand, when the speaker refers to the proposition, the representation of the content of Pierre's belief becomes only superficial with respect to the information value about Pierre's understanding. That is because (1) then implies that the subject understands the content of her attitude in the form of a certain construction without specifying which construction it is. In (1) this would let it be unspecified whether Pierre understands the sentence under the French or English construction. The speaker can make this reference precisely because she wants to apply the principle of translatability to (1). The cost for doing so is that the proposition will inaccurately represent Pierre's state of understanding of the content of his belief and will make us ascribe two contradictory beliefs to Pierre. On the other hand, when the speaker refers to a construction by a 'that'-clause, the construction is a deep representation of the content of Pierre's belief, and (1) specifies exactly under which construction Pierre believes that London is pretty. However, the new representation becomes too fine-grained to be substitutable for another construction without the change of the truth value. If we substituted it, we would always risk distorting Pierre's way of understanding the content of his belief. It depends on the speaker's cost-benefit analysis to which of these two alternative representations she directs her reference.

It should be noted that even if the speaker of (1) and (2) decides to refer to a proposition, it does not thereby follow that Pierre is irrational. It at most follows that the current representations of Pierre's beliefs are contradictory, but this does

14 It can be objected that strictly speaking, speakers cannot enjoy the freedom to decide what to refer to since most of the speakers are unaware of the distinction between propositions and constructions in the first place. In response to that, we may argue that the aim of the theory of reference is to clarify what is the nature of reference on the assumption that we are dealing with ideal referring agents. The possibilities of reference would be fully transparent to such agents. This seems sensible because the reference of many expressions is frequently far from obvious, and therefore the explanatory power of any theory of reference would be too weak if it was constrained by the epistemic limits of ordinary referring agents.

not exclude the possibility that if the contents of his beliefs were represented by constructions, it would become clear that the negated content of his belief in (2) does not coincide with the content of his belief in (1). For irrationality it is not enough to believe that two constructions lead to contradictory propositions; rather one must believe two constructions that lead to contradictory propositions in spite of knowing that these two constructions do so. Pierre does not meet this requirement as he does not realise that the constructions depicted by 'Londres est jolie' and 'London is not pretty' construct two contradictory propositions because of having a poor relative understanding of these sentences.

5. Possible Objections

At least three objections may be raised against the account that I proposed in the previous section. Firstly, it should be asked how the aforementioned condition for irrationality can cope with the following iteration problem[15]: Under the propositional reading, we end up believing that Pierre both believes and disbelieves that London is pretty, even though, unlike Pierre, we are aware of the fact that 'Londres est jolie' and 'London is not pretty' depict constructions leading to contradictory propositions. Are we not being irrational in that instance? I believe that we are. What is important for us is whether we know that (3) and (4) depict two constructions leading to two contradictory propositions. This knowledge seems self-evident and thus immediately accessible to us. Also, once we apply the principle of translation to (1), we get the reason to believe in (3). At the same time, this belief is justified only under our current representation of the content of Pierre's belief. Because we do not know what the precise content of Pierre's belief looks like, we cannot be completely justified in thinking that Pierre both believes and disbelieves the construction depicted by 'London is pretty' as he might believe only the construction depicted by 'Londres est jolie'. Therefore, it seems that we will best preserve rationality if we either refrain from applying the principle of translation, or suspend a definite judgement about (3) even after its application.

One may also wonder why we cannot, instead of taking pains to refer to constructions, simply posit that belief is a ternary relation between a believer, a singular proposition and a mode of understanding of the proposition.[16] For instance,

---

15 This problem was originally formulated by Schiffer (1987, 464).
16 Singular propositions are structured entities that contain the referred objects as their direct constituents.

Salmon (1986, pp.103-118) would analyse (2) in the following way:

∃x(Pierre grasps that London is not pretty by means of x & Bel (Pierre, that London is not pretty, x)), where the predicate Bel is a ternary relation of belief between Pierre, the proposition that London is not pretty and Pierre's mode of understanding of the proposition, x.

I believe that my view has the following advantage over Salmon's. Salmon (1986, 120) thinks that once we instantiate the mode of believing x, we get an object whose semantic nature is completely distinct from the content of the subject's belief. He remains silent on the nature of this object, describing it only vaguely as the function of the believer and 'that'-clause, F (Pierre, 'London is not pretty'). In contrast, while my view is more parsimonious because it does not posit any third relatum, it is able to account for the semantic difference between propositions and constructions. While constructions are explicit procedures by means of which propositions are structured that deeply represent the content of a belief as it is understood by its believer, propositions are more approximate representations of the same content definable as functions from possible world-time to truth values.

Finally, it is likely that Kripke would object that my argument against his puzzle rests solely on the explication of the principle of translation. However, Kripke (1979, 265-266) also proposes another version of the puzzle, which is independent of this principle. Ignacy Jan Paderewski was a Polish pianist and statesman. Imagine that Pierre has heard that someone called 'Paderewski' was a pianist and that someone called 'Paderewski' was a statesman but cannot imagine the same person would be both a pianist and statesman. Therefore, he assents both to the sentence 'Paderewski had musical talent' and to the sentence 'Paderewski did not have musical talent' assuming that 'Paderewski' names a different person in each sentence. Accordingly, by the principle of disquotation, we can derive:

(9) Pierre believes that Paderewski had musical talent.
(10) Pierre believes that Paderewski did not have musical talent.

As 'Paderewski' names the same person, we can derive that Pierre has two contradictory beliefs without the use of the principle of substitutivity.I must admit that the Paderewski puzzle possibly shows there is a limit to the degree of accuracy to

which constructions can reflect Pierre's understanding of the content of his belief. As long as the name 'Paderewski' is represented by the same constant in the construction, the 'that'-clause in (10) is just the negation of the construction of the 'that'-clause in (9), so there is no question that the contents of Pierre's beliefs are inconsistent. Nevertheless, as Sosa (1996, 388-389) notes, the thesis that 'if a name in the ordinary language has a single referent then it may be correctly represented logically by a single constant' presupposes the truth of strict Millianism. In other words, if strict Millianism is false, it may be argued that 'Paderewski' in (9) and 'Paderewski' in (10) should be represented by distinct constants because Pierre associates these names with different contents. In that case, the corresponding constructions become different as well. However, the question of whether we can treat names in this way is precisely what spurred the debate between strict Millianists and their opponents in the first place. Therefore, to use Paderewski puzzle in defence of Millianism is viciously circular.

6. Conclusion

In summary, I argued that Kripke's puzzle about belief fails. I built my argument upon the following four claims. Firstly, the most appropriate object of reference by 'that'-clauses in attitude reports is a construction of a proposition, not the proposition itself, as construction most accurately reflects the subject's way of understanding the content of her attitude. Secondly, the speaker can choose whether to refer to constructions or to propositions based on how accurately she aims to reflect the subject's understanding. Thirdly, under the constructional reading of 'that'-clauses, the puzzle does not arise because the principle of translation is not applicable in that case. Fourthly, under the propositional interpretation of a 'that'-clause, the puzzle does not yield its desired effect because the principle of translation proves to depend on the principle of substitutivity. I also argued that even the version of the puzzle which does not employ the principle of translation is ineffective because it has to presuppose strict Millianism for it to work. If my argument is convincing, then the reductio argument of the principle of substitutivity remains to be also the reductio argument of strict Millianism.

Bibliography

Barwise, J. and Perry, J. "Semantic Innocence and Uncompromising Situations." Midwest Studies In Philosophy 6, no.1 (1981): 387-404.

Burgess, P. John. "Translating Names." Analysis 65, no.3 (2005): 196-205.

Cresswell, J. Max. Structured Meanings. Cambridge, MA: MIT Press, 1985.

Davidson, Donald. 'On saying that' Synthese 19, no.1/2 (1968): 130-146.

Frege, Gottlob. "On Sinn and Bedeutung." In Frege's Reader, edited by Beaney, Michael, 151-171. Oxford: Blackwell Publishers, 1997.

Fricker, Elizabeth. "Understanding and Knowledge of What is Said." In Epistemology of Language, edited by Barber, Alex, 325-366. New York: Oxford Unitersity Press, 2003.

Kripke, Saul. "A puzzle about belief." In Meaning and use, edited by Margalit, Avishai, 248-283. Dordrecht: Reidel, 1979.

Longworth, Guy. "Some Models of Linguistic Understanding." Baltic International Yearbook of Cognition, Logic and Communication 5. no.1 (2009): 1-56.

Russel, B. "Descriptions." In Readings in the Philosophy of Language, edited by Peter, Ludlow, 323-333. Massachusetts: MIT Press, 1997.

Salmon, Nathan. Frege's Puzzle. Cambridge, Mass: MIT Press, 1986.

Schiffer, Stephen. "The `Fido'-Fido Theory of Belief." Philosophical Perspectives 1, Metaphysics (1987): 455-480.

Soames, Scott. "Lost Innocence." Linguistics and Philosophy 8, no.1 (1985): 59–71.

Sosa, David. "The Import of the Puzzle about Belief." The Philosophical Review

105, no.3 (1996): 373-402.

Strawson, Peter F. "On Referring." Mind 59, no.235 (1950): 320-344.

Tichý, Pavel. The Foundations of Frege's Logic. Reprint 2012 ed. Berlin and New York: De Gruyter, 1988.