

A NOTE ON HIS MAJESTY'S BALDNESS

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I

Long after monarchy had become a thing of the past in France, His Majesty (or, more accurately, His royal baldness) was still at the heart of an animated controversy - not between the Royaliste and the Republicans, but between two schools of philosophy, one spearheaded by Bertrand Russell, and the other by Gottlob Frege and, more recently, by P.F. Strawson and P.T. Geach. The controversy centred round the two sentences:

1. The King of France is bald.
2. The King of France is not bald.

Both parties were in full agreement in respect of the evaluation of the two sentences if uttered at a time when there is a referent to the Noun Phrase the King of France, and, furthermore, the entity in question satisfied the requirement made by the predicate bald. In a world, in which the two conditions were met, 1. would be true and 2. would be false.

But opinions differed - sharply at that - when it came to evaluating the two sentence in a world where the first of these conditions, viz., there being an individual occupying the French throne, did not obtain. Russell maintained that, in that case, 1. would be false and 2. would be ambiguous. Frege and Strawson argued that neither 1. nor 2. would be either true or false. Russell's solution to the problem (to be examined below in some detail) was formulated within the standard, two-valued, truth-conditional logic. The alternative proposal was based on a non-standard, three-valued logic (a truth-value-conditional one) which incorporated a novel concept - logical presupposition - which is thoroughly incompatible with the traditional logic.

While this controversy has long been a cause célèbre among philosophers, it was not until the late 60s that linguists joined the fray. But then, as if to make amends for their tardiness, they did so with a vengeance. By 1973, Laurie Karttunen was already referring to the "bumper crop of papers on presupposition" (Karttunen, 1973: 169) and, three years later, we find David Lightfoot apparently exasperated at the "deluge of presuppositional analyses". (Lightfoot, 1976:324).

Judging by these, one would have thought that the trend was definitely in favour of presuppositions. In 1975, however, there appeared two books - both revised

versions of doctoral theses -, one by Ruth M. Kempson, entitled Presupposition and the Delimitation of Semantics and the other by Deirdre Wilson, entitled Presuppositions and Non-Truth-Conditional Semantics. The two works have, in fact, a lot more in common. Their authors each argue that semantic theory can very well do without presuppositions; that most of what has been treated as presupposition can as well, if not better, be dealt with as entailments; and that the few problem cases that remain are better taken care of by means of a separate pragmatic component that would fall squarely within a use theory of meaning.¹

This paper does not purport to go into the issue as such, nor, indeed, any of its numerous philosophical ramifications. Rather, it aims to focus on Russell's original solution to the problem of the enigmatic French King's private secret (opportunately concealed by the crown) and some intuitively clear facts that a blind transference of the solution (together with the methodological devices used therein) to the analysis of meaning in natural languages might leave one hard put to it to explain. No resolution of these problems is attempted, except by way of speculation. If anything, then, the ensuing discussion is meant to be taken as no more than yet another drop in the bucket.

II

To go back to the French monarch's tonsorial secret, on Russell's view, 1. could be analysed as a conjunction of three distinct assertions, representable as 1'. in the notation of two-valued predicate logic² (For convenience of reference, 1. and 2. are reproduced below).

1. The King of France is bald.
2. The King of France is not bald.

$$1'. ((\exists x) Kx \ \& \ (\forall x) (\forall y) ((Kx \ \& \ Ky) \rightarrow x=y)) \ \& \ (\forall x) (Kx \rightarrow Bx)$$

where, K = 'is King of France'; B = "is bald"

The three conjuncts could be translated into everyday language as:

- 1a. There exists at least one King of France.
- 1b. There is only one King of France.
- 1c. Whosoever is the King of France is bald.

For Russell, then, (1) (=1') entailed (1a) (as well as (1b) and (1c)). In other words, the truth of (1) guaranteed the truth of (1a). Thus, (3) is a contradiction.

3. The King of France is bald, but there is no King of France (at the moment).

What about 2.? 2., argued Russell, is essentially ambiguous, depending on where one interpreted the logical operator of negation to be. The two readings of 2. could be represented as:

$$2'. \sim (((\exists x) Kx \ \& \ (x)(y) ((Kx \ \& \ Ky) \rightarrow x=y)) \ \& \ (x)(Kx \rightarrow Bx))$$

$$2''. (((\exists x) Kx \ \& \ (x)(y) ((Kx \ \& \ Ky) \rightarrow x=y)) \ \& \ (x) (Kx \rightarrow \sim Bx))$$

The rough translation equivalents of 2'. and 2''. would be 2₁ and 2₂ respectively.

2₁. It is not the case that the King of France is bald.

2₂. The King of France is 'non-bald'.

2'. can be true in a world where 2''. is false. For instance, 2'. will be true if there is no King of France, whereas, in the same world, 2''. will be false. In other words, 2'. and 2''. have different truth conditions. This means, they must be two different senses of 2.. Hence, the alleged ambiguity of 2.

Now, 2''. asserts 1a, whereas 2'. does not (necessarily that is). This means, 2'., which is the strict negation (i.e. the contradictory) of 1'. does not entail 1a.; whereas 2''. entails 1a., but is not the negation of 1'.. This is so in virtue of the fact that, in two-valued logic, which complies with the law of the excluded middle, either 'p' or '¬p' must be true, and, furthermore, if either is true, the other must be false.

There is no denying the significance of Russell's insight, insofar as the study of syntax is concerned. The scope ambiguity of negatives - wider scope (sentential) negation as in 2'., versus narrow scope (lexical) negation as in 2''. - both anticipated and is confirmed by Klima's argument (Klima, 1964:270-91) that negative prefixes such as 'un-', 'in-', 'ir-', etc. do not make the the whole sentence negative. Now, it is purely an accident that English does not lexicalise '¬ bald'. But, if words like unhappy, indiscreet, irresponsible, impious, non-committal etc. are substituted for '¬ bald', it can be verified that words that contain negative prefixes do not contribute to sentential negation³.

4. * The Queen of England is not pious, and the King of France is impious either.
5. * The King of France is non-committal, is he?
6. * The King of France would have been unhappy, not even if the French army had won the Battle of Agencourt.
7. * The King of France is irresponsible, and neither is the Queen of England
8. * The King if France was unkind to anyone.
9. * The King of France undid the Gordian knot until yesterday.

Clearly, Russell's analysis is eminently successful in accounting for a syntactic phenomenon in the English language. Nevertheless, as we shall see in Section III, it seems rather inadequate to handle certain semantic phenomena in natural languages.

III

Going back to 2'. and 2'', 2', as already noted, can be true in a number of possible worlds: it is true if any one (or any two or all three) of its conjuncts is false. This is because of the Morgan equivalence:

$$\sim(p \ \& \ q) \equiv \sim p \ \vee \ \sim q$$

which has three possible realizations (i.e., taking the 've1' (disjunction) operator as inclusive):

$$\begin{array}{l} \sim p \ \& \ q \\ p \ \& \ \sim q \\ \sim p \ \& \ \sim q \end{array}$$

Now, if 2' is converted into the notation of propositional logic, we get

$$('2) \sim((p \ \& \ q) \ \& \ r)$$

Since de Morgan equivalence is susceptible of being extended ad infinitum, there must be seven different ways of realizing ('2).

10. $((\sim p \ \& \ \sim q) \ \& \ \sim r)$
11. $((\sim p \ \& \ \sim q) \ \& \ r)$
12. $((\sim p \ \& \ q) \ \& \ \sim r)$
13. $((p \ \& \ \sim q) \ \& \ \sim r)$
14. $((\sim p \ \& \ q) \ \& \ r)$
15. $((p \ \& \ \sim q) \ \& \ r)$
16. $((p \ \& \ q) \ \& \ \sim r)$

However, 10. and 11. are ruled out logically, since the embedded complex clause $(\sim p \ \& \ \sim q)$ contains two clauses which are mutually incompatible.

That leaves us with five, viz., 12. - 16.. Now, any of these might be used to refute the assertion: $((p \ \& \ q) \ \& \ r)$. In a rebuttal, one does not normally repeat conjuncts that bear the same truth value as the ones in the assertion being rebutted. Thus, 12. is inappropriate as a rebuttal of 17.:

17. $((p \ \& \ q) \ \& \ r)$

It would be more natural to refute 17. with 12'.

12'. $(\sim p \ \& \ \sim r)$

Similarly, for 13. - 16., there are corresponding 13'. - 16'.:

13'. $\sim q \ \& \ \sim r$

14'. $\sim p$

15'. $\sim q$

16'. $\sim r$

The translation equivalents into everyday language of 12'. - 16'. would be:

12". There doesn't exist a King of France, and (besides), the King of France is 'non-bald'.

13". There are two (or more) Kings of France and they are both (or all) bald.

14". There is no King of France (presently).

15". There are two (or more) Kings of France (presently).

16". The King of France is 'non-bald'.

Clearly, 12". is incongruous, since a property is being predicated of an object that does not exist in the universe of discourse. On the other hand, 13" - 16" are all well-formed sentences in English (and, presumably, in all other natural languages)⁴

It is interesting to see how each of them functions in the context of a discourse. One way of doing it might be by inserting each of them into the following matrix:

17. A: "The King of France is bald"

18. B: "But that's absurd; -----"

13" - 16" all fit into 18., but each with a different degree of appropriateness. For instance, the word absurd seems to be undeservedly "strong" in 19., but not in 20.⁵

19. B: "But that's absurd; the King of France is 'non-bald'"

20. B: "But that's absurd; there are two (or more) Kings of France and they are both (or all) 'non-bald'"

A "less strong" comment like 21.

21. B: "But that's not true; -----"

seems to be more appropriate to 16" as can be seen from 22.:

22. B: "But that's not true; the King of France is 'non-bald'"

It must be noted, however, that the appropriateness test being proposed here can only tell us which of the statements 13" - 16" are "weak" such as to mark off absurd as too "strong" a comment. It cannot, in other words, tell us when the converse is the case. Thus, 23. seems to be all right:

23. B: "But that's not true; there are two (or more) Kings of France and they are both (or all) 'non-bald'.

The following chart captures my own intuitive judgments about the relative appropriateness of 13" - 16".. The evaluation is done on a three-point scale. The convention adopted for assigning the asterisks is as follows:

- *** 'quite appropriate'; 'well deserved'
- ** 'reasonably appropriate'
- * 'least appropriate'; 'undeserved'
- () 'element of uncertainty'

| | | | | | | |
|------------|----------|---|-------|-------|-------|-------|
| But that's | absurd | ; | *** | ** | ** | * |
| | not true | | ** | **(*) | **(*) | *** |
| | | | (13") | (14") | (15") | (16") |

Needless to say, the evaluation of the relative appropriateness of 13" - 16" would differ from speaker to speaker. But it seems reasonable to expect a fair amount of consensus on the following observations:

- a. (13"), if true, is a "stronger" reason to deny (17) than (14"), (15") or (16").
- b. (16") is the "weakest" of (13") - (16").
- c. (14") and (15") occupy a middle position on a scale of 'forcefulness'.

Now, Wilson (1975:32) advances the following argument in support of her thesis:

Strong presuppositional analyses assume that if a presupposition is false the negative sentence which presupposes it must lack a truth-value. But often the strongest way of arguing for the truth of a negative sentence is to show that its putative presupposition is false. Thus, what could be stronger proof that John does not know, or regret, or realize that Nixon is bald, that Nixon is not bald? What stronger proof could there be that I did not stop playing chess with Spassky, than that I have never played in my life, and so am not in a position either to stop or go on?

By the same token, one could ask:

What stronger proof could there be that the King of France is not bald than that there is no King of France, or that there are two Kings of France at the moment?

We have just seen THERE IS ONE.

IV

What follows is speculative and highly tentative, and cannot be sustained any further in the absence of additional confirmation by the intuitive reactions of several more informants in respect of the relative 'forcefulness' of 13" - 16"⁶.

To the extent that the chartyon p.224. is valid, the following rather interesting facts seem to suggest themselves:

- A. The greater the number of entailments refuted, the stronger the refutation as a whole. (13") is, as it were, "twice removed" from reality in comparison with the rest)
- B. Just as (14"), (15") and (16") seem to form a class in contradistinction, to (13"), and (13"), (14") and (15") seem to form a class distinct from (16"). And so do (14") and (15") as opposed to the rest.

It is reasonable to look for a raison d'être for the three groupings. Of the four propositions (13") - (16"), only (13") is a compound (molecular) one.

But why should (16") be different from (14") and (15")?

One possible answer to this question, already available in the philosophical literature - the one proposed by Frege, and, following him, Strawson and others - would make this discussion come full circle. After all, was it not the very perception of this crucial difference between (14") and (15") on the one hand, and (16") on the other, that started the whole polemic?

NOTES:

1. Kempson writes: "... .. all the problems raised by presupposition are in fact pseudo problems for semantics, since no concept of presupposition has any place within the semantics of natural language." (p.7)
2. This analysis of Russell's Theory of Descriptions is due to Cresswell(1978).
3. The six tests for sentence negation are from Klima (1964). In the case of (5), it is important to bear in mind that Klima identified the tags that he was interested in "by the absence of a peculiar intonation to which are associated incredulous or sarcastic overtones" (p.263). (8), again, with special intonation, would be acceptable for many speakers.
4. (13") and (15") can only be used as statements to refute (2) by assigning emphatic stress to the definite article (which underscores the uniqueness of the referent) as in:
THE King of France is not bald - there are two Kings of France at the moment (and, besides, they are both 'non-bald')
5. It must be noted that the efficacy of the test will depend on how "strong" one takes the word absurd to be, which in turn, will depend on how often the word is used by oneself or members of one's immediate circle. Thus, many speakers might refuse to recognize some of the common 'four-letter' words as "strong" in this sense. A way out of this might be to first present the informants with a choice of words such as absurd, ridiculous, preposterous, ludicrous or nonsense, poppycock etc, and ask them to place them on a scale, and then construct suitable frames.
6. I have informally checked the intuitive judgments of few native speakers of English and also native speakers of Portuguese and have found that they corroborate mine. My own native - near-native intuition about a few languages of India is fully in accord.

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