

# 31 The king of France is bald

**Suppose I tell you ‘The king of France is bald’. I may sound mad, or perhaps just very badly informed. But is what I say actually false? If it is false, that should mean (according to an established law of logic) that the opposite – ‘The king of France is not bald’ – is true. And that doesn’t sound much better. Or maybe these claims are neither true nor false – they are both just plain nonsense. And yet, while they may be odd things to say, they don’t seem to be meaningless.**

Do philosophers really trouble themselves over such matters? A sad case, you might think, of inventing an itch to have something to scratch. Well, yes they do: over the last hundred years much high-powered philosophical brain work has been given to the king of France, despite the country having been a republic for more than two centuries. Concerns over this puzzle and others like it provided the inspiration for the British philosopher Bertrand Russell’s theory of descriptions, first proposed in an influential 1905 paper named ‘On Denoting’. This theory, amongst much other work done by English-speaking philosophers in the early 20th century, was founded on the belief that painstaking analysis of language and its underlying logic is the surest route – perhaps the only route – to knowledge of the world that can be described using that language.

**Two thorny matters** The main focus of Russell’s theory of descriptions is a category of linguistic terms called definite descriptions:

## timeline

**c.350<sup>BC</sup>**

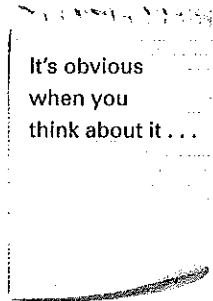
Forms of argument

**c.300<sup>BC</sup>**

The sorites paradox

Thus “the father of Charles II was executed” becomes: “It is not always false of  $x$  that  $x$  begat Charles II and that  $x$  was executed” and that “if  $y$  begat Charles II,  $y$  is identical with  $x$ ” is always true of  $y$ .

Bertrand Russell, 1905



'the first man on the Moon'; 'the smallest prime number'; 'the world's tallest mountain'; 'the present queen of England'. In terms of grammatical form, the kind of sentence in which such phrases occur – for instance, 'The first man on the Moon was American' – are similar to so-called 'subject–predicate sentences', such as 'Neil Armstrong was American'. In the latter example, 'Neil Armstrong' is a proper noun, which is referential in the sense that it refers to, or denotes, a specific object (in this case a particular human being) and then ascribes some property to it (in this case, the property of being American). In spite of their superficial resemblance to proper nouns, there are a number of problems that arise from treating definite descriptions as if they were referring phrases. Providing solutions to these puzzles was one of the main motivations behind Russell's 1905 paper. Two of the main problems facing Russell were as follows:

1. *Informative identity statements*

If  $a$  and  $b$  are identical, any property of  $a$  is a property of  $b$ , and  $a$  can be substituted for  $b$  in any sentence containing the latter without affecting its truth or falsehood. Now George IV wished to know if Scott was the author of *Waverley*. Since Scott was indeed the author of this novel, we can substitute 'Scott' for 'the author of *Waverley*' and so discover that George IV wished to know if Scott was Scott. But this does not appear to be what

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## Existential angst

Many definite descriptions fail to denote *anything*. So, for instance, we might wish to say: 'The highest prime number *does not exist*.' But it is clearly absurd to say of something that it does not exist. That looks like saying that something that exists does not exist – a plain contradiction. Russell's re-analysis of such sentences explains how such non-denoting expressions are meaningful without forcing us to take on unwelcome metaphysical baggage such as non-existent entities. The most contentious piece of (possible) baggage is of course God; the obvious shortcomings of one of the most significant arguments for God's existence (the ontological argument; see page 160) are exposed by a Russellian analysis.

he wished to know at all. 'Scott is the author of *Waverley*' is informative in a way that 'Scott is Scott' is not.

### 2. Preserving the laws of logic

According to the *law of the excluded middle* (a law of classical logic), if 'A is B' is false, 'A is not B' must be true. So, if the statement 'The king of France is bald' is false (as it appears to be, if uttered in the 21st century), 'The king of France is not bald' must be true. But this appears to be false too. If a statement and its negation are both false, logic seems to be fatally undermined.

**Russell's solution** The solution to each of these puzzles, in Russell's view, is simply to stop treating the definite descriptions involved as if they were referring expressions in disguise. Appearances in such cases are deceptive: although the various example sentences given above have the *grammatical* form of subject–predicate sentences, they do not have their *logical* form; and it is the logical structure that should determine whether the sentences are true or false and justify any inferences that we may draw from them.

**¶ If we enumerated the things that are bald, and then the things that are not bald, we should not find the present King of France in either list. Hegelians, who love a synthesis, will probably conclude that he wears a wig. ¶**

**Bertrand Russell, 1905**

Abandoning the referential subject–predicate model, Russell proposes instead that sentences containing definite descriptions should be treated as ‘existentially quantified’ sentences. So, according to his analysis, a sentence of the general form ‘The *F* is *G*’ can be split into three separate claims: ‘There is an *F*’; ‘no more than one thing is the *F*’; and ‘if anything is an *F*, then it is *G*.’ Using this kind of analysis, Russell swiftly dispels the various mysteries surrounding the crowned heads of Europe:

1. ‘Scott is the author of *Waverley*’ is analysed as ‘There is an entity, and only one entity, that is the author of *Waverley*, and that entity is Scott’. Clearly it is one thing for George IV to wonder if this is true; quite another for him to wonder about the bland identity statement implied by the referential model.
2. ‘The present king of France is bald’, in Russell’s analysis, becomes ‘There is an entity such that it alone is now the king of France, and that one entity is bald’; this is false. The denial of this is not that the king of France is *not* bald (which is also false), but that ‘There is *not* an entity such that it alone is now the king of France, and that entity is bald’. This statement is true, so the law of the excluded middle is preserved.

**the condensed idea**  
Language and logic