Are Fictional Descriptions Merely Referentially Vacuous?

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1 Introduction

This paper offers an improvement upon Professor Bunge's recent welcome analysis of definite descriptions*. That analysis makes a noteworthy advance upon previous analysis, not least because it unfuses existence and uniqueness. When definite description is identified with unique specification, as in Bunge's analysis, it becomes permissible to entertain statements, questions, etc., containing definite descriptions of non-existents. Since this sort of entertaining is rife in science and mathematics, it is good to have the record straight. There are, however, a number of features of Bunge's treatment of the allied semantical problems with which I quarrel.

I begin by drawing critical attention to two passages discussing truth. Secondly, I try to explain the infelicity of these passages by an ambiguity in Definition 9. If this ambiguity is cleared up, and the subsequent Axioms rewritten accordingly, not only are the troubles that slightly mar Bunge's analysis dealt with, but further useful sophistication is introduced into the semantics of definite descriptions.

2 Infelicities in Bunge's treatment of truth

The first passage with which I quarrel is:

"whether or not a concrete object with assumed properties

exists is a matter for empirical tests to decide." (p. 136)

Of course, I endorse Bunge's rejection of reification by unique speci-
fication (just as I endorse Aquinas's rejection of Anselm's attempt to prove
the existence of God from his unique properties). What I reject here is
(a) the idea that empirical tests decide anything and (b) the idea that
existence of concrete objects is tied to the outcome of empirical tests.

First: in my view, decisions are made by humans who may (or may
not) make them *in the light of* their observations (or the reports of o-
thers' observations) arising from empirical tests. Secondly, and more im-
portantly, there is no indubitable connection between the existence of a
concrete object of such and such assumed properties and the sensation
of, say, seeing a concrete object appearing to have such and such pro-
perties. *A fortiori* there is no indubitable connection between the existence
of such an object and the (less direct) results of an empirical test. None-
theless, people constantly decide concrete objects exist, notwithstanding
that philosophical idealism is irrefutable.

The second passage, or cluster of passages, is:

"In our view truth and falsity do not inhere in propositions" —So
far, so good— "but are attributed to them" —not so good! "In order
for a statement containing a definite description to be assigned a
truth value in a given context, it must point to referent in that
context. For, if it fails to have a referent, then it cannot be "faced"
to its referent in order to assign it a truth value." (p.143) Later, by
way of example, "In all mechanical ether theories, like Cauchy's,
'The luminiferous ether is elastic' is taken to be true." (p.144)

Here it seems three things are being confused: (1) the *truth* of a
statement purporting to indicate matters of fact; (2) the *consistency* of

such a statement with a set of other similarly purposed statements–that is, with its theoretical (and metaphysical?) context; and (3) the *decision* to count such a statement as true. In case (3), a truth value is assigned, in *stricto sensu*, by human decision; in case (2), a truth value is assigned, metaphorically, by the context; in case (1), however, the statement is true if and only if what it states is so.

3 An ambiguity concerning context

If I did not know his work better, I might take Bunge for an empiricist, but such a facile explanation would be false even if it sufficed to explain the confusions. Looking more deeply, I find in the definition of 'context' an ambiguity which may be the root of the trouble. Bunge's definition 9 is;

"The ordered triple $C-\langle U, F, S \rangle$ is called a *context* iff S is a set of statements in which only the function constants in the function family F occur, and the reference class of every F in F is in the universe or domain of individuals U."

Are the individuals in U *real* individuals or may some be merely conjectural or imaginary? At first flush, one might want to restrict the individuals in U to being *real* individuals, so that the question of reference precedes the question of truth neatly: as Bunge has it: $F(x)$ has a truth value in C if and only if it has a referent in C. However, Bunge's example of the ether's being elastic is at odds with this, since if we assume U contains only real individuals, the ether's being elastic would be true even in the context of mechanical ether theories only if U contained the ether. Hence, for Bunge, U contains conjectured individuals as well as real. The confusions to which I have drawn attention are rooted in this ambiguity.

Look at it this way. Bunge's definition of *context* does not allow us to distinguish analytically between (1) a statement's being true by virtue of correspondence between what it states and what is so; and (2) a statement's seeming true by virtue of correspondence between what it states and what the theoretical context implies is so. This point is not without significance in discussion of historical material: we might want to say that a specific hypothesis of an earlier day both *seemed* true at the time and *was* false, though without the assertion of falsity being construed as equivalent to the assertion the hypothesis no longer seems true. On Bunge's definition of 'context' an intolerable relativism threatens. At least, I think what is threatened is intolerable, though other thinkers, for example Kuhn, might be able to abide it with equanimity. Indeed, in the respect to which I am drawing attention Bunge's analysis seems custom built for the relativism Kuhn advocates in his *Structure of Scientific Revolutions.* Enough of that!

My proposal to resolve the problem is to expand context into an ordered quadruple, $C-\langle U_R, U_C, F, S\rangle$. U_R is a universe of real individuals; U_C is a universe of conjectured individuals. This latter is an important domain: it defines a universe of discourse in which descriptions etc., are set. U_C may pick out a restricted domain in physics (say, geometrical optics) or a broader domain such as in systematic theology or a totally fanciful domain as in fairy tales and some science fiction.

4 Sense and reference

My amended version of Bunge's definition 9 is this:

DEFINITION 9^1. The ordered quadruple $C=\langle U_R, U_C, F, S\rangle$ is called a *context* iff S is a set of statements in which only the function constants in the function family F occur, and the reference class of every F in

F is included in the universe or domain of individuals U_C in any case and in U_R just in case members of the reference class are real.

The various axioms and definition 10 now need amending:

Axiom 1'. The definite description $F(x)$ *makes sense* in the context $C=\langle U_R,\ U_C,\ F,\ S \rangle$ iff F is in F.

Axiom 2' (a) The definite description $F(x)$ has a *conjectured referent* in the context $C=\langle U_R,\ U_C,\ F,\ S \rangle$ iff $F(x)$ makes sense in C and F is defined at $x \in U_C$.

Axiom 2' (b) The definite description $F(x)$ *has a real referent* in the context $C=\langle U_R,\ U_C,\ F,\ S \rangle$ iff $F(x)$ makes sense in C and F is defined at $x \in U_R$.

DEFINITION 10'. Let $F(x)$ be a definite description that makes sense and has a conjectured real referent in a context $C=\langle U_R,\ U_C,\ F,\ S \rangle$. Then the values $Y_C=F(x)$ or $Y_R=F(x)$ are called the conjectured or real referents of $F(x)$ respectively.

Some remarks about the relations between U_C and U_R are in order before proceeding to the question of truth. In physics, for example, it is usual to postulate U_C as a subset of U_R if one adopts a realist position towards the entities described in physical theory. Instrumentalists may prefer to think definite descriptions of non-observables (whatever they may be) empty and hence concede no intersection of U_C with U_R. Changes in physical theory, especially in the metaphysics underlying physical theory, while not producing any changes in U_R, may produce changes in what is thought to occupy the intersection of U_R and U_C. By contrast, in science fiction the relation thought to hold between the universe of discourse of the fiction and the real world is a small intersection just large enough to give an air of verisimilitude to the stories. It is an interesting dispute in philosophical theology how far U_C intersects with

U_R. Despite the reference to indviduals, my use of U_R does not commit me to atomism of any kind: in Parmenides' view U_R contains exactly one individual, the universe. The usage can accommodate the varying views of Parmenides, Democritus and, say, Bunge on what individuals are real. The distinction introduced by treating U_R and U_C as separate universes enables us to deal with the distinction between full and empty description as encountered in a novel, as well as to indicate how some novels have real life settings.

5 Truth

Let us return now to the question of truth. Here I am in full agreement with Bunge: truth and falsity do not inhere in propositions! Nonetheless, I think it would be advantageous to distinguish a statement's being true from a statement's being true-in-a-system; and to distinguish both those from a human decision to regard a statement as true (however widespread or "expert" the decision). Now, despite the ambiguity of the term of phrase used I do not believe Bunge has this third style of "truth" in mind at all. My "conjectured" universe of individuals perhaps betrays more subjectivism than Bunge would wish for. Nonetheless, it is philosophically important to draw attention to the anthropogenesis of scientific concepts and hence of the individuals in the universe of discourse of physical theory. Scientific concepts are not *data* for the scientist: they are *excogitata!* Similarly, decisions to take particular statements as true are improtant for growth of knowledge in science: the body of scientific knowledge has this conventional character at least, that at any particular time its content is the result of human decision. Hence I introduce three parts to axiom 3'.

Axiom 3'(a)   A statement containing a definite description $F(x)$ in

context $C=\langle U_R, U_C, F, S\rangle$ has a truth value iff $F(x)$ has a real referent in C.

Axiom 3′ (b) A statement containing a definite description $F(x)$ in context $C=\langle U_R, U_C, F, S\rangle$ has a truth value relative to U_C iff $F(x)$ has a conjectured referent in C.

Axiom 3′ (c) A judgement of the truth value of a statement containing a definite description $F(x)$ in context $C=\langle U_R, U_C, F, S\rangle$ assumes (rightly or wrongly) the referent of $F(x)$ lies in the intersection of U_R and U_C.

One important advantage of Axiom 3′ (c) is to point up the deep rootedness of metaphysical judgments in matters of scientific truth. Clearly metaphysical preferences are not at stake in judging whether *within a given theory* (or theory complex) a statement is true or false; by contrast, whether to take the universe of discourse picked out by the theory as a segment of the real world, or to drop that theory's way of putting things in favour of an alternative, is a metaphysical question. It is mirrored under the modified analysis, by the assumption of an appropriate intersection of U_R and U_C.

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