



**The Scope of Fiction:  
Comments on Tim Button's  
'Where Fiction Ends and Reality Begins'  
Ioannis Votsis, 20/06/08**

# Preamble

- Suppose you want to *distance yourself from fiction*, i.e. suppose you want no commitment to the literal truth of a fictional sentence  $\phi$ .
- Suppose further that you want to be able to treat all sorts of discourses as fiction, i.e. not just literary fiction but also ethics, mathematics, science, parts thereof, etc.
- Button considers and rejects a number of fictionalist views that could be applicable to any of these discourses, namely the paraphrastic approach, the extended fiction approach, the pretence fiction approach and the spotty scope approach.
- Although I agree with quite a few of the conclusions that Button draws, I find some of his motivation and arguments problematic.

# Prefixing Fictional Discourse

- Problem: “The logical scope of the prefix causes problems whenever we want to mix-and-match fiction with non-fiction” (WFEARB, p.1).
- Example: Suppose Adam (a real person) is 6’7“ tall and Bilbo (a hobbit from Tolkien’s fictions) much shorter. So we may express this as:

(T) Adam is taller than Bilbo.

Problem: We don’t want to believe in the literal existence of Bilbo.

Solution: Let’s prefix it!!! But where do we insert the prefix?

(T<sub>1</sub>) According to *The Hobbit* [Adam is taller than Bilbo]

Problem: Adam is not a fictional character.

(T<sub>2</sub>) There is an  $x$  such that Adam is taller than  $x$  and according to *The Hobbit* [ $x = \text{Bilbo}$ ].

Problem: Variable ‘ $x$ ’ falls both inside and outside the fiction prefix, i.e. Bilbo is both real and fictional.

# The Paraphrastic Approach

- Aim: *To capture the essence of the original sentences in paraphrased sentences that do not present the same problems.*
- Example:  
(T<sub>3</sub>) According to *The Hobbit* [Bilbo is at most  $m$  meters tall], and  $(x)$  ( $x$  is at most  $m$  meters tall  $\rightarrow$  Adam is taller than  $x$ ).
- Button's critique:  
“But paraphrase is not an option for everyone. A problem arises, concerning the status of the predicates in the paraphrases... the predicate ‘is at most  $m$  meters tall’ occurs both inside and outside the scope of the fiction... the paraphrastic approach requires that I can believe in Bilbo’s height without believing in Bilbo. This seems to require realism about properties, and so will not generally be available to fictionalists” (WFEARB, pp. 3-4).

# Thinking through Button's Critique

- “We can see [that it will not generally be available to fictionalists] by treating some fictionalisms case by case” (WFEARB, p.4):
  - *Mathematical Fictionalism*: “Perhaps this is tenable, but it is not fictionalism. It is realistic (ante rem) structuralism” (WFEARB, p. 4).
  - *Scientific Fictionalism about Unobservables*: “The only comprehensible version of this doctrine is to be a realist about the structural properties... but that is to give up on scientific fictionalism in favour of structural realism” (WFEARB, p. 4).
- Some concerns with Button's stance:
  - (a) Does the paraphrastic approach *require* realism about fictional properties? Perhaps Button means that  $T_3$ ' way of paraphrasing does but not that all paraphrastic approaches do.  $T_3$  certainly requires realism about properties that both fictional and real objects share but it does not seem to require realism about Bilbo's height.

# Thinking through Button's Critique (2)

(b) Even if the paraphrastic approach does require realism about properties, the examples given are not entirely convincing. Any (selective) realist about a domain  $x$  is also an anti-realist (potentially a fictionalist) with respect to the complement of that domain. So:

- A mathematical structuralist says that “there is no more to math. entities than their math. properties” in opposition to people who think that there is more to mathematical entities. She can thus be said to be a fictionalist with respect to this ‘excess’ ontology.
- An ontic structural realist is a realist about structures but an anti-realist (potentially a fictionalist) about at least certain aspects of unobservables, e.g. whether objects are individuals.

NB: Button need not argue that the above positions are not genuine fictionalisms, since his ultimate point that not every fictionalist would find the ‘realism about properties’ restriction acceptable can easily be established by indicating particular fictionalists that do not embrace this distinction.

# The Extended Fiction Approach

- Aim: *To provide the right kind of scope by bringing real and fictitious objects in an extended fiction for comparison.*

- Example:

(T<sub>4</sub>) According to the extended fiction [Adam is taller than Bilbo].

- Button's critique:

We can create an extended fiction where “Gandalf utters truly ‘I see it now: Adam is taller than Bilbo’. But this doesn't suffice to tell me whether my *real* friend Adam is taller than a character in *The Hobbit*” (WFEARB, p.6) [original emphasis].

We also need to know various other things (e.g. whether the real Adam is as tall as the extended-fiction Adam, etc.). “But to know these things is just to know: (T3)... which is precisely the paraphrastic response considered in §2.... to know the truths of the extended fiction – is to know various paraphrased truths” (WFEARB, p. 7).

# Concerns with Button's Critique

- It seems that the extended fiction does not really add anything as we still have to relate the real to the extended fiction. Perhaps we even burden ourselves with additional problems as we also have to relate the extended fiction to the fiction and that might not be a straightforward affair. So Button seems right to dismiss this approach.
- However, Button's conclusion that the extended fiction approach collapses to the paraphrastic approach is puzzling since the former seems to be nothing but a type of paraphrastic approach. Indeed, its originator, e.g. Nolan (2005), does not suggest otherwise and even if he did, we could question whether his prefixes do not amount to a paraphrasing of sorts.
- Having said this, Button can still try to maintain the collapse claim but he'll need to reformulate it thus:

*The extended-fiction paraphrastic approach essentially collapses into the standard (unextended) paraphrastic approach.*



# Spotty Scope

- Aim: *To delimit different scope (including the scope of fiction) via the use of an additional syntactic tool.*
- Example:  
(T<sub>7</sub>) Adam is taller than Bilbo  
where the underlining delimits the scope of *The Hobbit*.
- Sainsbury (2006) gets this idea from *branching quantifiers*.
- In FOL the quantifiers are instantiated linearly (left to right). “An interpretation of an existential within the scope of a universal quantifier depends upon the interpretation of the universal quantifier. Sometimes this dependence is unwanted” (p. 17).
- In FPO (FOL strengthened with branching quantifiers) the quantifiers can be stacked on top of each other in which case none of the stacked quantifiers falls under the other’s scope, i.e. we have the ability to model the desired independence:

# Example

- Suppose we want to formalise: (R) Some relative of each villager and some relative of each townsman hate each other.
- Suppose further that the *intended interpretation* of (R) is that ‘villager’ and ‘townsman’ are interchangeable, i.e. the choice of one pair of relatives is independent of the other.

**In FOL we cannot express this** since both available options exhibit dependence:

$$(R_1) \forall x \exists y \forall u \exists v R(x, y, u, v) \quad , \quad (R_2) \forall u \exists v \forall x \exists y R(x, y, u, v)$$

**In FPO we can:**

$$(R_3) \begin{array}{l} \forall x \exists y \\ \forall u \exists v \end{array} \left. \vphantom{\begin{array}{l} \forall x \exists y \\ \forall u \exists v \end{array}} \right\} R(x, y, u, v)$$

where  $y$  depends only on  $x$  and  $v$  depends only on  $u$ .

# Button's Critique of Spotty Scope

- “Now, instead of using FPO to formalise (R), Sainsbury suggests we can formalise it in SS as follows:

$$(R_4) \quad \forall x \exists y \overline{\forall u \exists v} \overline{R(x, y, u, v)}$$

and he believes SS gains regressive support from its success here... and by its association with FPO” (WFARB, p.11).

- “Any sentence of FPO has an equivalent sentence in SS, so SS is at least as expressively rich as FPO. And in fact, SS is strictly more expressive than FPO. In FPO, everything to the right of the quantifier-stack falls within the scope of the quantifiers... This contrasts with SS, where we can dip in and out of scope at will” (WFARB p. 11).

# Dipping in and out of Scope

- Suppose we want to formalise the following:

(D) Some dragon likes some number.

SS: (D<sub>1</sub>)  $\exists x \overline{\exists y} ((\underline{Dx} \wedge \overline{Ny}) \wedge \underline{Lxy})$

FPO: (D<sub>2</sub>)  $\begin{array}{l} \exists x \\ \exists y \end{array} \left\} ((Dx \wedge Ny) \wedge Lxy)\right.$

“In (D<sub>1</sub>)... ‘Dx’ is meant to ‘depend’ just upon the quantifier  $\exists x$ ... By contrast, in (D<sub>2</sub>), both ‘Dx’ and ‘Ny’ depend upon *both* quantifiers” (B’s Notes, p. 3).

“The upshot of all this is that SS has greater expressive strength than we require to formalise (R). Consequently, considering (R) gives us no independent reason to adopt SS, rather than the weaker logic FPO” (WFARB, p.11).

# Concerns with Button's Critique

- Nowhere does Sainsbury suggest that we should use SS instead of FPO to formalise R. More crucially, nowhere does he suggest that SS is a different syntactic tool than FPO. Sainsbury (2006, p.18) says:

“The branching formula displayed above  $[R_3]$  has the following feature:  $Rwxyz$  is in the scope of both quantifier pairs, but neither of these pairs is in the scope of the other. This is a feature of scope which is impossible in many logics (including first-order logic), which are governed by the general rule that if something is in the scope of both  $x$  and  $y$ , then either  $x$  is in the scope of  $y$  or  $y$  is in the scope of  $x$ . When this principle fails, I say we have ‘spotty scope’. One could represent scope relations by lines, in which case spotty scope will show up as broken lines... What the study of branch quantifiers shows is that there is nothing wrong with spotty scope... My aim in this paper is to show how spotty scope can help make other problems seem less daunting.”
- The quoted passage suggests that spotty scope is merely a desirable feature of FPO – in fact that feature that sets FPO apart from FOL – that Sainsbury wants to apply to philosophical problems in natural language.

# Concerns with Button's Critique (2)

- *Should* Sainsbury consider SS to be a different tool from FPO's ability to model independence of scope? After all, his effective construal of FPO's ability in natural language using under/overlining might have inadvertently introduced elements that are foreign to FPO, e.g. the dipping in and out of scope. Let's call this construal of SS, 'SS-DIOS'.
- It is not immediately clear that we can identify the conditions of well-formed expressions in SS-DIOS, i.e. it is not immediately clear what the grammar of the underlining/overlining allows.
- How are we to understand Button's claim about the expressiveness surplus of SS-DIOS over FPO if we are not given a semantics for it?

# Concerns with Button's Critique (3)

- Button supports his claim that FPO is not sufficient for Sainsbury's purposes by saying that the “best possible formalisation of (T) using FPO is:

$$(T8) \quad \begin{array}{l} \exists x \\ \exists y \end{array} \left\langle (x=\text{Adam and } y=\text{Bilbo and } x \text{ is taller than } y) \right.$$

... [which ultimately] is equivalent to, i.e. collapses to, ‘Adam is taller than Bilbo’ “ (WFEARB, p.11).

- Sainsbury would reject that  $T_8$  or  $T_7$  are the best possible formalizations of (T) in FPO and SS respectively. Judging from his two (and only) examples of fiction, Sainsbury maintains a prefix approach to fiction: “According to the play *Coriolanus*...” (p. 20) and “According to the picture,...” (p.21). In short, (SS/FPO) + identifying which scope concerns the fictional discourse = his solution to the problem of fiction.

# Spotty Scope's Dilemma

- Button: “If [Sainsbury] wishes to endorse SS, he must either embrace fictions, or ultimately retain his distance by using paraphrase” (WFARB, p. 14).

Horn 1: To endorse SS, Sainsbury must embrace fictions.

If we offer the same (model-theoretic) semantics to SS as we do to FPO or FLO then we're no better off in avoiding ontological commitment to fictional entities since we will have to supply a domain of quantification with Bilbo in it.

Horn 2: To distance himself from fictions, Sainsbury must use paraphrase.

If the semantics for fictitious and real contexts are radically different then we will end up paraphrasing the original English sentence whereas in fact the semantics seem to be the same.



# Critique of the Dilemma

- Horn 1:

It is not clear whether Sainsbury would go for FPO's semantics. At least in the context of discussing intentional identity, he notes: "To say this is not to provide the needed systematic semantics for such sentences" (p. 20). Having said this, it would be natural for him to adopt FPO semantics and then endorse only a necessity condition reading of Quine's slogan 'To be is to be the value of a variable'.

- Horn 2:

It's not clear whether Sainsbury rejects paraphrase. He certainly does not explicitly reject it. Indeed he implicitly endorses prefixes and this suggests that he accepts a paraphrasing of sorts. Thus, the point I raised earlier about the failure of collapse applies here also. Of course, one *can still try* to argue that his peculiar version of the paraphrastic approach collapses into the standard (unextended) paraphrastic approach.