As of February 17, 2007. BORN AGAIN!

ANSELM AND GAUNILON IN THE PERSONS OF CHARLES HARTSHORNE AND WILLIAM ROWE[1]

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THE ARGUMENT AND AN OBJECTION

Hartshorne derives,

"There is a perfect being, or perfection exists,"

from the premises that

"perfection is not impossible,"

and that,

"perfection could not exist contingently." (Hartshorne 1962, pp. 50-1.)

Rowe, pointing the finger at common grounds since Anselm for premises such as the second one, says why, when it is a question whether *certain* kinds of things exist, it cannot be settled that it is at least not impossible, that is, that it is *at least possible*, that they exist, simply by observing that we understand the natures of these kinds and that our ideas of them harbour no contradictions.

Hartshorne's premises are, on certain assumptions, equivalent to at least close approximations of corollaries to which Anselm was committed of the premises of the major argument in *Proslogion* 2.

"Something-than-which-nothing-greater-can-be-thought exists in the mind."

and

"That-than-which-a-greater-cannot-be-thought cannot exist in the mind alone [and not also in reality]."

(Charlesworth 1979, p. 117: quotations from the *Proslogion* and ancillary documents are, unless otherwise indicated, from this work. M. J. Charlesworth's translation of *Proslogion* 2 is in Section 1 below, and of *Proslogion* 3 and 4 in Appendix B below.) Hartshorne's conclusion is similarly related to the conclusion of that argument,

"Something-than-which-a-greater-cannot-be-thought exists both in the mind and in reality."

Rowe's point can be found 'in embryo' in Gaunilo's *Pro Insipiente* 2. These venerable clerics, Anselm and Gaunilon, are 're-matched' in Hartshorne and Rowe for another look at how all this began and might soon have ended.

PART ONE. *THE ARGUMENT THEN AND NOW*

1. THE ARGUMENT THEN, IN THE *PROSLOGION* [2]

1.1 *Proslogion* 2

"That God truly exists

> "[1] Well then, Lord, You who give understanding [*intellectum*] to faith, grant me that I may understand, as much as You see fit, that You exist as we believe You to exist, and that You are what we believe You to be. [2] Now we believe that You are something than which nothing greater can be thought [*aliquid quo nihil maius cogitari possit*]. [3] Or can it be that a thing of such a nature does not exist, since 'the Fool has said in his heart, there is no God'? [*Psalms* 14, l. 1, and 53, l. 1.] [4] But surely, when this same Fool hears what I am speaking about, namely, 'something-than-which-nothing-greater-can-be-thought', he understands what he hears, and what he understands [*intelligit*] is in his mind [*intellectu*], even if he does not understand that it actually exists. [5] For it is one thing for an object to exist in the mind, and another thing to understand that an object actually exists. [6] Thus, when a painter plans beforehand what he is going to execute, he has [it] in his mind, but does not yet think that it actually exists because he has not yet executed it. [7] However, when he has actually painted it, then he both has it in his mind and understands that it exists because he has now made it. [8] Even the Fool, then, is forced to agree that **something-than-which-nothing-greater-can-be-thought exists in the mind**, since he understands this when he hears it, and whatever is understood is in the mind. [9] And surely **that-than-which-a-greater-cannot-be-thought cannot exist in the mind alone [and not also in reality]**. [10] For if it exists solely in the mind even, it can be thought to exist in reality also, which is greater. [Peter Millican puts in place of that, Alexander Broadie's 'translation': 'For if it exists solely in the mind, something that is greater can be thought to exist in reality.' Hopkins and Richardson have in (1974): 'For if it were only in the understanding, it could be thought to exist also in reality – which is greater.'] [11] If then that-than-which-a-greater-cannot-be-thought exists in the mind alone [and not also in reality], this same that-than-which-a-greater-*cannot*-be-thought is that-than-which-a-greater-*can*-be-thought. [12] But this is obviously impossible. [13] Therefore there is absolutely no doubt that **something-than-which-a-greater-cannot-be-thought exists both in the mind and in reality**." (pp. 87-8, bold emphasis and sentence numbers added.)

Charlesworth does not comment on the hyphenated singular terms that his translation of *Proslogion* 2 features.[3] How do they enter this proof? Anselm says that we believe that God is something than which nothing greater can be thought. That he may understand that God exists as he believes, he proceeds in terms of another 'name' for this person in whom he believes, he proceeds in terms of the descriptive name 'something-than-which-nothing-greater-can-be-thought' [4],[4] and says – I now make the best I can of the single-quotation marks in Charlesworth's translation when this name is introduced – that even the Fool who declares that there is no God, understands these words, this hyphenated term, when Anselm speaks to him using them/it. "He understands," Anselm might have spelled out, *using* these words, "*something-than-which-nothing-greater-can-be-thought*. And," Anselm could have added, "*what* he understands is in his mind as it is in my mind." (*Cf*., Charlesworth's translation of *Proslogion* 4 in the Appendix below.) One may gather from the possibility of the last of that addition that Anselm did not need the Fool for his argument which in this part could have been conducted as a Cartesian soliloquy.

1.2 Once the term 'something-than-which-nothing-greater-can-be-thought' has been introduced for that of which he thinks and speaks is in *Proslogion* 2, Anselm does not get back to 'God' until the second paragraph of *Proslogion* 3, to say and argue there that He is this being (i.e., that these terms are co-referential). There is, incidentally, a problem with that identification and *this* argument of *Proslogion* 3. It would establish only that God perhaps *too* is something than which nothing greater can be thought, and something that exists so truly that it cannot be thought not to exist.

There is a *gap* in the *Proslogion*: though Anselm *believed* that there is exactly one thing than which nothing greater can be thought, which thing thus exists so truly that it cannot be thought not to exist, and though he says as much in *Proslogion* 3; he does not prove this singularity there or elsewhere in the *Proslogion*. In *Proslogion* 13 and 22 he argues only that God uniquely instantiates *other* kinds of things. This is not, however, an important gap. Having noticed it, Anselm could at the cost of manageable adjustments, have closed it by beginning the argumentative proceedings of *Proslogion* 2 and 3 with the confession that,

we believe that You are something than which NOTHING ELSE AS GREAT OR GREATER **can be thought**.

Assumptions concerning the as-great-as-or-greater-than relation intended by Anselm, including that it is connected in the field of things, would entail that there cannot be two things each of which is such that there is nothing other than it that is as great or greater, and thus (on the assumption that only what can be, can be thought in the manner Anselm intends) that if there is something than which nothing else as great or greater can be thought, then there is exactly one such thing, and it is the greatest thing that can be thought (and that can be, on the assumption that only what can be thought in the manner intended, can be).[5]

Noteworthy are shifts in the reasoning of *Proslogion* 2 from 'something-than-which-nothing-greater-can-be-thought' in lines [4] and [8] to'that-than-which-nothing-greater-can-be-thought' in lines [9] and [11] and back to 'something-than-which-nothing-greater-can-be-thought' in [13]. These are remarked in the last paragraph of note 50 below.

2. *Detailing the Argument*

Proslogion 2 features two subsidiary arguments that deliver premises emphasized in sentences [8] and [9] for its major argument, the conclusion of which is drawn from them in sentence [13]. This agrees with the'take' on its argument with which the able monk Gaunilon begins his response on behalf of the Fool.[6]

> "To one doubting whether there is...something...than which nothing greater can be thought, it is said here...that its existence is proved, **first** because the very one who denies or doubts it already has it in his mind, since when he hears it spoken of he understands what is said; and **further**, because what he understands [this-something-than-which-nothing-greater-can-be-thought] is necessarily such that it exists not only in the mind but also in reality." (*Pro Insipiente* I: p. 87, bold emphasis and bracketed material added.)[7]

2.1 *Subsidiary argument [4] through [8]*. This is an argument for

Premise I. *Something-than-which-nothing-greater-can-be-thought exists in the mind.*

The Fool understands of what Anselm, with the term 'something-than-which-nothing-greater-can-be thought', speaks: [4]. He therefore has not only these words (this term/this indefinite description) in his mind, but this that they (it) designate(s) in his mind: [4]. So it exists in the mind. The curious passage from 'his mind' to 'the mind', without mediation by 'a mind', is unremarked.

2.2 *Subsidiary argument [9] through [12]*.

2.2.1 This is an argument for

Premise II. *Something-than-which-nothing-greater-can-be-thought* ***cannot*** *exist in the mind alone (and not also in reality).*

or, in other words, for

It is not possible that something-than-which-nothing-greater-can-be-thought *exists* in the mind alone (and not also in reality).

which is equivalent to,

It is necessary that it is not the case that something-than-which-nothing-greater-can-be-thought exists in the mind alone (and not also in reality).

To show this it is sufficient to derive from only necessities that, It is not the case that something-than-which-nothing-greater-can-be-thought

exists in the mind alone (and not also in reality).

Now comes a derivation for this negation. It is an *indirect* derivation for which we suppose that,

(i), Something-than-which-a-greater-cannot-be-thought exists in the mind alone (and not also in reality).
M(A)
[M: *a* exists in the mind alone (and not also in reality); A: something-than-which-a-greater-cannot-be-thought]

It is, however, necessary that:

(ii), For any kind of thing, a thing of this kind that exists not only in the mind
but in reality as well is greater than a thing of this kind that exists in the mind alone.

That it is necessary that existence in reality is an 'other-things-equal-greater-making' condition is a plainly implicit premise of *Proslogion* 2.[8]

Therefore, from (i) and (ii),

"[S]omething that is greater [than something-than-which-a-greater-cannot-be-thought]
can be thought" (Broadie's translation),

or in other equivalent words,

(iii), **Something-than-which-a-greater-cannot-be-thought**
is something than which a greater *can* be thought to exist in reality.

and

There is something such that it is greater than something-than-which-a-greater-cannot-be-thought,
and it can be thought to exist in reality.
(∃x)[G(xA) & Tx]
[A: something-than-which-a-greater-cannot-be-thought; G: *a* is greater than *b*;
T: *a* can be thought to exist in reality]

How so? Because we can think of something x such that, x is of exactly the same kind as this something-than-which-a-greater-cannot-be-thought, and x exists not only in the mind but in reality as well.

However (now comes a line that is only implicit in Anselm's text),

(iv), This something-than-which-a-greater-cannot-be-thought
is something than which a greater *cannot* be thought to exist in reality.

or equivalently

It is not the case that there is something such that it is greater than this
something-than-which-a-greater-cannot-be-thought, and it can be thought to exist in reality.
~(∃x)[G(xA) & Tx].

The redeployment of the name letter 'A' serves (as usual for repeated terms)[9] to symbolize the explicitly anaphoric phrase '*this* something-than-which-a-greater-cannot-be-thought'. The emphasized contradictory lines – please see their emphasized symbolizations for their intended interpretations and the contradiction – complete the indirect derivation. According to these lines, to adapt Anselm's words in [11]: 'This same something-than-which-nothing-greater-can-be-thought, is, (iii), something than which a greater *can* be thought to exist in reality, and, (iv), it is something than which a greater *cannot* be thought to exist in reality. But this is obviously impossible.'[10]

2.2.2 How did line (iv) of 'self-predication' get into this subsidiary derivation? Perhaps Anselm would say that (iv) is itself necessarily true, and that, *in general*, of any 'a-such-and-so' it *is* a such and so: This possibility is revisited in Section 2.2.4. I propose, for now, that Anselm considered (iv) to be a consequence of (i) in which its indefinite description occurs. My suggestion is that his reasoning proceeded in an *unarticulated logic* for indefinite descriptions in which such inferences are all but immediate and can easily go unremarked. It is a very simple and intuitive logic for indefinite descriptions. It can be reached by adding indefinite descriptive terms to a standard quantifier calculus for nonempty domains and denoting terms. For this logic, we may add to the language of the Quantifier Calculus (Kalish, *et. al*, 1980), for variable α, and formula φ in which α has a free occurrence, the indefinite description term ⌜@αφ⌝ in which '@' a variable-binding operator – literal translation, ⌜an-α-such-that-φ⌝, and add to its deductive system the premiseless inference rule or axiom:

Indefinite Descriptions. For variables α, and formulas φ and ψ, and formula $\psi_{@\alpha\varphi}$ that comes from ψ by proper substitution of ⌜@αφ⌝ for α,

$$\psi_{@\alpha\varphi} \equiv (\exists\alpha)(\varphi \,\&\, \psi),^{11}$$

an-α-such-that-φ is an α such that ψ if and only if (there is) an α is such that φ that is such that ψ

For example: 'G@xFx ≡ (∃x)(Fx & Gx)'[12] – 'an-x-such-that-Fx is an x such that Gx if and only if (there) is an x such that Fx that is such that Gx'.[13]

Statement (i) of our derivation has in the language of this logic the simple symbolization 'M@xSx' under the abbreviations – M: *a* exists in the mind alone (i.e., *a* exists in the mind, but not in reality); S: *a* is something than which a greater cannot be thought to exist in reality. Statement (iii) has under this scheme the symbolization '~S@xSx', and statement (iv) has the symbolization 'S@xSx'. The explicitly anaphoric '*this* something-than-which-a-greater-cannot-be-thought' of (iv) is symbolized here by the same symbolic indefinite description's being used symbolizations of these sentences, as it was in Section 2.2.1 by the same name letter's being used (please see note 8). Sentence (iv), thus symbolized, has the following derivation in the logic for indefinite descriptions just detailed from sentence (i), thus symbolized.

1. ~~*SHOW*~~ (iv) S@xSx — Direct Derivation (8)

2. | M@xSx (i)
3. | M@xSx ≡ (∃x)(Sx & Mx) Indefinite Descriptions
4. | (∃x)(Sx & Mx) 3, Biconditional Conditional [left to right], 2, *Modus Ponens*
5. | Sa & Ma 4, Existential Instantiation
6. | Sa & Sa 5, Simplification, Repetition, Adjunction
7. | (∃x)(Sx & Sx) 6, Existential Generalization
8. | S@xSx(∃x) ≡ (∃x)(Sx & Sx) Indefinite Descriptions
9. | S@xSx 8, Biconditional Conditional [right to left], 7, *Modus Ponens*[14]

2.2.3 The subsidiary derivation in Section 2.2.1 spells out what I take to have been Anselm's reasoning for *Premise* II. A crucial juncture of the reasoning, namely, the entry into it of line (iv), can be spelled out in a simple and intuitive logic for indefinite descriptions which I take to be Anselm's unstated way with them.[15] There is, however, not a small problem here. This logic for indefinite descriptions is fatally flawed. It is an *inconsistent* logic in which contradictions are derivable![16]

For example, there is in this logic an indirect derivation for the contradiction,

F@x(Fx & ~Fx) & ~F@x(Fx & ~Fx)

that turns on the case of Indefinite Descriptions,

~[(F@x(Fx & ~Fx) & ~F@x(Fx & ~Fx)] ≡ (∃x)[(Fx & ~Fx) & ~(Fx & ~Fx)].

In this case of Indefinite Descriptions,

For variables α, and formulas φ and ψ, and formula $\psi_{@\alpha\varphi}$ that comes from ψ by proper substitution of ⌜@αφ⌝ for α,

$$\psi_{@\alpha\varphi} \equiv (\exists\alpha)(\varphi \,\&\, \psi),$$

α is 'x', φ is '(Fx & ~Fx)', ψ is ~(Fx & ~Fx), and '~[(F@x(Fx & ~Fx) & ~F@x(Fx & ~Fx)]' is $\psi_{@x\varphi}$. It can be seen that '~[(F@x(Fx & ~Fx) & ~F@x(Fx & ~Fx)]' comes from '~(Fx & ~Fx)' by proper substitution of '@x(Fx & ~Fx)' for 'x'.

1. ~~*SHOW*~~ F@x(Fx & ~Fx) & ~F@x(Fx & ~Fx) (6, 7, Indirect Derivation)
2. | ~[F@x(Fx & ~Fx) & ~F@x(Fx & ~Fx)] Assumption for Indirect Derivation
3. | ~[(F@x(Fx & ~Fx) & ~F@x(Fx & ~Fx)] ≡ (∃x)[(Fx & ~Fx) & ~(Fx & ~Fx)] Indefinite Descriptions
4. | (∃x)[(Fx & ~Fx) & ~(Fx & ~Fx)] 3, Biconditional Conditional [left to right], 2, *Modus Ponens*
5. | (Fa & ~Fa) & ~(Fa & ~Fa) 4, Existential Instantiation
6. | Fa 5, Simplification, Simplification
7. | ~Fa 5, Simplification, Simplification

It may be observed that this troublesome derivation in our Anselmian logic for indefinite descriptions uses only the left-to-right half of the rule or axiom Indefinite Descriptions.[17] Coincidentally, it can be gathered from the next section that Anselm, though I think he uses both halves, needs only this first half of Indefinite Descriptions.

2.2.4 I have derived (iv) from (i) in what I take to be Anselm's logic, because, though (iv) can be derived from (iii), which is symbolized in its language most simply by '~S@xSx', so can everything: here 'S' abbreviates '*a* is something than which a greater cannot be thought to exist in reality. This is because, by an instance of Indefinite Descriptions, it follows from ~S@xSx that (∃x)(Sx & ~Sx).

1.	~~*SHOW*~~ P	(5, 6, Indirect Derivation)
2.	~S@xSx	*premise*
3.	~S@xSx ≡ (∃x)(Sx & ~Sx)	Indefinite Descriptions
4.	Sa & ~Sa	3, Biconditional Conditional [left to right], *Modus Ponens*
5.	~Sa	4, Simplification
6.	Sa	4, Simplification

For the same reason, (iv), 'S@xSx', is itself a theorem by an indirect derivation in this unfortunate logic,

1.	~~*SHOW*~~ S@xSx	Indirect Derivation (5, 6)
2.	~S@xSx	Assumption for Indirect Derivation
3.	~S@xSx ≡ (∃x)(Sx & ~Sx)	Indefinite Descriptions
4.	~Sa & Sa	3, Biconditional Conditional [left to right], 2, *Modus Ponens*
5.	~Sa	4, Simplification
6.	Sa	4, Simplification

as (iv) can *seem*, from its translation,

> '*Something-than-which-a-greater-cannot-be-thought-to-exist -in-reality is something than which a greater cannot be thought to exist in reality*.'

that it should be in a *good* logic for indefinite descriptions. As suggested in Section 2.2.2, Anselm may well have viewed (iv), not as an inference from something else, but as provable and necessary in its own right, and therefore hardly remarkable. This mistaken impression abetted I think by the proximity of the indefinite description predication '***an-x-such-that****-a-greater-cannot-be-thought-to-exist-in-reality* is an x such that a greater cannot be thought to exist in reality' to the universal generalization '***any x such that*** *a greater cannot be thought to exist in reality* is an x such that a greater cannot be thought to exist in reality', which generalization is analytic.

Similarly, for *every* pair of formulas $\ulcorner\sim\varphi_{@\alpha\varphi}\urcorner$ and $\ulcorner\varphi_{@\alpha\varphi}\urcorner$. For any variable α, formula φ in which α is free, and formula $\ulcorner\varphi_{@\alpha\varphi}\urcorner$ that comes from φ by proper substitution of ⌜@αφ⌝ for α: the formula $\ulcorner\varphi_{@\alpha\varphi}\urcorner$ is a theorem of our

Anselmian logic, and everything is derivable from its negation in our logic with Indefinite Descriptions. This with the remarkable consequence that in this logic that for any variable α and formula φ in which α is free, ⌜(∃α)φ⌝ is a theorem. To illustrate:

1.	~~*SHOW*~~ (∃x)Fx	(5, Direct Derivation)
2.	F@xFx	theorem
3.	F@xFx ≡ (∃x)(Fx ∧ Fx)	Indefinite Descriptions
4.	Fa ∧ Fa	3, Biconditional Conditional [left to right], Existential Instantiation
5.	(∃x)Fx	4, Simplification, Existential Generalization

2.2.5 *Unflattering?*

2.2.5.1 "But," Leftow might say, "**this puts an unflattering gloss on [Anselm's] argument**....One can instead read [it] in light of **non-Anselmian** semantic assumptions....[assumptions that include] that one can use satisfiable descriptions as if they refer, whether or not they do....This would amount to running Anselm's argument within a 'free' logic." (Leftow 2005, p. 84, bold emphasis added) Leftow 'extracts' (as David Lewis would say – please see note 33 below) from *Proslogion* 2 a two-premise argument, indicates informally a 'free-logical' path (without saying what is specifically 'free logical' about it) to a contradiction from the assumption that "nothing is a G [i.e., that nothing is identical with something-than-which-no-greater-can-be-thought]," and says, "As far as I can see, then, given a free logic, Anselm's reductio goes through" (p. 5).

Perhaps the two-premise argument Leftow extracts *Proslogion* 2 can be symbolized and derived in a free logic system for natural deduction. I have not looked into that, and Leftow is evidently not sure.[18] In any case, it does not matter to the exercise of the present paper, which is not that of extracting more-or-less nice arguments from *Proslogion* 2, but of saying what line of reasoning Anselm had in mind for this great text, and saying, incidentally, whether *his* reductio goes through. To get full value when studying historical philosophic arguments, it is important to keep apart exercises of faithful articulation, from those of 'extraction' for best arguments If great philosophers have made mistakes, they figure to have made mistakes from which we can learn. I do not consider the 'gloss' I place on Anselm's argument to be *at all* unflattering. It is *not* as if I were accusing Anselm of relying on an unstated easily taken for granted question-begging premise, a premise that all by itself entails what he is out to prove in *Proslogion* 2. Though even that accusation was not, when I made it in the first draft of this paper, terribly unflattering.

2.2.5.2 My criticism of Anselm's reasoning in *Proslogion* 2, and in particular his reasoning for *Premise* II, is not that it proceeded in an *unarticulated* logic for indefinite descriptions. Nor, certainly, is it that his reasoning proceeded *in a very simple and highly intuitive* logic for them. My admiring criticism is that it proceeded in an *imperfect* logic for indefinite descriptions, the faults of which logic are far from obvious. Studying his argument is *instructive*, firstly of the value of *articulating* and *vetting* logics of natural reasoning as we are now better positioned than he was to do.[19] Studying the faults his simple and intuitive way with indefinite descriptions is secondly instructive of the challenges of this particular piece of logical grammar. It took *genius* to find and exploit the loopholes of the intuitive system for it.

It was an *excellent error.*[20] Anselm can be seen in his reasoning to meld in what is, after all but not obviously, an impossible manner a Fregean *scope-free* treatment of indefinite descriptions as bona fide (albeit 'epsilon') terms, with a Russellian treatment of them as incomplete-in-themselves parts of essentially scoped formulas, which treatment provides for its indefinite description formulas the premiseless rule or axiom, for variable α, formulas φ and ψ, and formula-like string ψ' that comes from ψ putting ⌜Aαφ⌝ in place of each occurrence of ß that is free in ψ and that does not stand in ψ in an occurrence of a formula ⌜[Aαφ]χ⌝ ,

$$/\therefore\ [A\alpha\varphi]\psi \equiv (\exists\alpha)(\varphi \,\&\, \psi)$$

For a simplest example we have the sentence '[AxFx]G AxFx ≡ (∃x)(Fx & Gx)'. Anselm's error provided an occasion for the observation that these ways of dealing formally with indefinite descriptions are *deeply* different and not mergeable. If Gaunilo had 'cottoned' to it, and seen the problems of Anselm's argumentation for his *second* major premise, the subject of the logic of descriptions, indefinite and definite, could have been started up then, in the twelve century, instead of waiting to the end of the nineteenth. But he did not.[21] And it was not. There is more in Appendix B below of these alternative ways of coming to formal terms with the indefinite descriptions of English, and of the relation of these alternative ways to the argumentative reasoning of *Proslogion* 2.

Unflattering? Far from it. It was an award-winning error. *Five stars*!

2.2.6 *A more generous construction of Anselm's reasoning*. Suppose I am right about Anselm's implicit logic for indefinite descriptions. Then, had he articulated it and noticed the fatal flaw of it illustrated in Section 2.2.3, he could have found a cure that left his argument for *Premise II* intact. This on the assumption that he would say that the range of his quantifiers was exactly *things that exist in the mind*.

2.2.6.1 *The cure*. Taking into account this range for his quantifiers, Anselm could have seen that the rule Indefinite Descriptions needs to be premised. He could have, (a), revised Indefinite Descriptions to,

Indefinite Descriptions*. $(\exists\beta)\ \beta = @\alpha\varphi \quad /\therefore\ \psi_{@\alpha\varphi} \equiv (\exists\alpha)(\varphi \,\&\, \psi)$,

α and β variables, φ and ψ formulas, and $\psi_{@\alpha\varphi}$ a formula that comes from ψ by proper substitution of ⌜@αφ⌝ for α; and, (b), letting *M* be a logical predicate for existence in the mind, endorsed the rules,

Existence in The Mind. $M\gamma\ /\therefore\ (\exists\beta)\ \beta = \gamma$; $(\exists\beta)\ \beta = \gamma \quad /\therefore\ M\gamma$,

γ a term, β and variable.[22] These rules would reflect the intended range of his quantifiers, within which things that exist in reality would make a proper sub-class. Letting *R* be a logical predicate for existence in reality, the latter intent could be reflected by the rule,

Existence in Reality. $R\gamma \quad /\therefore\ (\exists\beta)\ \beta = \gamma$.

2.2.6.2 Amending his logic in this manner, Anselm could have argued for *Premise* II much as suggested in Sections 2.2.1 and 2.2.2. Using the new logical predicates '*M*' and '*R*' for existence in the mind and in reality, and 'S' to abbreviate '*a* is something than which a greater cannot be thought to exist in reality', the supposition for indirect derivation in Section 2.2.1 could be symbolized thus,

(i') $M@xSx \,\&\, {\sim}R@xSx$,

from which (iv) could be derived thus,

1.	~~*SHOW*~~ (iv) S@xSx	(8, Direct Derivation)
2.	$M@xSx \,\&\, {\sim}R@xSx$	(i')
3.	$(\exists y)\ y = @xSx$	2, Simplification, Existence in The Mind
4.	${\sim}R@xSx \equiv (\exists x)(Sx \,\&\, {\sim}Rx)$	3, Indefinite Descriptions*
5.	$(\exists x)(Sx \,\&\, {\sim}Rx)$	4, Biconditional Conditional (left to right), 2, Simplification, *Modus Ponens*
6.	$Sa \,\&\, {\sim}Ra$	5, Existential Instantiation
7.	$Sa \,\&\, Sa$	6, Simplification, Repetition, Adjunction
8.	$(\exists x)(Sx \,\&\, Sx)$	7, Existential Generalization
9.	$S@xSx \equiv (\exists x)(Sx \,\&\, Sx)$	2, Simplification, Existence in The Mind, Indefinite Descriptions*
10.	$S@xSx$	7, Biconditional Conditional (right to left), 6, *Modus Ponens*

Having added Existence to reflect his intent that the domain of his quantifiers should be exactly 'things that exist in the mind', Anselm could wish to 'free-logic' the rules of existential generalization and instantiation to agree with that intent, so that lines (6) and (8) should be respectively, (6') (∃x) x = a & (Sa & ~Ra) 5, Existential Instantiation*

and

(8') (∃x)(Sx & Sx) 6', Simplification (∃x x = a), 7, Existential Generalization*

Existential Instantiation*: for variable α, distinct variable β that is novel to the derivation, formula φ and formula φ_β that comes from φ by proper substitution of δ for α,

$$(\exists\alpha)\varphi \quad /\therefore\ (\exists\alpha)\ \alpha = \beta\ \&\ \varphi_\beta$$

Existential Generalization*: for variable α, term δ, formula φ_δ, and formula φ that comes from φ_δ by proper substitution of α for δ,

$$(\exists\alpha)\ \alpha = \delta,\ \varphi_\delta \quad /\therefore\ (\exists\alpha)\varphi$$

2.2.6.3 Anselm could have maintained that critiques of Indefinite Descriptions in Sections 2.2.3 and Section 2.2.4 cannot be adapted to run against Indefinite Descriptions*. The *reductio* of Section 2.2.3, readdressed to Indefinite Descriptions*, would need the premise that *M*@x(Fx & ~Fx). This premise he could have said is not available, since only things of which we can speak and think *without a priori contradiction*, as even the Fool can do of that-than-which-nothing-greater-can-be-thought, lie in the domain on his quantifiers and 'exist in the mind' in the sense of '*M*'. The *general* problem illustrated in the last paragraph of 2.2.4 can be deflected by two observations: first, that in the amended logic that features Indefinite Descriptions*, not 'F@xFx', but only '*M*@xFx ⊃ F@xFx', can be entered on line (2) as a theorem; and second, that needed but not provided for the entry 'F@xFx ≡ (∃x)(Fx ∧ Fx)' by Indefinite Descriptions* is the sentence '*M*@xFx', this to infer the premise '(∃y) y = @xFx' required for that rule.

The amendments suggested in 2.2.6.1 to what I think was Anselm's defective implicit logic in *Proslogion* 2 save the subsidiary reasoning in it for *Premise* II, and afford a charitable alternative interpretation of its hidden logic that would place the burden of this chapter's argument squarely on its *Premise* I, and direct critical attention to Anselm's reasoning for it. This direction is taken in Part Two below.

2.3 *On to the conclusion of Proslogion 2*

2.3.1 With premises I and II 'in hand', Anselm writes: "[13] Therefore there is absolutely no doubt that *something-than-which-nothing-greater-can-be-thought exists both in the mind and in reality*." (Italics added). Exactly this 'singular proposition' is the stated conclusion of *Proslogion* 2, and it does indeed follow from,

I. "[S]something-than-which-nothing-greater-can-be-thought exists in the mind."

and

II. "[T]hat-than-which-a-greater-cannot-be-thought cannot exist in the mind alone [and not also in reality]."

Under the abbreviations – A: something-than-which-a-greater-cannot-be-thought; M: *a* exists in the mind; R: *a* exists in reality – the argument from these premises to that conclusion is symbolized by,

$$M(A). \quad \sim\Diamond[M(A) \,\&\, \sim R(A)] \quad \therefore \; R(A),$$

which is valid in every logic for alethic modalities.[23]

2.3.2 However the last line of *Proslogion* 2, [13], does not deliver what was to be proved in it, which was the *existential generalization* that *something that which nothing greater can be thought exists*, or in other words, that *there exists a thing such that nothing greater than it can be thought*. That this is what was to be proved in this chapter can be gathered from its first lines:

> "[1] Well then, Lord, You who give understanding to faith, grant me that I may understand, as much as You see fit, that You exist as we believe You to exist, and that You are what we believe You to be. [2] Now we believe that You are **something than which nothing greater can be thought**. [3] **Or can it be that a thing of such a nature does not exist**, since 'the Fool has said in his heart, there is no God'?"

For a general result Anselm could have taken for granted the availability of,

> something-than-which-nothing-greater-can-be-thought is something than which nothing greater can be thought,

which we have seen is a theorem of a logic that features the axiom Indefinite Descriptions, and a consequence of *Premise* I in a better logic that features the rule Indefinite Descriptions*. From that together with [13] it follows that

something than which nothing greater can bethought exists both in the mind and in reality,[24]

and, since to exist in reality is to exist *simpliciter*, that "a thing of such a nature does...exist" [3], which is to say that,

something than which nothing greater can be thought exists.[25]

Such a thing 'truly exists', Anselm might add, as, according to the title of *Proslogion* 2, he would prove that God does.

Neither of the displayed, boldly emphasized, existential generalizations is drawn by Anselm in *Proslogion* 2. It serves his argument for *God* to skip over these generalizations, and to proceed from the non-general particular conclusion of *Proslogion* 2, namely that ***something-than-which-nothing-greater-can-be-thought*** *exists both in the mind and in reality*, to *Proslogion* 3. This next chapter of his book *elaborates* the result of *Proslogion* 2 regarding "this being....that-than-which-nothing-a-greater-cannot-be-thought" (*Proslogion* 3, [1] and [3], for) that it "exists both in the mind and in reality" [13]. This result is upgraded to say that **it** "exists so truly...that **it** cannot be even thought not to exist" (bold emphasis added), and *then* **it** is identified with God. It was convenient for the progress of *Proslogion* 3 to have available this something – "this being" he writes – for several references. As for the existential general conclusion itself , 'promised' in *Proslogion* 2 lines [1] **-** [3], Anselm 'took it as read', and might have had little patience with a student who asked after it.[26]

3. The Argument Now – *Hartshorne's Modal Argument*

Hartshorne offers a deduction of the existence of a perfect being from two modalized premises. He uses 'N' for necessity in the so-called S5-sense of truth at every possible world, and '~N~' for possibility in the correlative sense of truth at at least one possible world. I use instead '$\Box$' and '$\Diamond$'. He dubs his first premise 'Anselm's Principle.'

AP $\Box[Q \supset \Box Q]$,

which under the abbreviation – "'Q' for '($\exists$x)Px' There is a perfect being" (Hartshorne 1962, p. 50) – symbolizes,

It is necessary that if there is a perfect being, then it is necessary that there is a perfect being.

Hartshorne provides for ***AP*** the free translation, "*perfection could not exist contingently*" (p. 51, italics added), which idea he gets from *Proslogion* 3: there is in Hartshorne's text for this principle ("The Incompatibility of Perfection and Contingency," pp. 58-68) nothing like Anselm's *reductio* for his *Premise* II.[27] Hartshorne's argument runs in terms of an unanalyzed existential generalization. His reasoning, which is conducted in sentential, not quantified, modal logic, is well clear of the complications of Anselm's descent for purposes of logical calculation to a particular something.[28] That perfection could not exist contingently has the symbolization,

$$\sim\Diamond[Q \;\&\; \sim\Box Q],$$

which is logically equivalent to '$\Box[Q \supset \Box Q]$' by a modal-negation interchange followed by several interchanges of sentential equivalents.[29] His other premise comes with the comment, "Intuitive postulate (or conclusion from other theistic arguments)" (*op. cit.*, p. 51): it is the proposition *that perfection is possible*:

IP $\Diamond Q$.

Hartshorne had in mind for ***IP*** something more than 'the first subsidiary argument' of *Proslogion* 2 for the existence in the mind of something-than-which-nothing-greater-can-be-thought, namely, 'theistic arguments' that show that "the fool's...idea...is self-consistent" (p. 52).[30] It follows in modal logic S5 from ***AP*** and ***IP*** that there is a perfect being,

Q: $(\exists x)Px$.[31]

4. *This Modal Argument 'Updates' the Major Argument of* Proslogion *2*

Hartshorne's two premises are, on three assumptions, 'philosophic translations' of at least close approximations to consequences to which Anselm was committed of the premises of the major argument of *Proslogion* 2, and Hartshorne's conclusion is similarly related to the conclusion of *Proslogion* 2. *Assumption One* is that Hartshorne's words, 'a perfect being', mean the same as Anselm's words,'a thing than which nothing greater can be thought'.[32] *Assumption Two* is that to say, in Anselm's mentalistic idiom, that there is something of a kind that it *exists in the mind*, is to say in modal terms that something of this kind *is possible*, or equivalently, that *it is possible that* there is something of this kind. *Assumption Three* is that, 'to exist *in reality*' was, for Anselm, 'to exist *simply*'. On these assumptions, consequences to which Anselm was committed of the stated premises of *Proslogion* 2 are equivalent to Hartshorne's premises, and the conclusion of *Proslogion* 2 is similarly related to Hartshorne's conclusion.[33]

Premise I of the major argument in *Proslogion* 2 is,

Something-than-which-nothing-greater-can-be-thought *exists in the mind*.

From this, Anselm would need to say it follows, mainly by Indefinite Descriptions (or Indefinite Descriptions*), that:

There is something of the kind, thing than which nothing greater can be thought, *that exists in the mind*.

■*Confirmation*. (i) *Premise* I: M@xSx. (ii) S@xSx: a theorem given mainly by Indefinite Descriptions, or a consequence of (i), rewritten, '*M*@xSx', mainly by Indefinite Descriptions* and Existence in The Mind.

Therefore, **(∃x)(Sx & Mx)** by Existential Generalization, or Existential Generalization*.■ Therefore, by Assumption Two, *Premise* I has for Anselm the corollary,

It is possible that there is something than which nothing greater can be thought.

And this, according to Assumption One, is equivalent to,

IP It is possible that a perfect being exists: ◊Q

Premise II of the major argument of *Proslogion* 2 is,

Something-than-which-a-greater-cannot-be-thought *cannot* exist in the mind alone (and not also in reality).

Anselm is committed mainly by Indefinite Descriptions (or by Indefinite Descriptions* and *Premise* I) to,

Something-than-which-a-greater-cannot-be-thought is a thing than which a greater cannot be thought.

So *Premise* II alone (or with assistance from *Premise* I) has for Anselm the consequence,

(*) Something than which a greater cannot be thought *cannot* exist in the mind alone (and not also in reality).

And he would accept that,

(**) *It is not possible* that (something than which a greater cannot be thought exists in the mind, though no such thing exists in reality).

or equivalently,

(****) It is not possible that there is an x such that nothing greater than x can be thought, and x exists in the mind along (and not also in reality)

.■Please observe that

(*) Something than which a greater cannot be thought *cannot* exist in the mind alone (and not also in reality).

is amphibolous between,

(***) There is an x such that nothing greater than x can be thought, and x cannot exist in the mind alone (and not also in reality).

and

(**) *It is not possible* that something than which a greater cannot be thought exists in the mind alone (and not also in reality).

(***) and (**) are not equivalent. My claim is that Premises I and II of *Proslogion* 2 commit Anselm to (*) *in the sense of (***)*, and that while not similarly committed to (**) he would agree to it. It is the 'close approximation' to something to which he is committed that was anticipated in the first paragraph of this section. ■

Sentence (****) is, by my three assumptions, Anselmian speech for, It is not possible that (both it is possible that there is a perfect being,

and it is not the case that there is a perfect being).

■In particular, 'something than which a greater cannot be thought exists in the mind' is, by Assumption One, synonymous with 'a perfect being exists in the mind', which, by Assumption Two, is synonymous with 'it is possible that there is a perfect being'.■ And that in symbols is,

$$\sim\Diamond\,[\Diamond Q \,\&\, \sim Q].$$

which is equivalent to

$$\textbf{\textit{AnP}}\quad \Box[\Diamond Q \supset Q],$$

and thus to Hartshorne's,

$$\textbf{\textit{AP}}\quad \Box[Q \supset \Box Q].$$

Each of ***AnP*** and ***AP*** is equivalent to the Leibnizian principle that if it is possible that there is a perfect being, then it is necessary that a perfect being exists,

$$\Diamond Q \supset \Box Q:$$

■***AnP***: '$\Box[\Diamond Q \supset Q] \equiv \Diamond Q \supset \Box Q$' is an instance of the modal-confinement theorem '$\Box[\Diamond P \supset R] \equiv [\Diamond P \supset \Box R]$'.

AP: '$\Box[Q \supset \Box Q] \equiv \Diamond Q \supset \Box Q$' is an instance of the modal-confinement theorem '$\Box[P \supset \Box R] \equiv [\Diamond P \supset \Box R]$'.■

The explicit conclusion of *Proslogion* 2 that,

something-than-which-nothing-greater-can-be-thought exists both in the mind and in reality,

has either alone, or with assistance from *Premise* I, the consequence for Anselm that,

something than which nothing greater can be thought exists both in the mind and in reality.

This, by my three assumptions, is equivalent to,

It is possible that there is a perfect being, and there is a perfect being: $(\Diamond Q \wedge Q)$,

which is equivalent to Hartshorne's conclusion that there is a perfect being,

Q: $(\exists x)Px$.[34]

Part Two. *THE OBJECTION NOW AND THEN*

5. The Objection Now by Rowe – *THAT CONCEIVABILITY DOES NOT ENTAIL POSSIBILITY*

5.1 Common grounds since Anselm for premises such that perfect beings, and things than which none greater can be thought to exist, have been that we can *conceive* of such things, that we understand what we are talking about, when we talk about them, that our ideas of them harbour no contradictions, and so on (please see note 49 below from some evidence of this commonality). Rowe explains why, regarding *certain* kinds, including *these* kinds, the issue cannot be settled that it is at least *possible* that things of these kinds exist, simply by observing that we can *think* of such things existing, that we *understand perfectly well words* for their kinds. He explains why, even if we could prove that our concepts of these things do not *a priori* entail contradictions, this would not settle that it is possible that there are such things.[35] Examples of such kinds include actually or truly existing magicians, a.k.a, *magicans*,[36] and things than which (according to Anselm's lights) nothing greater can be thought[37] *If* such things could be shown *a priori* to be possible, and thus to exist, simply by thinking of them and so on,[38] then ever so many kinds of things could be shown similarly to exist that we are sure cannot be shown similarly to exist. How come?

Because, *for one thing*, corresponding to *every* kind K that can be thought or conceived without contradiction to be instantiated, there are kinds, for example, *actually or truly* existing K's, which can also be thought or conceived without contradiction to be instantiated, *which* kinds are instantiated only if the kinds K are instantiated. For example, there is no contradiction in the thought that the kind dragon is instantiated, and so the kind *dragoon*, a.k.a., *actually or truly existing dragon*, can also be thought or conceived without contradiction to be instantiated. Now *if* it could be settled *a priori* that it is possibly the case that that there is a *dragoon*, then it could be settled *a priori* that it is actually that case that there is a dragon. But *this*, we are sure, cannot be settled *a priori*.[39]

And because, *for a second thing*, regarding many, though not all, kinds K that can be thought or conceived without contradiction to be instantiated, there are kinds K* of '*K's than which no greater K's can be thought or conceived*'. For example, the kind, *blessed little isles*, that is, earthly isles not exceeding in area ten hectares that are blessed beyond anyone's imagination, can be thought without contradiction to be instantiated, and so can the kind *Anselmian* blessed little isles, this being the kind, '*blessed little isles than which (by Anselm's lights) no greater such isles can be thought or conceived*'. And so again, if it could be settled *a priori* that *Anselmian blessed little isles* are *possible*, then it could be settled *a priori* that *blessed little isles exist and are actual,*[40] though *this*, we are sure, cannot be settled *a priori*.

Presumably it is the somewhat same for *Anselmian gods*, that is, for beings than which no greater beings can be thought or conceived. To bring out the parallel with Anselmian bless little isles, we may let an *absolutely magnificent being* be an being that is *in every **non-existential** respect* exactly like a being than which (according to Anselm's lights) nothing greater can be thought: an absolutely magnificent thing would be a being than which nothing of greater power/knowledge/goodness/creative responsibility/and so on could be thought or conceived, but it is not part of the idea of an absolutely magnificent being that it 'exists in reality'. An *Anselmian god* would be an absolutely magnificent being that existed in reality. So again, if it can be settled *a priori* that Anselmian gods are possible, then it can be settled *a priori* that there are absolutely magnificent, though this cannot be settled *a priori*, if, contrary to what Descartes found to be clear and distinct together with what he took to be revealed by 'the natural light', existence in reality is not entailed by what would be the non-existential features of an Anselmian god that constitute absolute magnificence.[41]

5.2 *To elaborate in possible-world terms.* By a 'possible world' I mean 'a way things might have been', a comprehensive way that settles "everything regarding what things there are and how they are both in themselves and in relation to one another" (Sobel 2004, p. 99). *The actual possible world* is the possible world that happens to be the way things are in *the actual world, this world in which we live and breathe*: the actual world is not a *possible world*; it is in particular not the one that is the way things are in the actual world; the actual world *instantiates* the actual possible world. Following Plantinga, let us say that the actual possible world is *Kronos*. That said, here comes the *concept* of a *magican*:

> A thing *x* is a *magican* at a possible world w if and only if, (i), *x* exists and is a magician at w, *and*, (ii), x is exists and is a magician at *Kronos*. (*Cf*., Rowe 1993, 42n13.)

The *concept* of a *magican* is in a certain way peculiar. Let us say that an *ordinary* concept of a kind of thing is such that, for any possible world w, whether or not this concept is instantiated at w depends exclusively on the natures of things that exist at w. The concept of a magician is ordinary in this sense. The concept of a *magican* is not. For whether or not it is instantiated at a possible world w other than *Kronos* depends in part on the natures of things that exist at *Kronos*: the concept of a *magican* is instantiated at a possible world w only if the concept of a magician is instantiated at *Kronos* (the concept of a *magican* is instantiated at at least one possible world if and only if it itself is instantiated at *Kronos*). Let us say that a concept is *extraordinary* if and only if whether or not it is instantiated at a possible world w other than *Kronos* depends at least in part on the natures of things that exist at *Kronos*. The concept of a *magican* is extraordinary in this sense.[42]

The concept of an Anselmian god is similarly extraordinary. To prepare for this concept, we have, for a different concept, that:

A thing x is an *absolutely magnificent being* at a possible world w if and only if x exists at w and is, at w, *in every non-existential respect* exactly like a being than which (according to Anselm's lights) nothing greater can be thought.

Now comes the concept of an Anselmian god.

A thing x is an Anselmian god at possible world w if and only if, (i), x exists and is an absolutely magnificent being at w, and, (ii), x exists and is an absolutely magnificent being at *Kronos*

The concept of an Anselmian god is an extraordinary concept: whether or not it is instantiated at a possible world w other than *Kronos* depends in part on the natures of things that exist at *Kronos*. The concept of an Anselmian god is in this respect like the concept of a *magican*.[43] And one may gather from their parallel definitions other similarities. For one, that as it can be known *a priori* that it is *possible* that there is a *magican*, only if it can be known *a priori* that it is *true* that there is a *magician*, so it can be known *a priori* that it is possible that there is an Anselmian god, only if it can be known *a priori* that there is an absolutely magnificent being. And, *presumably*, for second, that as it *cannot* be known *a priori* that there is a magician, so it cannot be known *a priori* that there is an absolutely magnificent being. Given these similarlities, there follows by *modus tollens* inferences, the third that as it cannot be known *a priori* that it is possible that there is a *magican*, so it cannot be known *a priori* that it is possible that there is an Anselmian god.[44]

6. THE OBJECTION IN GAUNILO'S SPEECH 0N BEHALF OF THE FOOL

6.1 What should have been made of *Proslogion* 2 then, in the beginning of its history? Not much, Gaunilo said when it was first circulated, his reason being that though its major argument is valid, Anselm's subsidiary argumentation for *Premise* I does not establish that this thing of which Anselm speaks is *in the mind* in a sense that would entail that it exists not only in the mind, but in reality as well. This capsule sketch agrees with Anselm's take on Gaunilo's critical position.

> "[Y]ou maintain that, from the fact that that-than-which-a-greater-cannot-be-thought is understood, it does not follow that it is in the mind, nor that, if it is in the mind [in a manner entailed by its being understood], it therefore exists in reality . [Against this] I insist...that simply if it can be thought it is necessary that it exists." (Reply to Gaunilo 1: p. 111.)

Gaunilo had nothing to say gainst Anselm's reasoning for *Premise* II. There is no evidence that Gaunilo considered at all remarkable the implicit transitions from 'atomic indefinite description sentences' to corresponding existential generalizations in Anselm's text. The hyphenated indefinite descriptions of frequent occurrence in Charlesworth's translation *Proslogion* 2 - 4 have *no* occurrences in his translation of Gaunilo's opposition to the *Proslogion* 2.

6.2 Gaunilo's critical position was, I suggest, EITHER that from the fact that that-than-which-a-greater-cannot-be-thought is understood, it does not follow that *it is in the mind*, OR, that though it does follow from its being understandable that it is in the mind, this follows only *in a sense* in which, from its 'being in the mind' it does not follow that it exists. Why? Because, he could say, ever so many things are understandable that *do not exist*, including, he explicitly indicates in *Pro Insipente* 2, things that are ***are not capable of existing***.

Gaunilo does not say that there is not *a thing than which nothing greater can be thought*. One gathers that he may personally have thought there is such a thing, though the evidence is mixed.[45] In any case, he of course does not deny that he has these words, 'a-thing-than-which-nothing-greater-can-be-thought', in mind when he reads Anselm's inscriptions of them. Nor does he deny that he then understands them, or that he then has what they mean in mind. We may take, furthermore, that he finds no contradiction or *a priori* impossibility in these words. What he denies is that, from his understanding these words, and we may add from there being no contradiction in his understanding of them, it *follows* that *he has in his mind* something in any manner different from the way "all kinds of unreal things, **not existing in themselves in any way at all** , are equally in the mind since if anyone speaks of them I understand whatever he says" (*Pro Insipiente* 2, p. 105, bold emphasis added). Included, Gaunilo could have added, are things that *cannot* 'exist in themselves', things that are *incapable* of existing in reality, such as greatest numbers (the concept of which harbours a contradiction), and, *magicans*, the concept of which harbours no contradiction, had he heard of such things and believed there are in reality no magicians.

6.3 *Anselm* gathers that a thing than which a greater cannot be thought is in the mind *in a manner that serves his argument*, since it is in the mind of the Fool who, understanding what he says, says there is no such being. *Gaunilo* rejects this inference, but we should acknowledge that he denies the inference from the fool's understanding Anselm's words to the *requisite* existence in the mind of "what he understands" (p. 87), *only with difficulty*, and not in a manner that fully illuminates the problem of the inference. The problem with Anselm's first subsidiary argument for his great being's *existence in the mind in the sense required by his argument for its existing in reality*, is, I think, in other words, the problem that would spoil a similar argument for Hartshorne's 'Intuitive Postulate' which affirms the *possibility* of a perfect being. Understandability and conceptual coherence do not entail possibility. 'The more accurate explication' of Anselm's argument that runs in terms of possible existence explained in possible-world terms, rather than in terms of things existing in the mind, when joined with the more accurate explication of Gaunilo's primary objection cast in these up-to-date terms, can 'give additional evidence to' this objection.

6.4 Gaunilo, anticipating Leibniz, all but says to Anselm, "You have not proved that something than which nothing greater can be thought is *capable* of existing. You have not proved the *possibility* of it, *because* it is not sufficient for the possibility of a kind of thing that there should be understandable words for this kind, or even that there should be no contradiction in words for it, and thoughts of it. And you have provided nothing more to the possibility of your great being than this. If you had proved the possibility of it, if you had proved its *capacity* to exist, I would give you your perfect being, after you gave me, as you have promised to do, my blessed little island conceived as an island than which none greater can be thought."[46]

The admirable monk *actually* said, with reference to Anselm's attempt to 'place in the mind', in a manner sufficient for the argument, whatever is understood by a person:

> "this is in my view like [arguing that] any things...**are capable of existing** if these things are mentioned by someone whose spoken words I might understand" (*Pro Insipiente* 2, 106, emphasis added, brackets original in the translation).

And he said that, "If...someone wishes **thus** to persuade me that **this island**...exists, I should...think that he was joking"(*Pro Insipiente* 6, bold emphasis added). This line continues: "or I should find it hard to decide which of us I ought to judge the bigger fool – I, if I agreed with him, or he, if he thought that he had proved the existence of this island..., unless he had first convinced me that its very excellence exists in my mind precisely as a thing existing truly...and not just as something unreal or doubtfully real."

Gaunilo was, I think, near enough to Rowe's elusive zinger to get credit for anticipating it.[47] It was, I believe, otherwise unanticipated.[48] Anselm does not take up in the spirit of cooperative investigation the point that Gaunilo lobbed,[49] which, I conjecture, could have been, in Anselm's terms as translated by Charlesworth, that from the existence of a kind of thing *in **a** mind*, for example, in the Fool's mind, or in Anselm's mind, it does *not* follow that it *exists in **the** mind*, or, Charlesworth might have let him say, that it ***exists in mind***.[50, 51]

. . . . .

And that is how it all began, might have ended, and could now end. Though we know that it did not, and will not.

APPENDIX A

PROSLOGION 2 AS TRANSLATED BY S. N. DEANE

Chapter II.

"Truly there is a God, although the fool hath said in his heart, There is no God.

[1] And so, Lord, do thou, who does give understanding to faith, give me, so far as thou knowest it to be profitable, to understand that thou are as we believe; and that thou art that which we believe. [2] And, indeed, we believe that thou art a being than which nothing greater can be conceived. [3] Or is there no such nature, since the fool hath said in his heart, there is no God? (Psalms xiv. I). [4] But, at any rate, this very fool, when he hears of this being of which I speak – a being than which nothing greater can be conceived – understands what he hears, and what he understands is in his understanding; although he does not understand it to exist.

[5] For, it is one thing for an object to be in the understanding, and another to understand that the object exists. [6] When a painter first conceives of what he will afterwards perform, he has it in his understanding, but he does not yet understand it to be, because he has no yet performed it. [7] But after he has made the painting, he both has it in his understanding, and he understands that it exists, because he has made it.

[8] Hence, even the fool is convinced, that something exists in the understanding, at least, than which nothing greater can be conceived. For, when he hears of this, he understands it. And whatever is understood, exists in the understanding. [9] And assuredly that, than which nothing greater can be conceived, cannot exist in the understanding alone. [10] For, suppose it exists in the understanding alone: then it can be conceived to exist in reality; which is greater.

[11] Therefore, if that, than which nothing greater can be conceived, exists in the understanding alone, the very being, than which nothing greater can be conceived, is one, than which a greater can be conceived. [12] But this is obviously impossible. [13] Hence, there is no doubt that there exists a being, than which nothing greater can be conceived, and it exists both in the understanding and in reality." (Anselm 1962, pp. 7-8.)

. . . . .

Bracketed numbers have been added. They mark the sentence breaks in Charlesworth's translation, which agree with those in Deane's translation, except for [8] where three sentences in Deane's translation correspond to just one in Charlesworth's.

3. *That God cannot be thought not to exist*

[1] And certainly this being so truly exists that it cannot be even thought not to exist. [2] For something can be thought to exist that cannot be thought not to exist, and this is greater than that which can be thought not to exist. [3] Hence, if that-than-which-a-greater-cannot-be-thought can be thought not to exist, then that-than-which-a-greater-cannot-be-thought is not the same as that-than-which-a-greater-cannot-be-thought, which is absurd. [4] Something-than-which-a-greater-cannot-be-thought exists so truly then, that it cannot be even thought not to exist.

[5] And You, Lord our God, are this being. [6] You exist so truly, Lord my God, that You cannot even be thought not to exist. [7] And this is as it should be, for if some intelligence could think of something better than you, the creature would be above its Creator and would judge its Creator – and that is completely absurd. [8] In fact, everything else there is, except you alone, can be thought of as not existing. [9] You alone, then, of all things most truly exist and therefore of all things possess existence to the highest degree; for anything else does not exist as truly, and so possesses existence to a lesser degree. [10] Why then did 'the Fool say in his heart, there is no God' [Ps. 13: I; 52: I] when it is so evident to any rational mind that You of all things exist to the highest degree? [11] Why indeed, unless because he was stupid and a fool?

4. *How 'the Fool said in his heart' what cannot be thought*

[1] How indeed has he 'said in his heart' what he could not think; or how could he not think what he 'said in his heart', since to 'say in one's heart' and 'to think' are the same? [2] But if he really (indeed, since he really) both thought because he 'said in his heart' and did not 'say in his heart' because he could not think, there is not only one sense in which something is 'said in one's heart' or thought. [3] For in one sense a thing is thought when the word signifying it is thought; in another sense when the very object which the thing is understood. In the first sense, then, God can be thought not to exist, but not at all in the second sense. [4] No one, indeed, understanding what God is can think that God does not exist, even though he may say these words in his heart either without any [objective]* signification or with some peculiar signification. [5] For God is that-than-which-nothing-greater-can-be-thought. [This is the last occurrence in the *Proslogion* of hyphenated terms.] [6] Whoever really understands this understands clearly that this same being so exists that not even in thought can it not exist. [7] Thus whoever understands that God exists in such a way cannot think of Him as not existing.

[8] I give thanks, good Lord, I give thanks to You, since what I believed before through Your free gift I now so understand through Your illumination, that if I did not want to *believe* that You existed, I should nevertheless be unable not to *understand* it. (Anselm 1993, pp. 88-9: *Charlesworth's interpolation.)

Though beyond the purposes of this paper, I will not resist indicating for indefinite descriptions a sound extension of the Identity Calculus of (Kalish, *et. al*., 1980), congenial to Anselm's syntax in which indefinite descriptions are *bona fide* terms. In this Fregean theory 'proper' and 'improper' indefinite descriptions are distinguished for separate treatment. Another extension of the Identity Calculus, a Russellian theory, for indefinite descriptions will be indicated, applications of which to Anselm's text can be illuminating, though this second theory is not congenial to his syntax, for in it indefinite descriptions are 'scoped' *pseudo* terms. The Identity Calculus itself is a two-valued logic for denoting terms and non-empty domains, as are these two extensions of it.

B1 *The Indefinite Description Calculus*

B1.1 *Language*

New terms. For any variable α and formula φ, ⌜Яαφ⌝ is a term: it is an *indefinite descriptions*.

Semantics. Let an indefinite description ⌜Яαφ⌝ be *proper* in an interpretation *Int* for the Indefinite Description Calculus if and only if ⌜(∃α)φ⌝ is satisfied for an assignment of elements of the domain of *Int*: for the special case in Iiwhich no variable other than α is free in φ, ⌜Яαα⌝ is *closed* or a *name*, and the propriety condition is that ⌜(∃α)φ⌝ be true in *Int*. Let a description ⌜Яα φ⌝ be *vacuous* if and only if α is not free in φ. An interpretation for this logic features an *improper designatum*. A description ⌜Яα φ⌝ that is closed and not vacuous in *Int*, if proper in *Int* designates something in the extension in *Int* of φ, whereas, if improper in *Int* it designates the *Improper Designatum* of *Int*. That is a selected member of the domain of *Int*: "it falls to us to make some decision concerning [the] designation [of improper descriptions'" (Kalish, *et.* , p. 307), and this is the simplest decision. In an interpretation vacuous descriptions designate the improper designata of interpretations. An interpretation for the Indefinite Description Calculus includes a choice-function that, to each description ⌜Яαφ⌝ that is proper in *Int*, assigns a member of the extension of φ subject to two restrictions: (i), Alphabetic Variance, for any variables α and β, and formulas φ_α and φ_β such that φ_β comes from φ_α by proper substitution of β for α and *vice versa*, the same thing is assigned to ⌜Яαφ_α⌝ as to ⌜Яβφ_β⌝, and, (iii), 'Logical Extensionality', for any formula ψ, if φ and ψ are coextensive in every interpretation, the interpretation *Int* assigns the same thing to ⌜Яαψ⌝ as to ⌜Яαφ⌝.[52]

The Indefinite Description Calculus is an 'epsilon calculus' as is the Description Calculus itself: "Epsilon Calculi are extended forms of the predicate calculus that incorporate epsilon terms. Epsilon terms are individual terms of the form 'εxFx', being defined for all predicates in the language. The epsilon term 'εxFx' denotes a chosen F, if there are any F's, and has an arbitrary reference otherwise." (Slater 2005).

B1.2 *Logic*. For derivations in The Indefinite Description Calculus, I add analogues of the rules for definite desciptions terms in The Description Calculus of (Kalish, *et. al*., 1980).

Proper Indefinite Descriptions. For any variable α, formula φ, and formula $\varphi_{Я\alpha\,\varphi}$ that comes from φ by proper substitution of ⌜Яαφ⌝ for α,

$$(\exists\alpha\varphi) \quad /\therefore\ \varphi_{Я\alpha\varphi}$$

for example, from '(∃x)Sx' one may infer 'SЯxSx,

and

Improper Indefinite Descriptions. For any variables α and γ and formula φ,

$$\sim(\exists\alpha)\varphi \quad /\therefore\ Я\alpha\varphi = Я\gamma\ \gamma \neq \gamma$$

for example, from '~(∃x)Fx' one may infer 'ЯxFx = Я x x ≠ x.

and the two rules,

Alphabetic Variance. For any variables α and β, formulas φ and ψ such that ψ comes from φ by proper substitution of β for α and φ comes from ψ by proper substitution of α for β,

$$/\therefore\ \mathcal{A}\alpha\varphi = \mathcal{A}\beta\psi,$$

for example, one may 'infer', or enter on a line without further ado, '𝒜xFx = 𝒜yFy'.

and

Interchange of Equivalents. For any variable α, and formulas φ and ψ such that ⌜(φ ≡ ψ)⌝ is a theorem

$$/\therefore\ \mathcal{A}\alpha\varphi = \mathcal{A}\alpha\psi,$$

for example, from one may, or enter on a line without further ado, infer '𝒜xFx = 𝒜x~~Fx'.[53]

B1.3 In this calculus 'G𝒜xFx' neither is entailed by, nor does it entail, '(∃x)(Fx & Gx)'.

U: {0,1}	U: {0}
Improper designatum: 0	Improper designatum: 0
𝒜 xFx: 1	𝒜xFx: 0
F: {0,1}	F: {}
G: {0}	G: {0}
G𝒜xFx (∃x)(Fx & Gx)	G𝒜xFx (∃x)(Fx & Gx)
1 T	0 F
F	T

'𝒜xFx' is proper in the first model; its chosen designatum is 1. '𝒜xFx' is improper in the second model, and thus designates the improper designatum.

Similarly, in this calculus '~G𝒜xFx' neither entails, nor is it entailed by, '(∃x)(Fx & ~Gx)'. Also, whereas

$$G\urcorner xFx \rightarrow \bigvee y[\bigwedge x(Fx \leftrightarrow x = y) \wedge Gy] \vee [\sim\bigvee y\bigwedge x(Fx \leftrightarrow x = y) \wedge G\urcorner x\ x \neq x],$$

which expresses what "might be called the *essence of Frege*" (Kalish, *et. al.*, p. 325) is valid in the Description Calculus, *it's a* -analogue,

$$G\mathcal{A}xFx \equiv (\exists x)(Fx \,\&\, Gx) \vee [\sim(\exists x)Fx \,\&\, G\mathcal{A}x\ x \neq x],$$

is not valid in the Indefinite Description Calculus. Lastly, '*F𝒜xFx*' is false in every model in which the extension of 'F' is {}.

B1.4 Line (i) in the subsidiary derivation of Section 2.2.1 for *Premise* II in Anselm's argument can be symbolized 'M𝒜xSx'; line (iv) can be symbolized 'S𝒜xSx'– M: *a* exists in the mind alone (and not also in reality); S: *a* is something than which a greater cannot be thought to exist in reality.[54] The inference,

$$M\mathcal{A}xSx \quad /\therefore\ S\mathcal{A}xSx$$

is not valid in the Indefinite Description calculus. Its premise is true, thought its conclusion is false, in this model:

Universe: {0}
Improper designatum: 0
S: {}
M: {0}

And line (iv), that S𝒜xSx, is not valid in this calculus, nor is it 'derivable from scratch'.

B2 *A Russellian Theory of Indefinite Descriptions*. Another formal treatment of indefinite descriptions can take its cue from Bertrand Russell's Theory of Descriptions. It would make indefinite descriptions 'incomplete symbols' that occur in formulas that feature 'scope-indicators' for them. This more complicated theory – let it be the Theory of Indefinite Descriptions – can be taken from the *R*-calculus of (Sobel 2006, Chapter VIII), as the Indefinite Description Calculus is taken from the Description Calculus of (Kalish, *et. al.*, 1980).[55]

B2.1 ‘What might be called the essence of this theory of indefinite descriptions’,

$$[\mathbf{A}xFx]G\,\mathbf{A}xFx \equiv (\exists x)(Fx \,\&\, Gx),$$

is an instance of its principle or axiom for indefinite description formulas, for variable α, formulas φ and ψ, and expression ψ' that comes from ψ putting $\ulcorner \mathbf{A}\alpha\varphi \urcorner$ in place of each occurrence of ß that is free in ψ and that does not stand in ψ in an occurrence of a formula $\ulcorner [\mathbf{A}\alpha\varphi]\chi \urcorner$,

Russellian Indefinite Descriptions $\quad /\therefore\ [\mathbf{A}\alpha\varphi]\psi \equiv (\exists\alpha)(\varphi \,\&\, \psi)$

(*cf*., Sobel 2006, Chapter VIII, Section 6.2). I do not know that Russell ever considered such a theory of indefinite descriptions, but I think he must have done.

B2.2 ‘Scope matters’ in this theory. For example, ‘$\sim[\mathbf{A}xFx]G\,\mathbf{A}xFx$’ is equivalent to ‘$\sim(\exists x)(Fx \,\&\, Gx)$’, while ‘$[\mathbf{A}xFx]\sim G\,\mathbf{A}xFx$’ is equivalent to ‘$(\exists x)(Fx \,\&\, \sim Gx)$’. ‘Scope matters even for *proper* **A**-descriptions in this theory: ‘$(\exists x)Fx$’ does *not* entail the equivalence ‘$[\sim(\exists x)(Fx \,\&\, Gx) \equiv (\exists x)(Fx \,\&\, \sim Gx)]$’: ‘$(\exists x)Fx$’ and ‘$(\exists x)(Fx \,\&\, \sim Gx)$’ are true, and ‘$\sim(\exists x)(Fx \,\&\, Gx)$’ is false in the model,

Universe: {0, 1, 2}
F: {0, 2}
G: {0, 1}

So ‘$(\exists x)Fx$’ does not entail the equivalence ‘$(\sim[\mathbf{A}xFx]G\,\mathbf{A}xFx \equiv [\mathbf{A}xFx]\sim G\,\mathbf{A}xFx)$’.

The case is otherwise for Russellian *definite* descriptions in my theory for which

$$(\exists y)(x)(Fx \equiv x = y) \supset (\sim[\neg xFx]G\neg xFx \equiv [\neg xFx]\sim G\neg xFx)$$

is a theorem, since

$$(\exists y)(x)(Fx \equiv x = y) \supset (\sim(\exists y)[(x)(Fx \equiv x = y) \,\&\, Gy] \equiv (\exists y)[(x)(Fx \equiv x = y) \,\&\, \sim Gy])$$

is a theorem.[56] On the other hand, while in my Russellian theory for definite descriptions

$$[\neg xFx]G\neg xFx \equiv [\neg xGx]F\neg xGx$$

is not a theorem, since

$$(\exists y)[(x)(Fx \equiv x = y) \,\&\, Gy] \equiv (\exists y)[(x)(Gx \equiv x = y) \,\&\, Fy]$$

is not a theorem, the case is otherwise for our theory of Russellian *indefinite* descriptions in which

$$[\mathbf{A}xFx]G\,\mathbf{A}xFx \equiv [\mathbf{A}xGx]F\,\mathbf{A}xGx$$

is a theorem, since

$$(\exists x)(Fx \,\&\, Gx) \equiv (\exists x)(Gx \,\&\, Fx)$$

is a theorem.

B2.3 This Russellian theory of indefinite descriptions does not agree with Anselm’s use of indefinite descriptions *Proslogion* in which they are terms for which there are no questions concerning scopes of their occurrences. **A**-descriptions are not terms. They are ‘incomplete symbols’ that occurrences of which in term-positions in **A**-formulas are scoped. Relating this theory of “non-Anselmian semantic assumptions” (Leftow 2005, p. 84) to Anselm’s text can even so be illuminating. Thus it may be observed that in an extension of a ‘free logic conversion’ along lines drawn in (Sobel 2004: Chapter III, Appendix B) of this Russellian Indefinite Description Calculus for logical modalities, *Premise* II has multiple symbolizations.

Something-than-which-nothing-greater-can-be-thought cannot *exist in the mind alone (and not also in reality).*

or equivalently,

It is necessary that it is not the case that something-than-which-nothing-greater-can-be-thought exists in the mind alone (and not also in reality).

has in this extension the following symbolizations that feature exactly one occurrence of the 'scope indicator' '[AxSx]': (II'), [AxSx]□~(MAxSx & ~R AxSx), (II''), □[AxSx]~(M AxSx & ~R AxSx), and, (II'''), '□~[AxSx](M AxSx & ~R AxSx)'. *Premise* II –to go with *Premise* I, [AxSx]MAxSx, as Anselm would have it do – would need to be understood along the lines of the third of these symbolic sentences.[57] Happily, this is also the way *Premise* II would need to be understood for a *reductio* that, while being served by a *consistent* logic of indefinite descriptions, was *somewhat* along the lines traced in Section 2.2 above.[58]

Reconstructed with Russellian *pseudo-term* indefinite descriptions, the problems of *Proslogion* 2 would be confined to ones concerning *Premise* I. These, however, would be exacerbated by this premise's being in this reconstruction equivalent to an existential generalization symbolized by '(∃x)(Sx & Mx)'. *Premise* I, thus reconstructed, would entail *all by itself* what is to be proved, namely, that *something than which nothing greater can be thought exists*, (∃x)Sx.[59] The reconstruction of Anselm's argument contemplated here, and the amendment of his logic for indefinite descriptions sketched in Section 2.2.6 above, agree on this point. Each would confine the *problem* of *Proslogion* 2 to its subsidiary argument for *Premise* II.

B3 I have attributed to Anselm a defective logic for indefinite descriptions, a characteristic theorem of which is this instance of its rule, Indefinite Descriptions:

$$G@xFx \equiv (\exists x)(Fx \,\&\, Gx).$$

For comparisons, the restriction to the case in which the term '𝒜xFx' is proper of the half of this sentence upon instances of which Anselm depends,

$$(\exists x)Fx \supset [G\mathcal{A}xFx \supset (\exists x)(Fx \,\&\, Gx)],$$

is valid in the Fregean Indefinite Description Calculus, and the unrestricted narrow-scoped analogue of the whole sentence,

$$[AxFx]G\,AxFx \equiv (\exists x)(Fx \,\&\, Gx)$$

is valid in the Russellian Theory of Indefinite Descriptions.

It is as if Anselm's unarticulated logic were for proper indefinite descriptions only, a natural specialization given that improper indefinite descriptions are avoided in ordinary discourse, though they can come up in argumentative philosophic discourse that would 'stretch envelopes'. It is as if his unarticulated logic would 'have it both ways', and be Russellian for equivalences of indefinite description formulas with existential generalizations, while being Fregean for its *bona fide* indefinite description terms, and its inattention to 'scopes' of indefinite descriptions, though these can matter at least in philosophic prose that explicitly features indefinite descriptions. What a *nice*, natural, and hardly resistible in the language for logic of the twelfth century, *bad* idea.

REFERENCES

St. Anselm: Basic Writings, Second Edition 1962, translated by S. N. Deane, Introduction by Charles Hartshorne, LaSalle, Illinois: Open Court Publishing Company. (First edition, 1903. "...*Cur Deus Homo*...was rendered by James Gardiner Vose...and published in 1854-5...." S. N. Deane, "Introduction," p. iii.)

St. Anselm's Proslogion 1979, translated with an introduction and philosophical commentary by M. J. Charlesworth, with Latin facing English, University of Notre Dame Press. (A reprint of a 1965 publication by Oxford University Press.)

Anselm of Canterbury (four volumes), 1974-6, edited and translated by Jasper Hopkins and Herbert Richardson, Toronto and New York: The Edwin Mellen Press.

The Complete Philosophical and Theological Treatises of Anselm of Canterbury (2000), Jasper Hopkins and Herbert Richardson translators, Minneapolis, Minn.: The Arthur J. Banning Press.

Anselm of Canterbury: The Major Works 1998, edited with an Introduction by Brian Davies and G. R. Evans, Oxford: University Press. "The translators...M. J. Charlesworth: *Proslogion, Pro Insipiente* (On Behalf of the Fool), by Gaunilo of Marmoutiers, *Reply to Gaunilo*" (p. xxv).

The Five Books of Moses, translation with commentary and notes by Everett Fox, New York: Schocken Books 1995.

Descartes, René 1984, *The Philosophical Writings of Descartes*, two volumes, translated by John Cottingham, Robert Stoothoff, and Dugald Murdoch, Cambridge: Cambridge University Press.

Hartshorne, Charles 1962, *The Logic of Perfection*, LaSalle: Open Court.

Hick, John 1965, "Ontological Argument for the Existence of God," in volume 5 of *The Encyclopedia of Philosophy*, Paul Edwards, Chief Editor, New York: Macmillan Publishing Co.

Hume, David 1902, *Enquiries Concerning the Human Understanding and Concerning the Principles of Morals*, Second Edition, edited with introduction by L. A. Selby-Bigge, Oxford: Oxford University Press.

Kripke, Saul 2005, "Russell's Notion of Scope," , *Mind* 114, 1005-37.

Montague, Richard and Donald Kalish 1956, "Remarks on Descriptions and Natural Deduction," *Eingegangen am* 16.8.

Kalish *et. al*. [Donald Kalish, Richard Montague, and Gary Mar] 1980, *Logic: Techniques of Formal Reasoning*: Second Edition, New York: Harcourt Brace Jovanovich. First edition, Kalish and Montague, 1964.

Leibniz, Gottfried Wilhelm 1969 (1976), “Two Notations for Discussion with Spinoza: November 1676,”*Philosophical Papers and Letters*, Second Edition, translated and edited by Leroy E. Loemker, Dordrecht: D. Reidel.

Brian Leftow 2005, *The Oxford Handbook of Philosophy of Religion*, edited by William J. Wainwright, Oxford University Press.

Lewis, David 1970, “Anselm and Actuality,” *Nous* IV.

Malcolm, Norman 1960, "Anselm's Ontological Arguments,” *Philosophical Review* 69.

Meyer Viol, W. P. M. 1995, *Instantial Logic*, ILLC Dissertation Series 1995 - 11, Amsterdam.

Peter Millican 2004, “The One Fatal Flaw in Anselm’s Argument,” *Mind* 113.

Plantinga, Alvin 1974, *God, Freedom, and Evil*, New York: Harper & Row.

Rowe, William L. 1978, :”The Ontological Argument” in *Reason and Responsibility: Readings in Some Basic Problems of Philosophy*, Fourth Edition, editor, Joel Feinberg, Encino, California. (“Copyright © William Rowe, 1974. This essay was commissioned by the editor expressly for the third edition of this anthology.” P. 8, n.*)

Rowe, William L. 1993, *Philosophy of Religion: An Introduction,* Second Edition, Belmont, Calif.: Wadsworth Publishing Company. (“[F]irst published in 1978.” P. xi.)

Rowe, William L. 1994, "Modal Versions of the Ontological Argument," *Philosophy of Religion: An Anthology*, Second Edition, Belmont, Calif.: Wadsworth.

Barry Hartley Slater 2005, “Epsilon Calculi,” *The Internet Encyclopedia of Philosophy*.

Sobel, Jordan Howard 2004, *Logic and Theism: Arguments For and Against Beliefs in God*, Cambridge University Press.

Sobel, Jordan Howard 2005a, “Sentential Natural Deduction and Sentential Modal Logic,” on line: linked to http://www.scar.utoronto.ca/~sobel/L_T.

Sobel, Jordan Howard 2005b, “Deduction: Rules and Procedures for the Monadic Quantifier Calculus, and the Free Modal Monadic Quantifier Calculus,” on line: linked to http://www.scar.utoronto.ca/~sobel/L_T.

Sobel, Jordan Howard 2006, *Words and Symbols, Proofs and Invalidations*, on line: linked http://www.scar.utoronto.ca/~sobel/.

Tichý, Pavel 1979, “Existence and God,” *The Journal of Philosophy* LXXVI, 403-420.

van Inwagen, Peter 2006, “Ontological Argument for the Existence of God (*Addendum*),” *2nd Edition Encyclopedia of Philosophy*, editor, Donald M. Borchert, Detroit: Thomson Gale.

van Inwagen, Peter forthcoming, “Some Remarks on the Modal Ontological Argument.”

Wettstein, Howard 1997, “Doctrine,” *Faith and Philosophy* 14, 423-43.

NOTES

1. This study complements sections of (Sobel 2004): Part One complements Sections 3.1-3.4 in Chapter II on Anselm’s ontological reasoning, and Section 2.2 in Chapter III on the relation of Hartshorne’s argument to *Proslogion* 2. Part Two complements Sections 3.5 and 3.6 of Chapter II on Gaunilo’s *non-sequitur* charge, and Section 8 of Chapter III to Rowe’s point that conceivability does not entail possibility.

2. Written in 1077-8 when the Italian Anselm (1033-1109) was Prior, soon to be Abbot, of the Benedictine abbey of Bec in Normandy. He joined the monastery in 1059, held the post of prior from 1063 to 1078, and that of abbot from that year to his departure in 1094. He was Archbishop of Canterbury from 1094 to 1109.

3. His is, to my knowledge, the only translation that hyphenates to highlight the play of indefinite descriptions in Anselm’s reasoning. ‘Something-than-which-a-greater-cannot-be-thought’ occurs once in Charlesworth’s translation of *Proslogion* 3. ‘That-than-which-a-greater-cannot-be-thought’ occurs three times in *Proslogion* 3, and ‘that-than-which-nothing-greater-can-be-thought’ occurs once in his translation of *Proslogion* 4.

‘Something-than-which-a-greater-cannot-be-thought’ occurs twice in Chapter I, and once in the last Chapter X of his translation of Anselm’s reply to Gaunilo. In this last occurrence it is used to say what Anselm has proved to exist “in reality” (p. 189). ‘Something than–which-a-greater-cannot-be-thought’ occurs twice in Charlesworth’s translation of Chapter IX (p. 189). And ‘that-than-which-a-greater-cannot-be-thought’ occurs fifty two times in his translation Anselm’s reply to Gaunilo! One more thing: ‘the being than-which-a-greater-cannot-be-thought’ occurs in Chapter I of this reply (p. 169.) (*Caveat*: This visually challenging data was assembled without computer assistance.)

4. It is not the first descriptive name that has been proposed for the person who would be God. “Moshe said to God: Here I will come to the Children of Israel and I will say to them: The God of your fathers has sent me to you, and they will say to me: What is his name? – what shall I say to them? God said to Moshe: Ehyeh Asher Ehyeh/I will be-there howsoever I will be-there. And he said: Thus shall you say to the Children of Israel: Ehyeh/**I-will-be-there** sends me to you.” [*Exodus* 3: 13-14: as in (Fox 1995), p. 273. Bold emphasis added.] Everett Fox explains on page 270 his allegiance to “the [Buber and Rosenzweig] interpretation” of *ehzeh asher ehyeh* (‘I am that I am’ in the King James version) against “some scholarly consensus that the name may mean “He who causes (things) to be’ or perhaps ‘He who is’.”

5. Let L be the as-great-as-or-greater-than, i.e., the at-*L*east-as-great-as, of spiritual or religious significance for Anselm. That L is connected, i.e, that all things are L-comparable,

(1) $$\bigwedge x\bigwedge y[L(xy) \vee L(yx)],$$

entails that there are not two things each of which is such that nothing else has this L-relation to it,

(2) $$\sim\bigvee x\bigvee y(x \neq y \wedge \sim\bigvee z[z \neq x \wedge L(zx)] \wedge \sim\bigvee z[z \neq y \wedge L(zx)]).$$

Confirmation of the need for (1) is possible by a simple model for The Identity Calculus of (Kalish *et. al.*, 1980). Confirmation of its sufficiency for (2) is possible by a derivation in this calculus. Therefore, since (1) entails (2), from (1), and that there is at least one thing such that nothing else has this L-relation to it,

(3) $$\bigvee x\sim\bigvee y[y \neq x \wedge L(yx)],$$

which Anselm could consider established in a revision of *Proslogion* 2 addressed to the issue of the existence in reality of something-than-which-nothing-else-as-great-or-greater-can-be-thought, it follows that there is exactly one thing such that nothing else has this L-relation to it,

(4) $$\bigvee z\bigwedge x(\sim\bigvee y[y \neq x \wedge L(yx)] \leftrightarrow x = z),$$

(4) follows from (2) and (3) by an instance of the theorem,

$$\sim\bigvee x\bigvee y(x \neq y \wedge Fx \wedge Fy) \wedge \bigvee xFx \leftrightarrow \bigvee y\bigwedge x(Fx \leftrightarrow x = y).$$

It follows from (1) and (4), that something has the L-relation to everything else,

(5) $$\bigvee y\bigwedge x[x \neq y \rightarrow L(yx)],$$

and from (4) that there are not two things that have the L-relation to everything else,

(6) $$\sim\bigvee y\bigvee z(y \neq z \wedge \bigwedge x[x \neq y \rightarrow L(yx)] \wedge \bigwedge x[x \neq z \rightarrow L(zx)]),$$

as derivations can confirm. So it follows from (1) and (4) that there is exactly one thing that has the L-relation to everything other than it,

(7) $$\bigvee z\bigwedge x(\bigwedge y[y \neq x \rightarrow L(xy)] \leftrightarrow x = z).$$

It follows furthermore from (1) and (4) that whatever is of the first sort is of the second, and vice versa,

(8) $$\bigwedge x(\sim\bigvee y[y \neq x \wedge L(yx)] \leftrightarrow \bigwedge y[y \neq x \rightarrow L(xy)]),$$

as a derivation can confirm. So the thing such that nothing other than it has this L-relation to it is identical with the thing that has this L-relation to everything other than it,

(9) $\bigvee z(\bigwedge x({\sim}\bigvee y[y \neq x \wedge L(yx] \leftrightarrow x = z) \wedge \bigvee w[\bigwedge x(\bigwedge y[y \neq x \rightarrow L(xy)] \leftrightarrow x = w) \wedge z = w])$

and equivalently in Russell's Theory of Descriptions (Sobel 2006, Chapter VIII),

(10) $\{\iota x{\sim}\bigvee y[y \neq x \wedge L(yx]\}\{\iota x\bigwedge y[y \neq x \rightarrow L(xy)]\}\ \iota x{\sim}\bigvee y[y \neq x \wedge L(yx] = \iota x \bigwedge y[y \neq x \rightarrow L(xy)]$.

Defining greater-than in the usual way in terms of as-great-as-or-greater-than,

(11) $\bigwedge x\bigwedge y[G(xy) \leftrightarrow L(xy) \wedge {\sim}L(yx)]$,

whatever has the L-relation to everything else has the G-relation to everything else, and vice versa,

(12) $\bigwedge x(\bigwedge y[y \neq x \rightarrow L(xy)] \leftrightarrow \bigwedge y[y \neq x \rightarrow G(xy)])$,

so that the thing that has the L-relation to everything else is the thing that has the G-relation to everything else, which is to say, the greatest thing:

(13) $\bigvee z(\bigwedge x(\bigwedge y[y \neq x \rightarrow L(xy)] \leftrightarrow x = z) \wedge \bigvee w[\bigwedge x(\bigwedge y[y \neq x \rightarrow G(xy)] \leftrightarrow x = w) \wedge z = w])$

and equivalently

(14) $\{\iota x\bigwedge y[y \neq x \rightarrow L(xy)]\}\{\iota x\bigwedge y[y \neq x \rightarrow G(xy)]\}\ \iota x \bigwedge y[y \neq x \rightarrow L(xy)] = \iota x\bigwedge y[y \neq x \rightarrow G(xy)]$,

which entails the identity,

$$\iota x \bigwedge y[y \neq x \rightarrow L(xy)] = \iota x \bigwedge y[y \neq x \rightarrow G(xy)] .$$

Incidentally, that this L-relation is connected entails that both it and the G-relation are symmetric,

(15) $\bigwedge x L(xx)$,

and,

(16) $\bigwedge x G(xx)$,

which is as they should be. Though "God [would] not [be] greater than God" (Anselm 2000, p. 503), He would be as great as Himself, and thus as great as or greater than Himself, as everything must be relative to itself Thanks to Maciej Nowicki for this reference, and for introducing me to the J. Hopkins-H. Richardson translations.

Models and derivations alluded to in this note can be found in its expansion on-line, the URL of which is: http://www.utsc.utoronto.ca/~sobel/OnL_T/AnselmBornAgainNote4plus.pdf.

6. This articulation of the reasoning of *Proslogion* 2 contrasts with Charlesworth's statement of its argument. He says that it has two premises, "first of all...the definition of God as 'that than which nothing greater can be thought' " (Charlesworth 1979, p. 60), and "the second premise...that what exists in actual reality is greater than what exists in the mind alone" (p. 63), and the conclusion that "God [*sic*] actually exists" (p. 59). In fact, Anselm does not get back to God until *Proslogion* 3, and that we believe that God is something than which nothing greater can be thought' plays no rôle in the reasoning of *Proslogion* 3. Also Charlesworth neglects to mention the premise that even the Fool understands (would understand) Anselm's words 'something-than-which-nothing-greater-can-be-thought'.

7. Gaunilo elides the movement in *Proslogion* 2 from 'is in his mind' in sentence [4] to 'exists in the mind' sentence [8]. So does Millican in his statement of what he terms "the essential structure of Anselm's *Proslogion* II" (Millican 2004, p. 441).

8. This is' analytic' if 'greater than' here entails 'more worshipful', since of things otherwise alike, only the one that exists in reality is worshipful. It is impossible knowingly to worship what does not exist. I think that, in contrast, '*necessary* existence' is not 'great-making' or 'worshipful making'. As it was once but not always John Findlay's view, I think that necessary existence is antithetical to worshipfulness (Sobel 2004, Chapter IV, Section 7). From this perspective it is unfortunate for his case that Anselm proceeds in *Proslogion* 3 not only to identify something-than-which-a-greater-cannot-be-thought with God, but *before* that to maintain that it "exists so truly then, that **it cannot be even thought not to exist**" (bold emphasis added), *suggesting*, as these words can do for modern readers and I suspect did for Anselm and Gaunilon, that *it*, that is, that *something-than-which-nothing-greater-can-be-thought*, **exists necessarily**.

9. The valid argument – I was talking with John. You met (this) John last week. ∴ I was talking with someone you met last week. – is symbolized (with the quantifier confined to persons) by – M(A). T(A) ∴ (∃x)(Tx & Mx) – under the scheme – A: John; T: I was talking with *a*; M: you met *a* last week. But not the invalid argument – I was talking with John. You met (a) John last week. ∴ I was talking with someone you met last week. This argument is symbolized by – M(A). T(B) ∴ (∃x)(Tx & Mx) – under that scheme augmented by the abbrevation – B: John.

Proper names when repeated in speech or conversation are 'by default' for the same thing or person with '(this)' and '(that)' being understood without statement. Not so for repeated indefinite descriptions which are 'by default' for possibily different things with '(a)' being understood without statement unless 'explicitly overwritten' by 'this' or 'that' as in Charlesworth's translation of *Proslogion* 2.

10. Anselm's words here adapted are: "this same that-than-which-a-greater-*cannot*-be-thought is that-than-which-a-greater-*can*-be-thought. But this is obviously impossible." I take them as short for 'this something-than-which-a-greater-*cannot*-be-thought**-to-exist-in-reality** is that something-than-which-a-greater-*can*-be-thought**-to-exist-in-reality**'. There is more on this adaptation in note 14 below.

11. The grammar of @-descriptions is the same as that of ℩-descriptions in the Descriptions Calculus of (Kalish, *et. al*., 1980). Definitions of bound and free occurrences of variables, of formulas coming from formulas by proper substitution of terms for variables are the same *mutatis mutandis* for this @-extension of the Quantifier Calculus as for Description Calculus.

12. *Cf*.: "'I met a man'....involves a propositional function, and becomes, when made explicit: 'The function 'I met x and x is human' is [at least once] true." (Russell 1956, p. 168.) *Russell* means here *not* to endorse the intuitive logic for 'indefinite descriptions' just floated, but to say that 'grammar' can mislead here as to logical form: "This proposition is obviously not of the form 'I met x'. "The two words ['a man'] do not form a subordinate group having a meaning of its own" (p. 170). He could have expanded his view by saying that 'x' in 'I met x' is 'holding a place for terms' such 'Jones', *not* 'descriptions' such as 'a unicorn' or 'the spy who came in from the cold'.

13. Indefinite Descriptions may be contrasted with the following rule which, in a manner, incapsulates the rules of existential instantiation and generalization.

EI/EG. For variable α, formula φ, and formula $\varphi_{@\alpha\varphi}$ that comes from φ by proper substitution of ⌜@αφ⌝ for α,

$$\varphi_{@\alpha\varphi} \equiv (\exists\alpha)\varphi,$$

an-α-such-that-φ is an α such that φ if and only if there is an α such that φ.

For example:

$$F@xFx \equiv (\exists x)Fx,$$

an-x-such-that-Fx is an x such Fx if and only if there is an x such that Fx.

For *another* example that serves the contrast with the rule Indefinite Descriptions,

$$F@x(Fx \,\&\, Gx) \,\&\, G@x(Fx \,\&\, Gx) \equiv (\exists x)(Fx \,\&\, Gx),$$

an-x-such-that-Fx-and-Gx is an x such that Fx and Gx if and only if there is an x such that Fx and Gx.

The variable 'j' of existential instantiation in the inference from '(∃x)[Gx & ~(Mx & Rx)]' to '[Gj & ~(Mj & Rj)]' is cast as abbreviating, given the scheme in play, "the indefinite descriptive term '*something-than-which-nothing-greater-can-be-thought,-that-does-not-exist-both-in-the-mind-and-in-reality*'" in Section 3.3, Chapter III (Sobel 2004). In Section 3.4, for the inference from '(∃x)(Gx & Mx)' to '(Gj & Mj)', 'j' is cast as abbreviating 'something-than-which-nothing-greater-can-be-thought-and-that-exists-in-the-mind'.

14. Michael Almeida proposed during discussion of a precursor of this paper presented at the UTSA Philosophy Symposium on February 3, 2006, that rather than argue directly for *Premise* I from the Fool's understanding of 'something-than-which-nothing-greater-can-be–thought', Anselm could have argued indirectly from the principle that *existence in the mind* is great-making, as he argues indirectly for *Premise* II from the principle that *existence in reality is great-making*. This is true. In particular, from the assumption for that *reductio*, ~M@xSx, the self-predication S@xSx can be similarly derived. For its derivation one may replace 'M' by '~M' in the derivation just run.

Almeida's proposal raises the question why Anselm reasoned as he did for *Premise* I, directly from the Fool's understanding. Perhaps Anselm would have been uncomfortable with the *suggestion* of the *principle* that *existence in the mind* is great-making that there are things that not only do not exist in reality (golden mountains) but that do not exist in the mind (round squares, largest numbers), though they are possible objects of thought and speech. I suspect that he did not believe in things that do not exist in the mind, since he believed in a Great Mind in which absolutely everything of which we can speak exists. I'm guessing.

15. The 'adaptation' of Anselm's words, "this same that-than-which-a-greater-*cannot*-be-thought is that-than-which-a-greater-*can*-be-thought,"

(1) $$@x{\sim}(\exists y)[G(yx) \,\&\, Ty] = @x(\exists y)[G(yx) \,\&\, Ty]$$

to 'this same something-than-which-nothing-greater-can-be-thought, is something than which a greater can be thought, and it is something than which a greater cannot be thought'

(2) $$(\exists y)G(y@x{\sim}(\exists y)[G(yx) \,\&\, Ty]) \,\&\, {\sim}(\exists y)G(y@x{\sim}(\exists y)[G(yx) \,\&\, Ty])$$

can be negotiated by 'judicious' use the axiom **Indefinite Descriptions**. With Indefinite Descriptions we can get from (1) both,

(3) $$(\exists x)({\sim}(\exists y[G(yx) \,\&\, Ty] \,\&\, x = @x(\exists y)[G(yx) \,\&\, Ty])$$

and

(4) $$(\exists x)[(\exists y)[G(yx) \,\&\, Ty] \,\&\, @x{\sim}(\exists y)[G(yx) \,\&\, Ty] = x].$$

Existential instantiations of (3) and (4) can deliver respectively,

(5) $\sim(\exists y[G(ya) \& Ty] \& a = @x(\exists y)[G(yx) \& Ty]$

and

(6) $(\exists y)[G(yb) \& Ty] \& @x\sim(\exists y)[G(yx) \& Ty] = b$.

It follows from the conjunction (6) mainly by Leibniz's Law that,

(7) $(\exists y)(G(y@x\sim(\exists y)[G(yx) \& Ty] \& Ty)$.

It follows from the second conjunct of (5) and (1) that,

(8) $@x\sim(\exists y)[G(yx) \& Ty] = a$.

It follows from the first conjunct of (5) and (8) that,

(9) $\sim(\exists y)(G(y@x\sim(\exists y)[G(yx) \& Ty] \& Ty)$.

(7) and (9) can be conjoined for (2).

16. There is, to continue the contrast begun in note 12 above, nothing wrong with a logic for indefinite descriptions based on the rule EI/EG.

17. There is, for good measure, a troublesome derivation that uses only the right-to-left half of Indefinite Descriptions to embarrass this intuitive logic for indefinite descriptions. Please observe, for this derivation that the following are theorems of the non-empty domains quantification calculus of which this logic is an extension:

T1 $(\exists x)Gx \equiv (\exists x)[(Fx \vee \sim Fx) \& Gx]$

T2 $(\exists x)\sim Gx \equiv (\exists x)[(Fx \vee \sim Fx) \& \sim Gx]$

The troublesome derivation coming establishes the theorem of this logic:

T3 $(\exists x)Gx \supset (x)Gx$

That makes this logic a logic for domains in which no kinds are 'selective'.

1.	~~*SHOW*~~ $(\exists x)Gx \supset (x)Gx$	Conditional Derivation (12)
2.	$(\exists x)Gx$	Assumption for Conditional Derivation
3.	$(\exists x)[(Fx \vee \sim Fx) \& Gx]$	T1, Biconditional Conditional, Simplification, 3, *Modus Ponens*
4.	$(\exists x)[(Fx \vee \sim Fx) \& Gx] \supset G@x(Fx \vee \sim Fx)$	right-to-left Indefinite Descriptions
5.	$G@x(Fx \vee \sim Fx)$	3, 4, *Modus Ponens*
6.	~~*SHOW*~~ $\sim(\exists x)\sim Gx$	Indirect Derivation (10, 11)
7.	$(\exists x)\sim Gx$	Assumption for Indirect Deprivation
8.	$(\exists x)[(Fx \vee \sim Fx) \& \sim Gx]$	T2, Biconditional Conditional, Simplification, 7, *Modus Ponens*
9.	$(\exists x)[(Fx \vee \sim Fx) \& \sim Gx] \supset \sim G@x(Fx \vee \sim Fx)$	right-to-left Indefinite Descriptions
10.	$\sim G@x(Fx \vee \sim Fx)$	8, 9, *Modus Ponens*
11.	$G@x(Fx \vee \sim Fx)$	5, Repetition
12.	$(x)Gx$	6, Quantifier Negation, Double Negation

By this logic it could be proved that if, for example, there is a god, then everything is a god, that if there is a frog, then everything is a frog, and that if there are gods and frogs, then everything is both a god and a frog. By this logic things could not differ in kinds. To make matters worse we might upgrade the system to a second order predicate logic, add identity to it, and take from Leibniz the principle for the identity of indiscernibles, for variables α and β, and predicate letter φ,

$$\alpha \neq \beta \supset (\exists \varphi)(\varphi\alpha \& \sim\varphi\beta).$$

It would be a theorem for Spinoza in this bizaree logic that there is exactly one thing: '$\forall x \forall y\ x = y$'.

18. For ready reference, the two premises of Leftow's construction are:

(1a). Possibly something is a G.

and

(2a). If possibly something is a G, but actually nothing is a G, then in any possible world W in which something is a G, that G could be greater than it is in W.

(2a) is said to yield immediately,

(2b) If possibly something is a G, but actually nothing is a G, then in some possible world W, something is G but could be greater than it is in W.

He proceeds: "given (1a) and (2b), if nothing is a G, then in some possible world W, something is a G but could be greater than it is in W. But it cannot be the case that in some world, a G could be greater than it is in that world: being a G is being in a state with no greater in any world. So it is not the case that nothing is a G." (P. 85.)

19. Anselm could, I suspect, hardly have believed his good fortune, but then he thought that he had God to thank for it, and was thus not sufficiently suspicious and critical of it. *Cf.*:

"After I had published...[the *Monologion*]....I began to wonder if perhaps it might be possible to find one single argument that for its proof required no other, and that by itself would...prove that God...exists...and also...prove whatever we believe about the Divine Being. But as often and as diligently as I turned my thoughts to this...it eluded my acutest thinking..., so that finally...I was about to given up....However..., then, in spite of my unwillingness..., it began to force itself upon me more and more pressingly. So it was that one day when I was quite worn out with resisting its importunancy, there came to me...what I had despaired of finding...." (*Proslogion*, Preface.)

"Eadmer relates that while [Anselm] was reflecting upon the problem he gave up 'food, drink, and sleep'...it even began to interfere with his religious duties. Anselm had...begun to wonder if the...pursuit were not a temptation of the Devil when, 'to his great joy and jubilation', the solution dawn upon him one evening between the night offices. [Eadmer, *Vita Anselmi* I. xix.]" (Charlesworth 1979, p. 53.) [Eadmer: "Precentor of Canterbury and historian, born 1064 (?); died 1124 (?)." *Catholic Encyclopedia*, on line.]

20. Anselm's error of non-modal logic was vastly superior to Descartes's exploitation in the *Fifth Meditation* of the existential/universal amphiboly of '*a* perfect being exists', and superior as well to Spinoza's not that shabby exploitation of the amphiboly of scope of 'The infinite **substance cannot** be conceived not to exist', for which errors of these others of our betters please see, respectively, Parts One and Two of Chapter II in (Sobel 2004).

21. Indeed, hyphenated terms of the sort that in Charlesworth's translation occur in *Proslogion* 2-4, and that it is observed in Section 1 lace his translation of Anselm's response to Gaunilo's reply, are entirely absent from his translation of this reply, though I suspect that one was 'wanted' in this line:

"It is not, then, in the way that I have this unreal thing [a speaker has falsely spoken of some man] in thought or in mind that I can have that object in my mind when I hear 'God' or **'something greater than everything'** spoken of." (*Pro Insipiente* 4, p. 161, bold emphasis added.)

Re 'descriptions, indefinite and definite' please see the last lines of note 50 below.

22. 0ne could add to this amended logic for @-descriptions the rule

$$/\therefore\ (\exists\alpha)\varphi \equiv (\exists\beta)\ \beta = @\alpha\varphi$$

The result would be a logic in which the following analogues of three of the four rules of the Fregean theory of indefinite descriptions in Appendix B.1 below are derivable.

Proper @-Descriptions. For any variable α, formula φ, and formula $\varphi_{@\alpha\,\varphi}$ that comes from φ by proper substitution of ⌜@αφ⌝ for α,

$$(\exists\alpha\varphi)\quad /\therefore\ \varphi_{@\alpha\varphi}.$$

Alphabetic Variance. For any variables α and β, formulas φ_α and φ_β such that φ_β comes from φ_α by proper substitution of β for α and φ_α comes from φ_β by proper substitution of α for β,

$$/\therefore\ @\alpha\varphi_\alpha = @\beta\varphi_\beta.$$

Extensionality. For any variable α, and formulas φ and ψ,

$$(\alpha)(\varphi \equiv \psi)\quad /\therefore\ @\alpha\varphi = @\alpha\psi.$$

The following analogue of the fourth rule of that Fregean theory could be added to complete the amended @-theory.

Improper @-Descriptions. For any variables α and γ and formula φ,

$$\sim(\exists\alpha)\varphi\quad /\therefore\ @\alpha\varphi = @\gamma\ \gamma \neq \gamma.$$

A semantics for this theory could take this ' page' from the "Russellian Theory of [Definite] Descriptions" of Chapter VIII in (Kalish, *et. al.*, 1980): "A *Russellian model*...differs from a Fregean model in [that]...the extension of '⅂x x ≠ x' in the model is to be some number *not* in the universe of the model" (p. 395). If the world, **W**, is its universe, U, plus its 'improper designata', i; then its quantifiers are confined to U, though extensions of predicate and name letters and of the logical relation '=' are not restricted to U(this in contrast with the Russellian theory of Kalish, *et. al*., p. 395). Confinement of its quantifiers to U will call for 'free logical' adjustments, as in (Sobel 2005b), of the rules of inference and the procedure of universal proof in the logic of the theory.

23. A short direct derivation uses in addition to sentential rules, the rules, Modal Negation, and Necessity.

1.	~~*SHOW*~~ R(A)	(Direct Derivation, 6)
2.	M(A)	*Premise* I
3.	~◇[M(A) & ~R(A)]	*Premise* II
4.	□~[M(A) & ~R(A)]	3, Modal Negation
5.	~[M(A) & ~R(A)]	4, Necessity
6.	R(A)	5, DeMorgan, 2, Double Negation, *Modus Tollendo Ponens*, Double Negation

24. Given that

$M@xSx$ & $R@xSx$ [13]

and

$S@xSx$ either as a theorem mainly by Indefinite Descriptions , or a consequence of *Premise* I mainly by Indefinite Descriptions*

it follows that

$(\exists x)(Sx \& Rx)$

by either mainly from Existential Generalization, or byExistence in The Mind and Existential Generalization* of the previous but one note.

25. *Proslogion* 2 is titled, "That *God* truly exists" (italics added) though it is only in *Proslogion* 3 that Anselm gets back to God by name: "And You, Lord our God, are this being [that-than-which-a-greater-cannot-be-thought]....for if some intelligence could think of something better than You, the creature would be above its creator and would judge its creator – and that is completely absurd." (P. 88) (In fact there need not be absurdity in that, and it is strange that Anselm should have thought otherwise. There may be impertinence when a child judges her parents and finds them somewhat wanting, but there need not be falsity, let alone absurdity.)

26. To get the best out of *Proslogion* 2, in Section 4 below I'translate' its 'mentalistic idiom' into modal terms. Millican takes a different tack:

> "To circumvent [certain] difficulties," Millican finds it "necessary to sketch (at least) a suitable theory of mental or intentional objects." (Millican 2004, p. 446.) "As terminology for these...the most appropriate choices seems to be the language of 'natures' which is used by Anselm and Gaunilo" (*ibid*.).

Millican elaborates in a note that Anselm uses the word 'nature'/'*nature*' only *once*, and that Gaunilo uses it but *twice*. In the argument that Millican says "[i]t is...very clear...is essentially the same as Anselm's" (p. 458) the word and its plural are *prominent*. Millican offers an interpretation in which the term, 'something-than-which-nothing-greater-can-be-thought' denotes a nature (p. 447). In his 'reconsideration' of Anselm's argument (pp. 457-8), Anselm's mention of the words 'something-than-which-nothing-greater-can-be-thought', the phrase 'a-nature-than-which-no-greater-nature-can-be-thought'; Millican's reconsideration proceeds on his "Outline of an 'Anselmian' theory of natures" to the conclusion the nature denoted by this phrase is instantiated in reality. It is, I think, something of a stretch to say that the argument Millican discusses 'is essentially the same as Anselm's', suggesting thereby that Anselm's reasoning proceeded in terms of a theory of natures. Left to be demonstrated, I think, is the relevance to Anselm's argument of the 'one fatal flaw' that Millican identifies in his reconsideration of Anselm's argument.

The single use of 'nature'/'*natura*' by Anselm is in:

> "*An ergo non est aliqua talis natura, quia 'dixit insipiens in corde suo*: *non est deus*'?" (Charlesworth 1979, p. 116.)

which more or less literally comes to,

> "Is there, then, no such nature ... , for the Fool has said in his heart, there is no God?" (Anselm 1974-6, Jasper Hopkins and Herbert Richardson translators)

Hopkins and Richardson, after 'no such nature', enter the words 'as You' (1974-6) which interpolation they bracket in (2000). They might better have left 'no such nature' unadorned, or interpolated '*as Yours would be* '. Charlesworth assigns to 'no such nature' the sense of 'no thing of such a nature', which is I think right for the context. *Cf*.:

> "[3] Or can it be that a **thing** of such a nature does not exist, since 'the Fool has said in his heart, there is no God'? [*Psalms* 14, l. 1, and 53, l. 1.]"

Anselm continues:

> "*Sed certe ipse idem insipiens, cum audit hoc ipsum quod dico*: '*aliquid quo maius nihil cogitari potest*', *intelligit quod audit*; *et quod intelligit in intellecta eius est, etiam si non intelligat illud esse. Aliud enim est rem esse in intellectu, aliud intelligere rem esse*." (Charlesworth 1979, p. 116)

which more or less literally comes to,

> "But surely when this very Fool hears the words 'something than which nothing greater can be thought,' he understands what he hears. And **what he understands** is in his understanding, even if he does not understand ... **it** to exist. Indeed, for a **thing** to be in the understanding is different from understanding...that this **thing** exists." (Anselm 1974-6.)

If Anselm intended what the Fool understands, given that he understands Anselm's words, and what is therefore in his, the Fool's, understanding, to be a *nature*, not a *thing*, Anselm could have said so.

Brian Leftow writes: "A natural thought would be that what [is referenced by the indefinite description 'a G' and said to be] 'in his intellect'...is the property the description expresses, *being* a G. But as the argument proceeds, it supposes that the Fool 'has in mind' some particular thing that has the property...." (Leftow 2006, p. 81). This is true. Anselm had primarily in mind from the first lines of the *Proslogion*, God, a divine *being* or *substance*, not a nature, and not a "divine office" (Tichý 1979, p. 414) either. *Cf*.:

> "I began to wonder if perhaps it might be possible to find one single argument...that by itself would suffice to prove

that God...exists, that He is the supreme good..., and...to prove whatever we believe about the Divine Being [Substance]." (Charlesworth 1979, p. 103 [Anselm 2000, p. 88].)

27. Hartshorne writes that "the famous-notorious Chapter II of the *Proslogium*...is...altogether secondary. [Its] paragraphs represent but a preliminary try, and an unsuccessful one – elliptical and misleading at best – to state the essential point, which is first explicitly formulated in *Proslogium* 3, and reiterated many times in the *Apologetic* I, V, and IX." (Anselm 1962, p. 2.) *Cf.*: "...Anselm's *Proslogion* contains two...proofs of God's existence. One, propounded in Chapter II is somewhat involved and intractable, and on the most charitable interpretations suffers from deficiencies cognate to those involved in Descartes's proof." (Tichý 1979, p. 414.)

Hartshorne's gets the *idea* from *Proslogion* 3 that "perfection could not exist contingently" where one can find the idea that a perfect being could not exist contingently. He has no use for Anselm's *argument* in *Proslogion* 2 that something-than-which-a-greater-cannot-be-thought exists in reality. He seems to have missed its proximity, to be spelled out in the next section, to his own argument. He was perhaps handicapped in his reading by the Deane-translation on which he relied: please see the next note. Perhaps Pavel Tichý also relied on this translation. It is impossible to say. He does not cite an edition of the *Proslogion*, and he presents a "novel analysis of Anselm's Ontological Argument" (p. 403) without quotations from Anselm's text or a translation of it.

It may be observed that Hartshorne does not use the idea others have found in *Proslogion* 3 that a perfect being would be essentially perfect and would have not merely existence, but necessary existence, $\Box\forall x[Px \supset \Box(Px \;\&\; E!x)]$: '$E!x$' here is short for '$(\exists y)\; x = y$'. Nor does he argue for the existence of such a being, $(\exists x)\Box(Px \;\&\; E!x)$. That, in my view, is a *good* thing, given that he intends a *theistic* argument for the existence of a *worshipful* being (*cf.*, note 7 above). Hartshorne's conclusion is 'merely' that there is a perfect being: $(\exists x)Px$. It could have been that it is necessary that there is a perfect being, $\Box(\exists x)Px$. That, however, would not yet say there is a being who is necessarily perfect, $(\exists x)\Box Px$, which, on the fair assumption that 'perfection is existence-entailing', $\Box\forall x(Px \supset E!x)$, is equivalent to $(\exists x)\Box(Px \;\&\; E!x)$ in the quantified modal logic of (Sobel 2004).

John Hick wrote: "Charles Hartshorne and Norman Malcolm...have revived the second argument, or second form of the argument, found in Anselm's *Proslogion* (3) and in his *Responsio* to Gaunilo." (Hick 1967, p. 540b.) Yes. They say the work contains two arguments. For their error and the relations of *Proslogion* 2 and 3 please see Section 1 above and the texts of these chapters. An argument for the existence of God, and that He is what we believe Him to be – namely, something than which nothing greater can be thought – is begun in *Proslogion* 2. This chapter reaches the result that something-than-which-a-greater-cannot-be-thought exists in reality. *Proslogion* 3 elaborates this result. It maintains first that this something 'exists so truly' that it cannot be thought not to exist. It maintains next that this being is none other than God. There is a *single* argument in these chapters for the existence of God and that He is what we believe Him to be. *Pace*, Hartshorne, Malcolm, Hick, Tichý, and their many followers.

28. "Was this departure on Hartshorne's part from the form of Anselm's reasoning deliberate, and in order to work in sentential modal logic?" My guess is, No. My guess is that this departure was unwitting and all but inevitable, given that Hartshorne got his Anselm from S. N. Deane's translation of 1903. No curious terms stand out in that translation of *Proslogion* 2: see the Appendix below. *Deane's* translation, read naturally, has Anselm proceeding at the level of generalizations concerning a thing or things than which nothing greater can be conceived, and casts as positively uncharitable a reading that has him descending to a particular, given the trouble it foists on him. *Charlesworth's* translation, first published in 1965, gives the reader no choice but to read Anselm as in that trouble. In the light of *this* translation, Hartshorne's argument is not a 'modal translation' of Anselm's, but a 'modal *reconstruction*'.

29. Here is a 'path' of logical equivalents from the displayed sentence to Hartshorne's symbolization of ***AP***: '$\sim\Diamond[Q \;\&\; \sim\Box Q]$'; $\Box\sim[Q \;\&\; \sim\Box Q]$; $\Box[\sim Q \vee \sim\sim\Box Q]$; $\Box[Q \supset \sim\sim\Box Q]$; $\Box[Q \supset \Box Q]$.

30. Anselm makes, in the first section of his reply to Gaunilo, another argument for the existence in the mind of that-than-which-a-greater-cannot-be-thought.

> "If 'that-than-which-a-greater-cannot-be-thought' is neither understood nor thought of, and is neither in the mind nor in thought, then it is evident that *either* God is not that-than-which-a-greater-cannot-be-thought *or* is not understood nor thought of, and is not in the mind nor in thought. Now my strongest argument that this is false is to appeal to your faith and to your conscience. Therefore 'that-than-which-a-greater-cannot-be-thought' is truly understood and thought and is in the mind and in thought." (p. 111.)

"You understand that God is that-than-which-a-greater-cannot-be-thought," Anselm dares Gaunilo to deny, and without pausing for a reply concludes, "Therefore" [To make the best I can of Charlesworth's single quotation marks, I now unpack Anselm's inference] "since the term 'that-than-which-a-greater-cannot-be-thought' is understood and used by you in thought, that-than-which-a-greater-cannot-be-thought is in the mind and, what is the same thing, in thought."

This, however, is not a 'theistic argument', and does not supplement Anselm's argument as Hartshorne would have done by 'other theistic proofs'. It is Anselm's argument from even the Fool's understanding of what Anselm speaks, merely readdressed to Gaunilo and made less clear by the inclusion of extraneous material that is not to its purpose. The 'engine' of these arguments is that "whatever is understood is in the mind" (sentence [8] in *Proslogion* 2).

Hartshorne's idea is that "one or more of the other theistic proofs" might be used to "demonstrate that perfection must be at least conceivable" and that "'the fool's'...idea of God [as a perfect being] is self-consistent" (p. 52). This, Hartshorne was thinking, would make it the idea of a not impossible kind of being. His thought was that while understandability of a kind of thing does not, *conceivability without contradiction* does, entail possibility. Rowe's point, coming in Part Two below, is that Hartshorne was wrong about this. There are perfectly coherent '*abnormal*' concepts, as Rowe calls them, that happen to be of impossible kinds of things.

31. Here is a derivation in the Sentential Modal Calculus of (Sobel 1994) elaborated in (Sobel 2005a). It is, but for the use of Universal Possibility, an unabbreviated derivation. Universal Possibility is a 'derived rule' of SMC, the 'primitive rules' of which are: Necessity – $\Box\varphi \;/\therefore\; \varphi$; Universal Necessity – $\Diamond\Box\varphi \;/\therefore \Box\varphi$ (a characteristic principle of S5 modal logic); and Modal Negation – $\sim\Diamond\varphi \;/\therefore \Box\sim\varphi$, $\Box\sim\varphi \;/\therefore \sim\Diamond\varphi$, $\sim\Box\varphi \;/\therefore \Diamond\sim\varphi$, $\Diamond\sim\varphi \;/\therefore \sim\Box\varphi$.

0.	~~*SHOW*~~ Q	Direct Derivation (15)
1.	~~*SHOW*~~ $\Box Q$	Indirect Derivation (13, 14)
2.	$\sim\Box Q$	assumption for indirect derivation
3.	$\Diamond\sim Q$	2, Modal Negation
4.	~~*SHOW*~~ $\Box\sim Q$	Necessity Derivation (5: 'Entries from without', 7, 10, are entirely from without, and are of necessities, they must be in a Necessity Derivation)
5.	~~*SHOW*~~ $\sim Q$	Indirect Derivation (9, 12)
6.	Q	assumption for Indirect Derivation
7.	$\Box(Q \supset \Box Q)$	***AP***
8.	$Q \supset \Box Q$	7, Necessity
9.	$\Box Q$	6, 8, *Modus Ponens*
10.	$\Box\Diamond\sim Q$	3, Universal Possibility*
11.	$\Diamond\sim Q$	10, Necessity
12.	$\sim\Box Q$	11, Modal Negation
13.	$\Diamond Q$	***IP***
14.	$\sim\Diamond Q$	4, Modal Negation
15.	Q	1, Necessity

*Why Universal Possibility? Because: For a sentence φ, $\ulcorner\Diamond\varphi\urcorner$ is true at a possible world if and only if φ is true at at least one possible world. From this it follows that $\ulcorner\Diamond\varphi\urcorner$ is true at a possible world if and only if $\ulcorner\Diamond\varphi\urcorner$ is true at every possible world. Now $\ulcorner\Box\varphi\urcorner$ is true at a possible world if and only if φ is true at every possible world. And so $\ulcorner\Diamond\varphi\urcorner$ is true at every possible world if and only if $\ulcorner\Box\Diamond\varphi\urcorner$ is true at every possible world. Therefore, $\ulcorner\Diamond\varphi\urcorner$ is true at a possible world if and only if $\ulcorner\Box\Diamond\varphi\urcorner$ is true at this possible world.

32. This is true – Anselm's and Hartshorne's predicates 'perfect being' and 'something than which a greater cannot be thought' do mean the same – *if* a property P is a *perfection* if and only if, for any things x and y that were alike except that x had and y did not have P, x would be *greater than* y (*more complete*, more nearly *wanting of nothing*). To say that their predicates mean the same, is not to say that Anselm and Hartshorne would agree about the extensions of 'perfection' and 'greater-making property'. This first assumption is consonant with: "What then are You, Lord God, You than whom nothing **greater** can be thought?....You are just, truthful, happy, and whatever it is **better** to be than not to be...." (*Proslogion* 5.)

33. This is contrary to Rowe, according to whom Anselm should be understood to confine 'things that exist in the mind' to things that are actually thought of: "Undoubtedly there are [things that don't exist in the understanding....For there are things...of which we have not thought [and never will think]." (Rowe 1993, p. 31.) On this interpretation not even everything that, in Anselm's terms, exists in reality also, in his terms, exists in the mind, though of course everything that exists in reality is, in our terms, possible. When laying out Anselm's argument Rowe adds to the premise that that-then-which-nothing-greater-can-be-thought exists in the mind, the premise that this thing is a possible thing. He says, "Anselm, I think, assumes the truth of [this] premise...without making it explicit" (p. 33).

Rowe does, 'to facilitate understanding' substitute for 'nothing greater *can be conceived*', as found in Deane's translation of Anselm's formula (Anselm 1962), the words 'nothing greater *is possible*'. (P. 31.) Relating this re-write to Charlesworth's translation, it is in order only if, a thing is in Anselm's words such that it **can be in thought**, if and only if **it is possible**. It is a problem for Rowe that his main point (reached on page 40) is that it is possible that not even everything that can be thought without contradiction is necessarily possible: it is not necessary that there are magicians, and if there are no magicians, then, though we can think of *magicans* without contradiction, they are not possible.

34. David Lewis "confine[s]...attention to one of the arguments that can, with some plausibility, be extracted from Chapter II of the *Proslogion* – not the only one, but the one I take to be simplest and [best]" (Lewis 1970, p. 176). I think that Hartshorne's argument is, *no contest*, the simplest and best that can be 'reached' from that chapter, though perhaps the update of 'in the mind' to 'possible' disqualifies it as an 'extraction'. Neither Hartshorne's nor Lewis's argument can with *any* plausibility be said to *be* the 'argument' of that great text, though Hartshorne's comes much closer to being 'essentially that argument.' Neither features anything like Anselm's term, in Charlesworth's translation, 'something-than-which-nothing-greater-can-be-thought'. Similarly for the argument produced in Chapter II, Section 3.4 of (Sobel 2004), which non-question-begging argument is assembled from materials afforded by *Proslogion* 2 without ascending 'in the mind' to 'possible'. Instead of explicit use of indefinite descriptions it works with a variable introduced by existential instantiation for the star of the argument which, it is observed, can be understood to abbreviate an indefinite description, albeit (as said in note 12 above) not exactly the one featured in Charlesworth's translation. Quantifiers in the argument produced in (Sobel 2004) range over the union of things that exist in the mind, and things that exist in reality. This argument is in the spirit of a 'charitable interpretation' of *Proslogion* 2.

35. These are, in the literature of Leibnizian perfection-if-possible-is-necessary ontological arguments, common grounds for their possibility-premises, but they are not the only grounds offered in these arguments. For example, Kurt Gödel (according to notes by Dana Scott) derives, from *axioms for positive properties*, the possibility of a 'God-like-being' that has all and only positive properties.

For another example, Peter van Inwagen concisely explains in (van Inwagen 2006, p. 21) a clever derivation from informal Gödelian principles to the possibility of a being that has precisely the properties that are positive. The principles are, (i), that positive properties are closed under entailment (i.e., that any property entailed by positive properties is itself positive), and, (ii), that the negation or complement of a positive property is not positive. Principle (i) is stronger than the informal principle expressed by Axiom 2 in Dana Scott's notes, "Gödel's Ontological Proof", which principle is that any property entailed by a positive property is itself positive. Principle (i) is expressible only in a formal language more accommodating than the language actually deployed in those notes, and Gödel's note, "*Ontologischer Beweiss*", transcribed, respectively, in Appendix B and Appendix A to Chapter IV of (Sobel 2004). Principle (ii) is the unproblematic part of the principle expressed by Axiom 1 of those notes, which principle is that the negation or complement of a property is positive if and only if this property is not positive. The informal derivation explained by van Inwagen runs in terms of sets of properties including the possibly problematic set of all properties, but "could...have been formulated using 'plural quantifiers' that bind 'plural variables' ranging over properties" (van Inwagen forthcoming).

Having produced the argument, van Inwagen wonders what it comes to, observes that this depends on the meaning of the words 'positive property' in terms of which these principles are true, and gives a reason one why these principles leave *wide open* whether these words mean anything 'theologically or metaphysically interesting'. For these principles entail that, if there is a positive property, then, since every property entails "universal properties like self-identity and being either red or not red," these are positive properties. *Cf.*"[If] every property necessarily contained in a positive property is itself a positive property....[then] if there is a positive property,...every necessarily universal property such as being self-identical, and being either red or not red, is a positive property." (Sobel 2004, p. 120.)

36. I mean by a magician not a trickster such as Houdini, but a maker of *bona fide* magical events, that is (by an exercise of 'philosophic license'), a maker of *miracles* in *more or less* David Hume's 'accurately defined sense',* as Merlin is depicted as being, and as the Pharaoh's "wise men and...sorcerers..., magicians of Egypt...with their occult-arts,"*Exodus* 7:11 (Fox 1995, p. 293), are reported as having been. *Cf*., "**occult arts**: Whereas Aharon needs none, since [when he throws down his staff and it becomes a serpent] God performs the *miracle*" (*loc. cit.*, italics added – note by Everett Fox), whereas the Pharaoh's magicians did their own. Rowe uses 'magician' in a sense in which Houdini *is* one. *"A miracle may be accurately defined, *a transgression of a law of nature by a particular volition of the Deity, or by the interposition of some invisible agent.*" (Hume 1902, p. 115n) I mean by a magical event 'a transgression of a law of nature by a particular volition of some agent, visible or invisible, natural or supernatural.' (I do not believe in magic or miracles.)

37. 'According to Anselm's lights' if things x and y are alike in every universal respect other than existence, then the one that exists is *greater*. Indeed, though this is not important to his argument, there is evidence that he thought that everything, including the lowliest things, that exist in reality are greater than everything that exists only in the mind. *Cf*.: "[N]othing that Anselm says makes clear what advantages in other respects, **if any**, are sufficient to outweigh the additional share of greatness that is conferred on a nature which is instantiated in reality as compared with one which is not." (Millican 2004, p. 451, bold

emphasis added.)

38. *Cf*.: Anselm, in his reply to Gaunilo, writes, "I insist...that simply if it [that-than-which-a-greater-cannot-be-thought] **can be thought** it is necessary that **it exists**." (Anselm 1998. Reply to Gaunilo* I: p.111, bold emphasis added.) All quotations of Anselm's and Gaunilo's words are from M. J. Charlesworth's "deliberately literal translation" (Millican) as found in(Anselm 1998). [*Though (Anselm 1998) uses the translation by M. J. Charlesworth, in the original publication of that translation the *title* of Anselm's reply to Gaunilo "A Reply to the Foregoing by the Author of the Book in Question" (Charlesworth 1979, p. 169). Anselm begins Section 1 of his reply with the words, 'You say then – you, **whoever you are**', emphasis added. Gaunilo's name does not occur in the text or original titles of the *Proslogion* and its Appendices.]

39. It is an exceedingly *elusive* criticism of ontological reasoning. Though Rowe is 'set' to make it in "A Final Critique," and a reader is then 'set' to receive, it is not made in this section. Having just considered an objection that he suggests "is best construed...as raising the question **whether any of us is in a position to know...that Anselm's God is a *possible* object**" (Rowe 1993, p. 37, bold emphasis and italics added), he does *not* in his "Final Critique"say that merely from the analysis of ideas of kinds of things such as *magicans* one cannot establish that things of such kinds are *possible*. Rather he skips over the issue of possibility, and cuts to that of existence.

> "In this final section* I want to present a somewhat different critique of the argument, a critique suggested by the basic conviction noted earlier: namely, that from the mere logical analysis of a certain idea or concept, we can never determine that there exists in reality anything answering to that idea or concept." (P. 37. *The final section in Rowe 1978 starts here and runs to the end the essay, which differs only in minor ways from the chapter in Rowe 1993. One difference is that the 'final section' of the essay is divided into three sections in the chapter.)

Following a definition of '*magican*' and some discussion, Rowe writes,

> "We are now in a position to...see that, from the mere fact that *God* is defined as an existing, wholly perfect being, it will not follow that some existing being is God....whether some existing thing is God will depend entirely on whether some existing thing is a wholly perfect being....This being so, it clearly does not follow merely from this definition of *God* that some existing thing is God. Only if a wholly perfect being exists will it be true that God, as...conceive[d] **exists**." (P. 39, emphasis added.)

Rowe gets to his novel and important, his 'deep', critical point only in the next section, "Implications for Anselm's Argument" (p. 39): "Suppose....that no magicians have ever existed....We would then have a coherent concept 'magican' which would not be exemplified by any possible object at all."* (p. 40) [*"I am indebted to Professor William L. Wainwright for bringing this point to my attention." (P. 42n12) (Rowe 1978, p. 17n11.)] It took some time, but he did get along to it with a little help from his friend. I am guessing that Rowe did not get to it in initial drafts of "The Ontological Argument" that he talked about with Wainwright. (Rowe recalls that Wainwright made this during a late night conversation.)

40. Using the abbreviations – A: *a* is an Anselmian blessed little isle; B: *a* is a blessed little isle. It is a consequence of definitions that [$\Diamond(\exists x)Ax \supset (\exists x)Bx$], *and* that [$(\exists x)Bx \equiv (\exists x)Ax$]. As a matter of logic, it is the case that [$(\exists x)Ax \supset \Diamond(\exists x)Ax$]. Therefore it is a consequence of definitions that [$\Diamond(\exists x)Ax \equiv (\exists x)Bx$], **and that [$\Diamond(\exists x)Ax \equiv (\exists x)Ax$]**: the property of *being an Anselmian blessed isle* is possibly instantiated if and only if it is actually instantiated. While 'purely mathematical' properties numbers are all like that, properties of concrete things that come first to mind are not.

'*Though not all*': well *numbers* can be thought without contradiction to exist, but *numbers than which no greater numbers can be thought* cannot be thought without contradiction to exist.

41. Descartes, in reply to the "First Set of Objections," writes: "if we attentively examine whether existence belongs to **a supremely powerful being**...**we shall be able to perceive *clearly and distinctly***....[that] when we attend to the immense power of this being, we shall be unable to think of its existence as possible without recognizing that it **can exist by its own power**; and we shall infer from this that this being does really exist and has existed from eternity, since **it is quite evident by *the natural light* that what can exist by its own power always exists**" (Descartes 1984, Volume II, p. 85; italics and bold emphasis added).

42. 'Ordinary' concepts are not the same as Rowe's 'normal' concepts, for which he proposes "that a *normal* concept C of...kind of being is *satisfied* in a given possible world just in case, were that world actual, ...a being of that kind would exist" (Rowe 1994, p. 75). The concept of a *magican* is normal in this sense.

43. So is the concept of an 'Anselmian *uber*-God', for which one may replace clause (ii) by, 'x exists and is an absolutely magnificant being at *every* possible world.' As existence is explicitly contained in the idea of an Anselmian god, so necessary existence is explicitly contained in the idea of an Anselmian *uber*-God. On the assumption that Anselm's words 'it cannot be even thought not to exist' mean *it necessarily exists*, he says in *Proslogion* 3 that the "something-than-which-a-greater-cann0t-be-thought" which has been show in *Proslogion* 2 to exist in reality, exists necessarily, and is, in my terms, not only an

'Anselmian god' but an 'Anselmian *uber*-god' (*Proslogion* 3, p. 119).

44. It is written in (Sobel 2004) that "there are no *a priori* possibilities" (p. 92). That, Anthony Anderson has recently pointed out to me, is not true if there are *a priori* truths, for whatever is true is possible. What I should have said is that there are no *a priori* mere possibilities, meaning that there are no possbilities that are knowable *a priori* that are not truths that are knowable *a priori*. I am not sure this is true, and have claimed here only that it is not *a priori* possible that there are things such as Rowe's *magicans* and 'Anselmian blessed little isles', and that *presumably* the same holds for 'Anselmian gods'.

45. Anselm presumes so: "it is not the Fool...who takes me up, but...an orthodox Christian" (Reply to Gaunilo: p. 111). He says that his strongest argument against the disjunction – "*either* God is not that-than-which-a-greater-cannot-be-thought *or* is not understood nor thought of, and is not in the mind nor in thought" – "is to appeal to your faith and to your conscience" (Reply to Gaunilo 1: p. 111.) Also, Gaunilo himself, in his concluding Section, after praising everything else in the *Proslogion*, says "of those things at the beginning [in *Proslogion* 2] (**rightly intuited**, but less surely [than the rest] argued out)....[that they] should be demonstrated more firmly...so [that] everything [can be] received with very great respect and praise." (*Pro Insipiente* 8: p. 110.) *However*, Gaunilo had said, "I certainly do not yet admit this greater [than anything] to be a truly existing thing; **indeed I doubt or even deny it**." (*Pro Insipiente* 5: p. 108.) *Perhaps* Gaunilo believed only in a lesser god, a less than perfect god, of a kind in evidence in The Bible and adored by the rabbis (Wettstein 1997). Perhaps Gaunilo was not the 'orthodox Christian' that Anselm said he was, and could have been daring him to confess that he was not. Perhaps Anselm was, at the same time, proselytizing for the not yet *firmly* established orthodoxy of 'perfect being theism' so dear to philosophers of religion.

46. "Now, I truly promise that if anyone should discover for me something existing either in reality or in the mind alone – except 'that-than-which-a-greater-cannot-be-thought' – to which the logic of my argument would apply, then I shall find that Lost Island and give it, never more to be lost, to that person." (A Reply to Gaunilo 3.)

47. If only Anselm had picked up on the word 'capable' and been disposed to *cooperative disputation* aimed at truth and clarification, he just might have, he was certainly smart enough to have, seen the possibility of building on the idea of a blessed isle, to make the idea of an blessed isle that exists in reality . This would not be a normal concept in Rowe's sense (Section 5.2 above). It would, for a challenge specifically to the first subsidiary argument of *Proslogion* 2, stand to the concept of a blessed isle, as the concept of a *magican* stands to that of a magician. It is too bad. Anselm *could* have been 'Gaunilo's Wainwright' (please see note 38 above).

48. Descartes does not, in *Meditation Five*, argue for the possibility of a perfect being. *If* he had, then he might, when freely associating on the thought in Objection I (Caterus) of an existing lion, considered in addition to 'a winged horse' and 'an actually existing lion', *an actually existing winged horse*. With these words in mind he just *might* have seen that from the absence of contradiction in the idea of an actually existing winged horse he not only could not infer that it exists, but that he could not infer even that it is capable of existing, or that it has possible existence. Caterus's objection is at least two removes from anticipating Rowe's. He does not anticipate Leibniz by saying that Descartes needed to prove first the possibility of a supremely perfect being, and actually existing lions are both conceivable and possible since there are actually existing lions. This in contrast to actually existing winged horses, and winged horses. As said, I think that Gaunilo's is the *only* anticipation of Rowe's, with a little help from his friend, good objection to the most common grounds for the possibility of perfect beings, and beings than which no greater beings can be conceived, when actual existence is included in their concepts.

49. He was blind to it. Consider: "what is understood is understood by the [*sic*] mind, and what is understood is thus, as understood, *in* the [*sic*] mind. What could be more obvious than that?" (Reply to Gaunilo 2: p. 113. Regarding Charlesworth's decision to insert articles, and the *same* article, here, the next note is relevant.). What is understood is in a sense in a mind. For what is understood is understood by someone who, when he is thinking about it, 'has it in mind'. No question about that. But it is not obvious that whatever is understood is, as understood, 'in *the* mind', or better 'in mind', in the sense of being possible or of being capable of existing. How could he have missed this, which Gaunilo had so kindly place before him to see?

Anselm was not the last to miss to the point that what is understood need not possibly exist, if it is a kind of thing, or possibly be so, if it is a proposition. He was not the last to miss that not even the coherence of the concept of a kind of thing guarantees the possibility of a thing of this kind. Duns Scotus seems to have supposed that since "the idea of God as a synthesis of 'pure perfections' cannot contain any contradiction," God so conceived is possible. (Charlesworth 1979, p.5.) Scotus is said to argue that this idea is free of contradiction, "since contradiction can only occur where something is posited and something is negated" (*ibid.*). Leibniz equates possibility with freedom from contradiction in *New Essays*, Book IV, Chapter 10, and, in order to fill a gap in Descartes proof, argues similarly from the simplicity of perfections to the possibility of a most perfect being (Leibniz 1979, pp. 167-8). "Scotus's version can be considered a bridge between St. Anselm's argument and the later variations of it developed by Leibniz....The Leibnizian formula, ‘If God is possible, God exists’, derives in fact from Scotus’.” (Charlesworth 1979, p. 5.)

Norman Malcolm writes: "The only...way of rejecting Anselm's claim that God's existence is necessary is to maintain that the concept of God, as a being greater than which cannot be conceived, is self-contradictory or nonsensical ....Gaunilo attacked Anselm's argument on this very point. [False! Gaunilo observed that a thing’s being mentioned by words I understand does not entail that it is capable of existing: *Pro Insipiente* 2, p. 106. But he nowhere impugns Anselm’s concept of a thing than which nothing greater can be thought, or implies that only things whose concepts harbour contradictions are incapable of existing.] He would not concede that a being a greater than which cannot be conceived existed in his understanding....[False again. He allowed that he understood Anselm’s words, that the Fool understood what Anselm was talking about, that he understood Anselm’s words, and in this sense had in his understanding what Anselm was talking about.] Gaunilo's faith and conscience will attest that it is false that...'He is not understood (*intelligitur*) or conceived (*cogitatur*)'....[Malcolm allude’s here to the *ad hominem* in the first section of his reply, p. 111, with which Anselm accosted “one who, though speaking on the Fool’s behalf, is an orthodox Christian and no fool,” p. 111, to whom addressed his reply.] Descartes also remarks that one would go to 'strange extremes' who denied that we understand the words '*that thing which is most perfect that we can conceive*...' [Again Malcolm misses the limited significance of our understanding these words, implying as he does that our understanding them entails the possible existence of their purported referent.]...." (Malcolm 1962, p. 49) "God's existence is either impossible or necessary. It can be the former only if the concept of such a being is self-contradictory or in some way logically absurd. [False. If there are no magicians, the existence of *magicans* is impossible, though the concept of a *magican* is not self-contradictory or in any way logically absurd.]" (Malcolm 1962, p. 50.)

Hartshorne sometimes equates possibility with consistent conceivability (please see note 29 above). Plantinga sometimes equates coherence of the idea of a kind of thing with the possibility of things of this kind. Please consider: “What [the ontological argument] shows is that if it is possible that there be a greatest possible being ([i.e.] if the idea of a greatest possible being is coherent)....” (Plantinga 1974, p. 106.) Leibniz argued for the possibility by demonstrating to Spinoza the *consistency* of the idea of having every perfection. (Leibniz 1969.)

Lastly, there is David’s Hume’s approving report: ‘it is an established maxim in metaphysics’ that whatever is *conceivable* without contradiction is *possible* (David Hume, *The Treatise*, Book I, Part I, Section II). Certainly ‘what can be affirmed only on pain of *a priori* contradiction is *necessarily false*’ and ‘what can be denied only on pain of *a priori* contradiction is *necessarily true’* (*pace* Graham Priest who believes in ‘true contradictions’), to which ‘maxims of metaphysics’ it is easy to append the error that ‘what can be affirmed without *a priori* contradiction is *possible*’.

Rowe’s *magicans*, again, speak to this error. Suppose there are no magicians. Then it is not possible that there are *magicans*, though the proposition that there are *magicans* can be affirmed without *a priori* contradiction. I do not say that in this case the proposition that there are *magicans* can be affirmed without contradiction *full stop*. For in this case it is necessary that there are no magicans, and the proposition that there are *magicans* entails a contradiction, since what is necessary is entailed by every propositions. The point is that in this case, though it is not possible that there are *magicans*, the proposition that there are *magicans* does not ‘entail *a priori*’ that there are no *magicans*, since though this proposition, if true is necessarily true, its truth is not discoverable *a priori*, any more than is the truth of the proposition that there are no magicians, if this is true.

50. *Further to this conjecture.* In Charlesworth’s translation, *Anselm* ‘says’: “...when this...Fool hears what I am speaking about...he understands what he hears, and what he understands **is in his mind**....Even the Fool, then, is forced to agree that something-than-which-nothing-greater-can-be-thought **exists in the mind**....” (*Proslogion* 2: p. 87) *Perhaps* Gaunilo, had he been fluent not only in eleventh century scholastic Latin but in modern English, might have explained: “Anselm alludes inadvertently to an essential distinction. It would be, between Anselm and me, a matter of articles, if he were fluent in English. I could then say to him, that it is one thing for an object to exist in *a* mind, that is, for a person to have in mind and understand words for this thing, and to entertain it as an intentional object in thought. It is *another* thing for an object to exist in *the* mind, or perhaps better said, to ‘exist-in-the-mind’, or to ‘exist in mind’, where this means to *exist in the realm of all things that can be,* both those that *are*, and those that *can be* though they are not. I could say to him that he needed to show that something than which nothing greater can be thought exists not only in this or that mind, but that it *exists in mind*.”

I assume that there are in the latin text reasons for Charlesworth’s choosing for the substantive ‘mind’ the definite rather than indefinite article when it is not a particular mind, such as the Fool’s, of which he is writing. I think that the phrase ‘a mind’ does not occur in Charlesworth’s translation of *The Proslogion.* Perhaps, however, Charlesworth’s translation could be improved by replacing throughout ‘exists in *the* mind’ by the article-free predicate ‘exists in mind’, an option open to him given that absence from Latin of articles. The awkwardness of the construction ‘exists in mind’ would, I think, have been salutary. His choice of the construction ‘exists in the mind’ invites the question, “And exactly which mind, exactly whose mind, would that ‘the mind’s’ be (pray tell)?!” Although Anselm’s answer *in other contexts* could have been, “God’s,” this answer is not available to him in *Proslogion* 2, which is titled, “That God truly exists.”

Our preternatural Gaunilo could have seen another ‘issue of articles indefinite and definite’ raised by the shifts, observed in Section 1 above, from ‘*something*-than-which-nothing-greater-can-be-thought’ to ‘*that*-than-which-nothing-greater-can-be-thought’, *and back* in *Proslogion* 2. However, ‘that-than-which’ *here* is I think short for ‘that-something-than-which’ and a term of anaphoric reference. In *Proslogion* 3, ‘that-than-which-which-nothing-greater-can-be-thought’ occurs first, to give way to ‘something-than-which-nothing-greater-can-be-thought’ . God is then said to be “this being” that exists so truly that it cannot even be thought not to exist. In *Proslogion* 4 we find that “God is that-than-which-nothing-greater-can-be-thought”: *here* one wants to take the term as short for ‘*the-thing*-than-which-nothing-greater-can-be-thought’. There are no occurrences of hyphenated description terms subsequent to this one in *Proslogion* 4.

51. Millican does not ‘lean on’ the principle of the first part of Anselm’s argument, namely, that “whatever is understood is in the mind”(sentence [8] in *Proslogion* 2) or (modalized) that ‘whatever is understood is *possible*’. Certainly Millican does not offer to *refute* this principle. *Implicit* in his critique is only the idea that when conjoined with an ‘analysis’ of ‘perfection’ it allows Anselmian arguments to *beg their question*. This is implicit in his criticism of Plantinga’s ‘Anselmian’ argument: “The question-begging nature of Plantinga’s argument becomes clearer if it is translated out of the idiom of possible worlds....Thus translated, Plantinga’s claim is in effect: ‘The following property – *essential omniperfection which if possibly exemplified is necessarily exemplified* – is possibly exemplified.” (Millican 2004, p. 469n.) It is no part of my critique of Anselm’s own argument that in either of its subsidiary arguments it is ‘question-begging’. Absent from Millican’s otherwise ample bibliography are references to (Rowe 1978, 1993, 1994).

52. Analogues of Alphabetic Variance and Logical Extensionality are derived conditions for extensions of proper ⅂-descriptions in the Description Calculus. Indeed Full Extensionality is a derived condition for extensions of proper ⅂-descriptions: for any formula ψ, if φ and ψ are coextensive in ***Int*** , the interpretation *Int* assigns the same thing to ⌜𝒜αψ⌝ as to ⌜𝒜αφ⌝.

53. The Description Calculus makes do with the two rules, for variables α and γ, formula φ, variable β not free in φ, and formula $\varphi_{⅂\alpha\varphi}$ that comes from φ by proper substitution of ⌜⅂αφ⌝ for α,

Proper Descriptions. $(\exists\beta)(\alpha)(\varphi \equiv \alpha = \beta)$ $/\therefore$ $\varphi_{⅂\alpha\varphi}$

and

Improper Descriptions. $\sim(\exists\beta)(\alpha)(\varphi \equiv \alpha = \beta)$ $/\therefore$ ⅂αφ = ⅂γ γ ≠ γ.

Analogues of the rules Alphabetic Variance and Interchange of Logical Equivalents for 𝒜-descriptions are derivable in the Description Calculus in which, for example, ‘⅂xFx = ⅂x~~Gx’ and ‘⅂xFx = ⅂yFy’ are theorems.

54. Given the abbreviations – A: something-than-which-something-greater-cannot-thought; G: *a* is greater than *b*; T: *a* can be thought; and now, S: *a* is something than which a greater cannot be thought – Anselm’s formulas ‘something-than-which-nothing-greater-can-be-thought’ and ‘that-than-which-a-greater-cannot-be-thought’ have the three symbolizations in the Indefinite Description Calculus, ‘A’, ‘𝒜xSx’, and ‘𝒜x~(∃y)[G(xy) & Ty]’.

55. Each indefinite description calculus would, however, be an extension of the Quantifier Calculus of (Kalish, *et. al*., 1980), whereas the Description Calculus is an extension of the Identity Calculus of that text, and the *R*-calculus is an extension of the Description Calculus.

56. *Cf*.: “It will be clear that when a denoting phrase is analysed as a quantifier, the quantifier will have some determinate scope....On the other hand, if it is looked at as a term...embedded in...a negation, ‘¬some φ did ψ’, it will have two readings, depending on whether the negation or the quantifier has larger scope.... This is Russell’s notion of scope. It is most interesting in the case of definite and indefinite descriptions....In a truth-functional context, scope *can*...make a difference. However, if the **appropriate** conditions are met, **if there is a unique x such that φx** ....different scope interpretations lead to materially equivalent statements.” (Kripke 2005, p. 1009.) However, *if* ‘the appropriate condition’ for the indefinite description ⌜**A**αφ⌝ is its *propriety* condition, ⌜(∃α)φ⌝, that this condition is met does not necessarily lead different scope interpretations of ⌜¬some φ did ψ⌝, [**A**αφ]$\sim\psi_{\Lambda\alpha\varphi}$ and ~[**A**αφ]$\psi_{\Lambda\alpha\varphi}$, being materially equivalent.

57. Applying Russellian Indefinite Descriptions to (I) and (II’) leads to existential generalizations that need to be instantiated to *different* variables. Similarly for (I) and (II’’). Applying Russellian Indefinite Descriptions to (II’’’) leads, after a Necessity inference, to the negation of an existential generalization, and then, by Quantifier Negation, to a universal generalization that can be instantiated to the variable introduced when (I) is previously instantiated.

58. To simplify, as in Section 2.2.2 above, we may use the abbreviations: M: *a* exists in the mind alone (and not also in reality); S: *a* is something than which a greater cannot be thought to exist in reality. To prove that

Premise II’’’ □~[AxSx]M AxSx

it suffices to derive from only necessities

~[AxSx]M AxSx

We may assume for an indirect derivation

(i') [**A**xSx]M **A**xSx

Given (ii), that existence in reality is greater making, we may infer that

(iii') [**A**xSx]~S**A**xSx,

which is a symbolization available in this context of 'something-than-which-a-greater-cannot-be-thought-to-exist-in-reality is something than which a greater *can* be thought to exist in reality'. (iii') has the 'literal' translation, 'there is something than which a greater cannot be thought to exist in reality, *and* it is not the case that it is something than which a greater *cannot* be thought to exist in reality'. (iii') thus has as a 'free' translation of 'there is something than which a greater cannot be thought to exist in reality, *and* it *is the case* that it is something than which a greater *can* be thought to exist in reality'. From (iii'), we may by Russellian Indefinite Descriptions infer

(∃x)(Sx & ~Sx),

and from this a contradiction. [All this can be in the free quantified modal logic of (Sobel 2004) elaborated in files linked to the web page – http://www.scar.utoronto.ca/%7Esobel/L_T.]

59. Almeida has offered Anselm the friendly suggestion that he forget about all that business of the fool's understanding and learn to equivocate on the scope-amphiboly, on a Russellian view, of 'something-than-which-nothing greater-can-be-thought does not exist in mind' for the appearance of a *reductio* proof of Premise I, given the 'free-premise' that everything that exists exists in mind, (x)(E!x ⊃ Mx). The pretence could work like this in a 'free logic'. To prove [**A**xSx]M **A**xSx, assume for a *reductio* (when your audtiors are not paying attention) that [**A**xSx]~M **A**xSx. Infer from this that (∃x)(Sx & ~Mx), then that E!a & (Sa & **~Ma**), and then, from E!a and that 'free-premise', that **Ma**. A contradiction is now all but in hand. (Please see note 13 above for Almeida's idea for a differently defective *reductio* for Premise I.)