



The Problem of Heavenly Bodies



Overview

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Heavenly bodies

- The problem

- Uniform matter view

- Diverse matter view

- Matterless heavens view

Angels and souls

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Reminder: Matter and Form(s)

What is the world made out of? (And how?)

- **integral parts**: elements.
- **metaphysical parts**: parts that aren't integral parts; matter and form
- we need these to account for change

- Does this apply to *everything*?
 - soul and angels?
 - heavenly bodies (stars, planets)?

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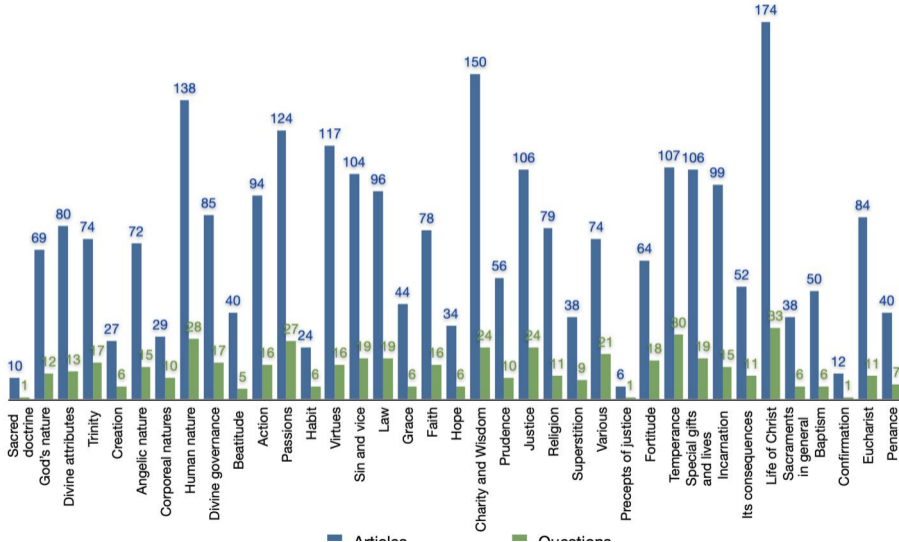
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The Summa Theologiae



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How to Read the *Summa*?

The general structure:

- 1 The title: usually a yes/no question
- 2 Objections to Aquinas's own position:
 - 1 Obj. 1
 - 2 Obj. 2
 - 3 etc.
- 3 "But on the contrary..." (*sed contra*) – some consideration, often by authority, why we should take Aquinas's view seriously
- 4 Aquinas's own view and his arguments for it
- 5 Response to the objections
 - 1 Response to obj. 1
 - 2 Response to obj. 2
 - 3 etc.

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Peter Auriol (1280–1322)

- studied in Paris
- critique of Scotus
- influential on Ockham, etc.

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The Cosmos



The Problem of Celestial Matter

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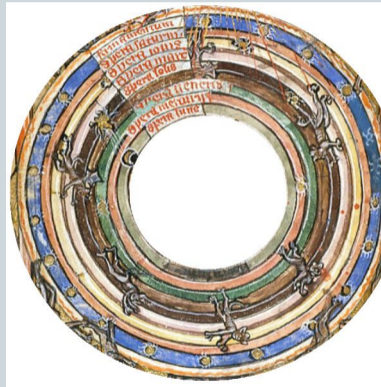
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The Problem of Celestial Matter

Some background: Ptolemy, Aristotle (later Averroes)

- The sublunary vs. superlunary sphere: one is corruptible, the other is not.
- The heavens are not subject to substantial or qualitative changes.
- But matter is precisely the underlying substrate for such changes!
- However, if there is no matter, then how can the heavens move?



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Are celestial bodies composed of matter and form? — 3 main positions

- **Uniform matter view:** Yes; they have the same kind of matter as the earthly one – Giles of Rome, Ockham, perhaps Scotus (undecided)
- **Diverse matter view:** Yes, but they have a different kind of matter from the earthly one – Aquinas, the early Galileo
- **Matterless heavens view:** No; they have no matter at all – Peter Auriol, John of Jandun, Durand of St.-Pourçain

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1. The Uniform Matter View

Arguments for the view:

- If matter is pure potentiality, there is nothing to diversify it.
- Parsimony argument; we can account for sublunar corruption this way; therefore, there is no reason to posit two kinds of matter.
- The First Act is one, therefore, so should be the First Potency.

Arguments against:

- Does this mean that the matter of the heavens could, possibly, take on a form and become corruptible?
- Celestial and terrestrial matter have different characteristic motion (circular vs. rectilinear); hence, they are different.

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2. The Diverse Matter View

- Seems to be the prevalent view at least in the early 14th century
- Cf. the arguments against the previous view
- Conforms to the basic Ptolemaic/Aristotelian distinction between the sublunar and superlunar spheres — one contains generable and corruptible things, the other does not.

Argument against: How can we draw a distinction between different kinds of matter, if matter is pure potency?



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3. The Matterless Heavens View

Some Arguments:

- Argument from incorruptibility, and from the inadequacy of alternative positions
- Argument from parsimony
- Argument from dimensions

Arguments against:

- What sense does this make?
- How can the heavenly bodies have motion, colour, etc., if they don't have matter?

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3. Matterless Heavens – What Does This Mean?

Peter Auriol, In Sent. II.14.1.1

The heavens are not form, because form is not in potency to its perfections; nor is it matter, because matter is in potency to the first act; therefore, it is something as if in the middle, having the nature of a subject, and fifth essence. . . . The heavens are a fifth essence, which is not composite, namely by matter and form, neither form, nor matter, but a subject that only has dimensions in its act (1605, p. 188bF).

John of Jandun, De substantia orbis, q. 1

The heavens, which is the fifth essence, if we bracket from the mover, is not composed of matter and form, but is a simple subject, always subject to its mover, having matter not as [potency] to being but as potency to location [potentia ad ubi] (1552, fol. 51rB).

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3. Matterless Heavens – What Does This Mean?

- heavenly bodies are not metaphysically composite
- they are neither matter nor form
- they are a simple subject, having dimensions as act

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3. Matterless Heavens – Objections & Responses

Corporeity?

No need for matter. (Corporeity is a form!)

Quantity?

No need for matter. (Inheres in the form of corporeity)

Sensible accidents?

No need for matter. (Due to form; inheres in quantity)



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Similarity:

- cannot be understood except by the form / its mover
- does not exist except with the form/mover
- does not have qualities except due to form/movers
- we infer the existence of PM by observing substantial change; we infer the existence of “local matter” by observing local motion
- but we cannot know the positive formal characteristic of either (since they don't have any, apart from their form/mover)

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Dissimilarity:

- PM receives its existence from form; CBs have their own actuality
 - the union of a CB and its mover is not like the union of PM&SF, but more like a ship and its captain.
-
- Does this solve the problem?
 - What does it tell us about the nature of matter?

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Angels? Souls?

The problem is similar:

- The intellect (angelic, human, etc.) seems to be able to change — e.g., it can acquire new concepts, etc.
- The underlying substrate of change is matter;
- ∴ Therefore, the intellect has an underlying substrate of matter and is composite of this matter and form.

The positions:

- 1 You may think that still, there is no such thing as spiritual matter (Aquinas, and most later scholastics).
- 2 Or you may think that there is such a thing as spiritual matter, and it is the same as the regular one (“universal hylomorphism”; Bonaventure, Avicenna).
- 3 Or you may think that spiritual matter is different (Auriol).

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