## Ia q. 67 a. 2

## Whether light is a body?

**Objection 1.** It would seem that light is a body. For Augustine says (De Lib. Arb. iii, 5) that "light takes the first place among bodies."Therefore light is a body.

**Objection 2.** Further, the Philosopher says (Topic. v, 2) that "light is a species of fire." But fire is a body, and therefore so is light.

**Objection 3.** Further, the powers of movement, intersection, reflection, belong properly to bodies; and all these are attributes of light and its rays. Moreover, different rays of light, as Dionysius says (Div. Nom. ii) are united and separated, which seems impossible unless they are bodies. Therefore light is a body.

**On the contrary,** Two bodies cannot occupy the same place simultaneously. But this is the case with light and air. Therefore light is not a body.

**I** answer that, Light cannot be a body, for three evident reasons. First, on the part of place. For the place of any one body is different from that of any other, nor is it possible, naturally speaking, for any two bodies of whatever nature, to exist simultaneously in the same place; since contiguity requires distinction of place.

The second reason is from movement. For if light were a body, its diffusion would be the local movement of a body. Now no local movement of a body can be instantaneous, as everything that moves from one place to another must pass through the intervening space before reaching the end: whereas the diffusion of light is instantaneous. Nor can it be argued that the time required is too short to be perceived; for though this may be the case in short distances, it cannot be so in distances so great as that which separates the East from the West. Yet as soon as the sun is at the horizon, the whole hemisphere is illuminated from end to end. It must also be borne in mind on the part of movement that whereas all bodies have their natural determinate movement, that of light is indifferent as regards direction, working equally in a circle as in a straight line. Hence it appears that the diffusion of light is not the local movement of a body.

The third reason is from generation and corruption. For if light were a body, it would follow that whenever the air is darkened by the absence of the luminary, the body of light would be corrupted, and its matter would receive a new form. But unless we are to say that darkness is a body, this does not appear to be the case. Neither does it appear from what matter a body can be daily generated large enough to fill the intervening hemisphere. Also it would be absurd to say that a body of so great a bulk is corrupted by the mere absence of the luminary. And should anyone reply that it is not corrupted, but approaches and moves around with the sun, we may ask why it is that when a lighted candle is obscured by the intervening object the whole room is darkened? It is not that the light is condensed round the candle when this is done, since it burns no more brightly then than it burned before.

Since, therefore, these things are repugnant, not only to reason, but to common sense, we must conclude that light cannot be a body.

**Reply to Objection 1**. Augustine takes light to be a luminous body in act—in other words, to be fire, the noblest of the four elements.

**Reply to Objection 2.** Aristotle pronounces light to be fire existing in its own proper matter: just as fire in aerial matter is "flame," or in earthly matter is "burning coal." Nor must too much attention be paid to the instances adduced by Aristotle in his works on logic, as he merely mentions them as the more or less probable opinions of various writers.

**Reply to Objection 3**. All these properties are assigned to light metaphorically, and might in the same way be attributed to heat. For because movement from place to place is naturally first in the order of movement as is proved Phys. viii, text. 55, we use terms belonging to local movement in speaking of alteration and movement of all kinds. For even the word distance is derived from the idea of remoteness of place, to that of all contraries, as is said Metaph. x, text. 13.