Dear Sir,

## Difficulties in grasping the metaphysical

I should first address the objection you have raised, which is a good one, in comparing evil—as a lack of good—with non-being as a lack of being. A couple of distinctions need to be made. The first is between the absence of being which should be present and the absence of being *tout court*. The second distinction is that between *real* being and *mental* being.

Evil is a lack of real being, the lack of a due good, something that should be there but is not—as blindness is a physical evil in a horse, as theft is a moral evil in a man's conduct. This lack is different from a simple absence of being.

Things exist in the mind and things exist in the real, but the mode of their existence differs. What is in the mind *may* reflect what is real, but it may not. Moreover, because we are intellectual creatures who happen to have a body we tend to give physical, positive, names (and concepts) even to things which are negative. Night is a good instance. 'Night' is simply 'light' minus 1 plus n. We give a positive name to something negative—and never notice that we are doing it. 'Nothing' is another instance of the same but subtly different.

A further distinction, the most important of all, is necessary: 'being' connotes two realities, essence (*what* is) and existence, or be (*that* it is). Now while 'evil' indicates a lack of some essence (sight in the horse, moral rectitude in the man) and 'night', too, indicates a lack of some essence (light), 'nothing' indicates a lack of both essence and be. In other words, despite the fact that we give it a positive name, 'nothing' contains no element of reality whatsoever.

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I insist that what is at stake is not a dispute between science and the philosophy of Aristotle (and of St Thomas), but between philosophy and philosophy, between materialism and metaphysics. Aristotle's philosophy has no dispute with modern science. The issue between a materialist (physical) and a metaphysical view of reality could start with any topic. That of light is one of the better ones. I don't concede that light is a body because it isn't! Science itself is in two minds about it after all.

### Three levels of intellectual abstraction

Science deals with reality at one remove from its subject, the first level of formal abstraction. When science considers a gold nugget, for instance, its concern is the 'gold-ness', and it can recite in immense detail all the indicators, the phenomena, that characterise gold. When it has finished it has not really told us what gold is, just that it is a substance that manifests these many indicators. Ditto with light. It can only list its phenomena; it can't tell us what light is.

The second level of abstraction is the mathematical. It is not concerned about *this* instance of gold either, it is concerned about its dimensions and their complexity, its number. While science is tied to gold, the mathematical is content with any material body on which to demonstrate its theses. In fact, it does not need a body at all. It can do its work via mental exercise alone.

There is a third level of abstraction, the philosophical, which considers the gold nugget as an instance of being, an exerciser of the act of 'be'. Now 'be' involves, as noted above, two issues, *what* is, and *that* it is, essence (or nature) and existence. Like mathematics, philosophy is quite insouciant about what it is dealing with. Any bodily thing will do. Indeed, it does not need it even to have a body, just something that exercises existence ('be') in some fashion, like an idea, or the soul of a tree, or of a dog.

Of the three levels of abstraction that of the philosophical is the most profound, for philosophy can look at the other two and consider *what*? and *that*? about them too. For instance, that mathematics exists is true, but how does it exist? In the real, or in the mind of man? or in both? And if so, how in the one and how in the other? And where, primarily? And these considerations involve, also of course, the question of just *what* mathematics is.

Now through the influence of St Thomas and of the scholastic philosophers of the late middle ages, all the world thought metaphysically until the revolt against God in the sixteenth century. I don't mean that everyone was a philosopher, but that Aristotle's profound analyses filtered down even in mundane subjects to the average man as an effect of intellectual pressure from above. Having rejected God, men began to reject God's surrogate in this life, reality. The theological error of Luther and those who followed him devolved into philosophical error manifested in Descartes' silly theses. Instead of starting with reality, Descartes started with himself, and took philosophy off the rails. Philosophy has suffered ever since, and so has science. Descartes' error evolved into two crutches, subjectivism (what matters is not reality, but what I think about reality) and materialism (if you can't detect it, it does not exist). Had the revolt never occurred, science would today be weighing its analyses against Aristotle's profound thought and arriving at true conclusions about our topic, light, and about the instrumental efficient cause of gravity, inter multa alia.

# Aristotle on Causality

There are four causes of every thing and of every act—form and matter, maker (or doer) and end. There are no less than four; there are no more. The chief of the causes is the end, the final cause, why man does things; why things, natural things, exist. Recognition of final causality leads inevitably to God. Matter can be anything. What makes matter be this thing is its formal cause. And formality is tied to finality, for what something is is determined by the end for which it exists. This is the case in all natural things. It is the case with our making and doing too.

#### Newton and His Assessments

Newton preferred Descartes's views to those of Aristotle. And the drift away from a metaphysical grasp of reality to a materialist one—that is, the view that reality is to be determined by what can be physically measured—was well under way, but not completely! Newton still recognised causes that were not susceptible to detection, as his note to Dr Richard Bentley, Master of Trinity College, Cambridge, shows.

"It is inconceivable that inanimate Matter should, without the Mediation of something else, which is not material, operate upon, and affect other matter without mutual Contact... That Gravity should be innate, inherent and essential to Matter, so that one body may act upon another at a distance thro' a Vacuum, without the Mediation of any thing else, by and through

which their Action and Force may be conveyed from one to another, is to me so great an Absurdity that I believe no Man who has in philosophical Matters a competent Faculty of thinking can ever fall into it. Gravity must be caused by an Agent acting constantly according to certain laws; but whether this Agent be material or immaterial, I have left to the Consideration of my readers."

There is hardly a scientist on the face of the earth in the twenty-first century who is not guilty of that absurdity, who does not think a medium is unnecessary. They, all of them, think that space is empty of all (or nearly all) material content, non-being somehow existing; nothing.

#### Void or Vacuum

When Frank Sheed deals with the existence of spirit in his *Theology for Beginners*, he sets out the arguments for it then offers advice along these lines. *There is hardly anything more that can be said about the issue. You have just to keep mulling over the arguments that something can exist and yet not have a body until its truth will hit you.* It is the same with the impossibility of void, of non-being somehow existing. The statement "Nothing does not exist" expresses reality. The truth it entails is as simple as that in the statement "Water flows downhill", and its content is just as self-evident when you have a metaphysical (i.e., common sense) understanding of reality. It requires only a slow weighing of the arguments to come to realisation.

We have been conditioned by generations of thinkers in the train of Descartes and those who succeeded him, and of writers who have picked up their ideas, to accord a reality to non-being. Just as is the case with truth, error starts with the academics and percolates through to the average man.

### Light

I had better get back to light before I lose you. To understand what light is—and what light is not—I have to get you to see the force of Aristotle's teaching on *substance* and *accident*. He teaches that all things can be divided into ten genera or categories. *Substance* is one category and the other nine are all *accidents*. [ There is a useful summary in chapter ix of Fr George Joyce's *Principles of Logic*, (2<sup>nd</sup> edition, 1916), which is available as a cheap reprint over the internet. ]

The definition of substance is 'be-in-self'. Note that this is not what Newton means by substance (vide the intro to his *Principia*). Nor is it what the man in the street today means by substance. Over the centuries a burgeoning materialism changed the meaning of the word. I have set out the issue in a paper on *superflumina* called 'The Two Rabbits' (<a href="http://www.superflumina.org/two rabbits.html">http://www.superflumina.org/two rabbits.html</a>). A *substance* exists in its own right. Examples are a dog, a horse, a tree, water, air (or its component gases), marble. Only a substance can have a body.

The definition of accident is 'be-in-other'. An *accident* exists, can only exist, in some substance: for instance the blue of the sky; the green of grass; the up-side-down-ness of a child hanging from a cross-bar; clothed (or unclothed); now; here; being hit (in the nose); kicking (a ball); the sound (of a trumpet); being brother or sister (to another).

Now light is not a substance. It is an accident, that accident, called *quality*, which makes things visible. It does not subsist; it befalls (that is the root of *accidere*, the verb from which the word 'accident' comes) or affects, some substance. Light cannot exist apart from some substance. This analysis is not

concerned with the characteristics light manifests (whether waves, particles or [?!?!] both), but with what sort of being it is. The issue is primarily a philosophical, not a scientific, one for only philosophy is concerned with the being of anything.

### Materialism's influence on Science

When in 1887 Michelson and Morley conducted their famous experiment they reached conclusions which were not so much scientific as philosophical. They concluded from their observations that a light bearing ether did not exist. But they reached that conclusion because they accepted materialism's postulate that if you can't detect something it does not exist. This was irrational (and materialism IS irrational!) for there are plenty of effects which cannot be detected experimentally but for which reason demands that a proper cause must exist, as e.g., the soul of any living thing.

Had Luther not revolted against God and led millions in his train, Descartes' philosophical maunderings would have been treated with the disdain they deserved, and materialism would never have risen to dominate intellectual life. Michelson and Morley would have discovered that they had confirmed Aristotle's teachings about *aether*, the chief of which is that it cannot be detected by a scientific instrument! They would also have discovered (or their determinations would have led to the discovery) that the fixity of the speed of light (light is an accident, remember!) demanded the existence of a substance which reflected this fixity. In other words, their investigations would have assisted Einstein immensely in working out his theories. Instead of focusing on a constant *c*, as if this accident (for speed, too, is an accident) could somehow exist *sui generis*, he would have attributed it to its proper substance. And instead of dismissing the existence of 'ether' for the purposes of his two theories, he would have endorsed its existence and recognised its proper place in the workings of the universe.

Once you regard reality with the intellect rather than with the imagination, and accept what intellect demands, that in whatever space, apparently void of being, that exists, this space CANNOT be non-being somehow existing, it follows that it must be a material body, *even if it cannot be detected*. The testimony of the senses confirms the intellectual assessment. There must be a material continuum between my eye and the star *alpha centauri*, otherwise I could not see it. There must be a subject of inhesion—a substance—just as there must be a substance in which the accident of gravity, centripetal force, inheres. This is what Newton was getting at.

The evidence is overwhelming that this substance is the same for each of these two accidents – cf. <a href="http://www.superflumina.org/contents">http://www.superflumina.org/contents</a> philosophy.html .

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