John Leslie’s *Infinite Minds* is a refreshingly daring book. Leslie argues that reality consists of infinite minds — an infinity of infinite minds in all likelihood — which may be presided over by something like Leibniz’s God but may consist of many minds each of which has its own claim to divinity. The things we find in the world — atoms, rocks, and stars included — are thoughts in this mind, a mind activated by the principle that what exists is what is ethically required.

*Infinite Minds* is a successor to Leslie’s *Value and Existence*. That book defended axiarchism — the doctrine that values determine what there is. This book continues the story. But there are some dramatic changes. The changes may well be significant advances and if, as I shall suggest, there are still unsolved problems, we may expect a further volume, for Leslie remains amazingly industrious.

God stayed in the background in the original book, and the dust jacket said such a being might “not be a person but a Principle.” In the new book God plays a much larger role. Indeed God expands to include everything, for this is a pantheistic book — though the pantheism is not quite standard. Its outcome is a kind of pantheism in which the world likely consists of an infinity of infinite minds “each worth calling divine” (p. 2). Reality is literally Malebranchean, though Malebranche and his British disciple John Norris do not figure in Leslie’s book. Stones and stars are literally structured by the thought of the divine mind, though as Malebranche believed, this leaves them as “real” and as solid as anyone ever thought they were. Immortality is

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2. Somewhat curiously Malebranche is mentioned only in Voltaire’s example of a “philosophe malebranchiste” who declares “it is God who does everything for me, without my interfering” (p. 139).
now a central issue. The unity of the world is the dominant feature of the world’s nature.

*Value and Existence* offered an answer to Leibniz’s question: Why is there something rather than nothing? The answer it gave is that the universe exists because it ought to. Thus *Value and Existence* is a very Leibnizian book, but Leslie’s answer reverses Leibniz’s priorities: Leibniz thought that the world exists because God wanted it to and chose the best of all possible worlds.³

Leibniz thus implied a thesis to which it was not obvious that he really subscribed: Some people had always thought that God chose to create the world because it was good, and others that the world was good because God chose it. Leibniz seemed to picture God contemplating all the possible worlds and choosing one — implying that he might have chosen a worse one, though in Leibniz’s own view this would hardly been compatible with God’s nature, for God was a rational being and no rational being would ever choose the worse rather than the better. But if God’s nature determined the choice then in some sense God didn’t really choose in the way that you might choose grey socks rather than black ones. And since God thereafter appears only through pre-established harmony and through strongly patterned predictable events like transubstantiation, he becomes, like a dean who has delegated all his work to committees, redundant.⁴

In his earlier book Leslie sorted all this out by urging that though there might be a God, this was because a benign God is one of the things one might find in a world in which things exist because they ought to. Behind this doctrine lay something much like the theory this reviewer put forward a little later: If one asks “why is there something rather than nothing?”, the answer must be framed in terms of something that does not itself need explanation.⁵ Children ask “who created God?”. They don’t ask “who created goodness?”, for they know instinctively that goodness, as such, cannot come into or go out of existence.

God was never abolished in Leslie’s original book and in this new book comes forward full-bloodedly. The theory now seems to be that intelligible principles embodying goodness imply minds. The moral requirement of the reality of goodness simply has to be instantiated in something capable of thought and action.

But how does the world come about? Must there not be causal problems involving an infinite regress? Leslie understands the problem but he now tends toward the view that God created himself. Logically it seems again that this is possible because God is good and goodness tends to manifest itself in any world. (After all it would not be good if it did not.)

³ The difference is just one of logical priorities. The issue is whether or not God is primary and the world is good because God is good, or whether the goodness of the world necessitates the existence of God.
The theory as it stands now is a cross between Spinoza and McTaggart with strong (unintentional I think) Malebranchiste undertones. Leslie claims that there is an infinite mind with knowledge of everything, and that what it knows is a determinate rational whole. “Everything” includes something like David Lewis’s realm of possibilities, except that Lewis thinks these possibilities might exist independently of a mind. But if an infinite mind exists and knows correctly, then what it knows and what there is cannot, as Spinoza insisted, differ. So if there is a divine mind, it will know all that there is.

Leslie’s argument for such a mind is that it is “ethically required”: If goodness exists, Leslie’s world or something like it must exist. It is true, of course, that “goodness is real but the world is all bad” seems to be a contradiction.

The problem of modes of being intervenes here. Someone might say “goodness exists, but its mode of being is something like that of Sir Karl Popper’s World 3⁶ — it is only efficacious when some conscious agent thinks about it. In that case, conscious agency is prior to goodness. And the way in which goodness exists is more like that of the number 2 than like that of the brown cow in the next field.” Leslie’s position would be much strengthened by an argument that showed that there are independent grounds for thinking that the mind which is necessary exists. And this is not so far to seek, though it would complicate his ontology. Leslie’s assumption all through is that the universe is intelligible, the sort of place in which one can talk sense and exchange reasons. But intelligibility implies intelligence. Brains are intelligible — that is we can create neurophysiological theories about them that carry a good deal of weight. But they are not intelligible in themselves. It is only when some mind is brought to bear on them in a world of experience that they become intelligible. The brain surgeon must rely on what his patients say as well as on what he sees in the patient’s brain. If patients could not be talked to, brains would still be unintelligible grey mush whose functions could hardly be mapped. The neurophysiologist reads the world. It is there to be read, but it consists really of symbols to which he can attach meanings. So perhaps minds are basic in any world which can be understood.

If so, there are still three problems:

Is there one mind or are there many, and if there are many is one of them God?

Is Leslie’s determinism consistent with what he wants to say about the world?

And why, if there are minds that are infinite and goodness is real, is there evil in the world?

Leslie thinks there are many minds for the obvious reason that an infinite mind knowing everything possible will know an infinity of other minds.

Is any of them God? There are various models. I think a possible theory is the one which may have been Spinoza’s: There is one God in whose mind there are the ideas of things in the world and these include other beings who have ideas of

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themselves.\footnote{For a discussion, see Leslie Armour, \textit{Being and Idea}, Hildesheim, Georg Olms, 1992.} In one sense these other minds would be infinite, for they could know an infinity of things — for instance they could understand Cantorian arithmetic and Dedekind’s cut. But though God’s idea of them would be of them as perfect, their ideas of themselves might fall very short of perfection, as ours in fact do. Leslie mentions this but doesn’t explore it (p. 100). Another possibility is that they are all equal as McTaggart thought. A third is that what is properly called God is the principle according to which infinite minds are constructed. Leslie leaves us to choose as if the choice made no difference, for he avoids talking about models that would be disastrous. Yet, so far as I can determine, on his theory it could be that one mind controls all the others, as the Calvinists thought, and that this mind has decided from all eternity who is to be damned and who is to be saved. For one mind could be the original and all the others could be images of it which would be changed if the original so decided — in the way that a mirror image can be changed by changing the composition or angle of the light used to reflect it.

On the question of which of these models of the universe one should prefer, I think Leslie is impressed by the fact that on all these models the sum total of value in the universe is infinite (and therefore the same) and fixed. Leslie does not worry about the meanings we assign to the word “God”. He speaks of “verbal habits” and says they don’t matter.

There are, however important distinctions between the models of the universe, and they have to do with what we might do in such universes. Leslie is a determinist because he thinks the world is a rational system and because he doesn’t think being indeterminate would help us to be free to do worthwhile things. He says, in fact, “the more indeterminism there is, the less control one has over one’s mental workings” (p. 141).

I think, though, that much depends on what one means by “indeterminism”. I will try to distinguish between “systematic determinism and indeterminism”, and what I shall call “organic determinism and indeterminism.” The first does have disastrous consequences. For we would then just be puppets on the strings of God.

The system Leslie proposes is dominated by a notion of systematic unity. The unifying factor is the relation between an infinite mind and the things that it knows. Leslie’s world is a unity expressed through a system whose parts do not have independent existence. In his world (or worlds) the reality of things depends on the knowing activities of the divine mind or minds. What such minds know is. To be is to be known in the same sense that in Bishop Berkeley’s world “to be is to be perceived or to perceive”. Perception suggests seeing, hearing, feeling and so forth whereas knowledge can include things like real triangles and the ten billionth prime number. Knowledge can also include things that cannot be sensed for factual reasons: Electrons cannot be seen because of a factual relation between their size and the wave properties of light. Photons cannot be seen because of their relation to the senses.\footnote{Photons enable us to see. If we could see them we couldn’t see anything else.}
Determinism seems natural to such a unified world, but it is not necessary. That is, the world may contain complex predicates such as a-or-b so that what God knows is not that “a is true” or “b is true” but that the truth is the pair (a, b) and the logical relation “or”. On some views of quantum theory this is exactly the most that God could know. But, as Leslie says, the uncertainties of quantum theory in themselves would not increase our freedom. They would merely make our actions uncertain with respect to their outcomes.

But one can imagine an organic determinism. An organic unity is one in which the parts function together to make a whole, but in which there is a set of sub-parts such that each has ends of its own and acts on these ends even though the ends, taken together, form a unified and intelligible system. If God knows that there are beings with ideas of themselves which are not his ideas of them, then their ability to have such ideas of themselves gives them a sphere of action determined only by their own natures. In the world in which we live there are willing creatures. Spinoza did not like the idea of “will”, but in this sense it only means there are creatures such that what they decide to do happens unless something prevents it. If I decide to raise my arm, my arm goes up unless there is something wrong with my physiology. If I go to the doctor and say “my arm won’t go up”, he will find a cause — some kind of interference — and possibly fix it. If I say: “It’s very frightening. When I will to raise my arm, my arm goes up. Please explain why.” He may or may not prescribe thorazine, but he will anyhow think I am mad.

The world contains entities that have their own natures, and they are free so long as they act in accord with them. In human beings these natures develop into characters and one who behaves “in character” is said to be free. A clergyman, say, who decides to embrace Cudworth’s doctrine of divine love and preaches it from the pulpit is said to have acted freely. But if he suddenly takes off all his clothes and dances a jig in church, he will be supposed to be under the influence of a disease, a drug, or some intervening force — even a devil perhaps. Malebranche’s scheme seems very like Leslie’s except that Malebranche supposed that God’s ideas constituted the world in a way that gave the world a certain independence. And St. Thomas speaks of God’s “governance” of the world in his Fifth Way and suggests that things work together under laws because their natures work this way.

Malebranche and St. Thomas both imagined an organic universe in which the parts work together but are governed by laws within which their own natures have scope. So Malebranche says we are free if we do what we want to even though we may not have “liberty of indifference”, the power to have done something else. We are determined by God, but God gave us natures and characters. God also has a nature, and acts on it. He could not have been God and a being who does evil, but the divine freedom is absolute in the sense of being determined only by its nature. Malebranche is often imagined to be a determinist, but if the ideas he uses are spelled out clearly and the distinction is made between systematic and organic determinism, I think he is an organic determinist. This idea needs more explanation.
On the organic determinist view one could be said to have acted freely if it was “in one’s character” to act freely. A member of Parliament who for many years has questioned the dogmas of his party as well as the others and obeys the party whips only when he thinks they are right would be said to act freely and to have the kind of character that makes sense of such actions. That is not to say that he acts whimsically. How is this possible?

In our world this is possible because we confront a lot of complex predicates. A parliamentary vote will be aye or nay. It has the character of being “aye-or-nay”, not the characteristic of being one or the other, until the votes are counted. Voting is something people do, not something atoms do. Nature according to quantum theory also contains any number of such complex predicates. There is no reason to suppose that the firing mechanisms of neurons are, as Sir John Eccles held, of such a kind as to exhibit such predicates.9

If the predicates involved in a certain action are complex at all levels from the sub-atomic to that of sizable organisms like members of parliament, there is every reason to suppose that there is freedom; and there is not the slightest reason to suggest that this makes the outcome chancy unless it happens that the agent is one whose character is, as we might say, “flaky”.10 On the contrary, in the case of our member of parliament it makes the outcome quite certainly determined by the member’s own choice. Such members have actually existed. Veteran parliament-watchers will remember Konni Zilliacus in the British House of Commons in the 1950s.

If freedom is provided for by a God, it makes a great deal of difference to all of us. We might then have the God St. Thomas said meant to save us by our own free will. Otherwise, we might have the Calvinist God who has decided our fate. If an infinite mind can determine that things in the world should have their own natures then, if we are infinite minds ourselves — even though we have not yet grasped our full infinity — we may one day acquire power over some of our actions and then over our natures and characters. In such a world we may be able to inculcate virtues in ourselves as many philosophers from Aristotle onwards have thought.

So the decision about the right notions of God, cause, and determinism may be more important than Leslie apparently thinks.

In Leslie’s own system, the question of evil is clearly troubling. Like most theistic theorists, he must face the fact that there does seem to be evil in the world and there shouldn’t be if such minds are the result of ethical requiredness and have infinite resources at their disposal. Leslie takes refuge in the fact that the world may

10. The question of which things are “real” is an interesting one which bears on this question. Recently, Trenton Merricks in Objects and Persons, Oxford, Clarendon, 2001, has argued that baseballs are not real on the ground that everything a baseball does is in fact done by the atoms that compose it. Organisms — in a long line from oak trees to human beings — are different. Their behaviour is not the sum of the behaviour of their atoms and molecules. Atoms can’t sing hymns and preach sermons. The Bishop of London can. Apes can swing from tree to tree but atoms can’t.
be as good as it could be, but if so one of the premises would seem to be wrong. Goodness cannot require evil in a purely intellectual world (like Leslie’s) in which what exists is all and only what is known by an infinite mind. Such a mind could populate its world with all and only good objects of thought. Though such a world might be dull, is that itself an evil? It is not at any rate the worst evil in our world.

There is a possible explanation for evil if systematic determinism is not true and if, as surely seems to be the case, intellect is not everything. It might be that the highest order value is something that requires apparent evil. For instance, it has been argued in the Christian tradition that God is love. But love requires more than one person and some distinction between persons. (Mere self-admiration is surely not enough for a God who has bothered to create a world.) Christians have argued about the Trinity from early times, but the doctrine contains the germ of an answer. If the persons of the Trinity really have some measure of distinctness in order that they might exhibit love beyond self-admiration, then even they face the possibility of separation. They are specimens perhaps of Leslie’s infinite minds so closely unified as to be “of one substance” and certainly do not count as three Gods, yet we are admonished not to “confuse the persons” just as we are told not to “divide the substance”.

The last words of Jesus are said to have been “My God, why hast thou forsaken me?” But evil in that case was overcome.

Suppose that love is the ultimate nature of the real, yet it is hidden from us by our separations from each other. But suppose that we can get together if we choose the right actions. When we do experience confirmatory instances of the real, we grasp what lies behind the illusion of separateness.

The very nature of the case, though, demands freedom, for such a love must come freely from the character of the persons involved. Leslie may well reject this solution; no doubt he will come up with others.

11. It is sometimes imagined that any distinction between the persons of the Trinity would make for tritheism. But orthodoxy assigns them different functions. The notion that two people might act as one is not so strange. In many legal systems man and wife were taken for some purposes to be one. If this is now thought outrageous it is either for doctrinaire political reasons or, more reasonably, because it is thought that the relation between them can never be close enough. But the persons of the Trinity are supposed be so close as to be of one substance.