

God's Foreknowledge and Prophecy: a Case Study in Logical Indeterminism and Compatibilism—Part 1

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Setting the Scene

The tension between creaturely freedom and the omniscience of God is one which has taxed the minds of theologians throughout the centuries. Numerous attempts have been made to reconcile the concepts in a manner which retains a risk-free view of God's providence and allows for the free choice of human beings, yet to many it seems impossible to hold to such a view of God's sovereignty and at the same time maintain true human freedom. For such scholars the only way in which they have been able to deal with the problem has been to deny one or other of the opposing poles in the discussion. Thus, either the sovereignty of God is compromised leading to a risk-view of God as championed by Process theologians and those who opt for an 'open' view of God such as John Sanders¹ and Clark Pinnock;² or the freedom of humans is compromised leading to fatalism as propounded by groups such as the hyper-Calvinists, where man has no part to play in decision-making and freedom is simply an illusion.

Our aim in this paper is two-fold. First, to show the relevance of Donald MacKay's much neglected hypothesis of Logical Indeterminism, a compatibilist attempt to use science to understand the concept of free-will and Determinism. Secondly (in Part 2), we intend to illustrate the value of this approach as we look at how a more traditional reading of prophecy in Scripture might still be defended by the use of Logical Indeterminism. We are not attempting to outline and evaluate the many proposals for solving such tensions, but simply seeking to test the cogency of MacKay's hypothesis and to show its explanatory power within this theological debate.

As the intention of this investigation is primarily philosophical, the Scriptures will be taken at face value, although it has been common for many biblical

critics to argue that a great amount of prophecy has been written *ex eventu* and so cannot be a true indication of God's sovereignty. But, however we are to understand the biblical prophecy from the perspective of a biblical critic, the Old Testament in many cases appears to presuppose that God knows the future, and the precise correlation of prediction and fulfilment is not relevant here.

In Scripture, God is seen to be actively involved in the decisions of men, knowing what they will do, and indeed determining this, yet we also see man being held responsible for his actions even when accurately predicted by the sovereign God. In contrast we also see instances where God is seen to 'repent' from what he says will happen, precisely because of man's actions. An attempt will be made to ascertain the significance of the formulation of prophecy in these forms and its very nature for our understanding of the relationship of man's freedom and God's omniscience. We hope to show that this is one example of a fruitful interaction between science, philosophy and biblical theology.

'The Demands of Revelation'

Karl Barth,³ Vernon White⁴ and many other writers recognise that to talk of God at all assumes that he has revealed himself in some manner and, 'it is in his action towards us that we assert that he is not just an imaginative extrapolation from other experience'.⁵ Thus, to talk about God and his nature we must first understand something of how he has revealed himself to us; for without an understanding of his revelation we cannot begin.

White proposes that one must first determine the location of God's revelation. For this he suggests the Old and New Testament Scriptures; for 'we should certainly start there, and few Christians would deny that, even if the limits have to be re-drawn later'.⁶ It is here that we shall also begin.

Once the location has been ascertained White suggests that our proposal should fulfil a number of criteria. First, it must be comprehensive, taking into account any major theme of Scripture that may have any relevance to the issue at hand. Secondly, it must then be consistent; consistent with Scripture, reckoning with each theme and dealing with them satisfactorily, and internally consistent with one's proposals. Thirdly, the proposal must be coherent, making sense of the data; and finally it must have some explanatory power for our understanding of Scripture and the issue at hand for, if it does not, there is

little point in its formulation.

Competing approaches to human freedom and responsibility

In order to discuss the tensions between divine sovereignty and human freedom we should first take a brief look at how the concepts are understood and reconciled within theological, and perhaps philosophical circles. There are three general schools of thought; ideas may vary within them but each group has some general presuppositions.

First, Determinism. This suggests that humans do not have freedom because all actions are determined, therefore actions are not caused by 'free human choice' but by a number of preceding causes (possibly infinite). Here there tends to be three approaches: physical determinism, theological determinism as, for example, propounded by Jonathan Edwards, and psychological determinism as championed by B. F. Skinner. These approaches are by no means exclusive and often a mingling of these ideas can be seen. The first tends to look at everything naturalistically and sees nature as a whole determining itself by preceding causes; the second argues that ultimately everything is determined by God, and the final focuses on the way in which psychology and the physiology of the brain determines one's actions.

Secondly, there is Indeterminism as championed by J. R. Lucas⁷ and R. Swinburne⁸ who argue that freedom is incompatible with Determinism. It is not only incompatible with freedom but it leaves no room for dignity and indeed, under such circumstances, one cannot advocate punishment for crime or hold anyone responsible for their actions. Again, the ways in which scholars advocate Indeterminism are as diverse, if not more so, than the determinists, but a general trend flows throughout which is perhaps summarised sufficiently by Paul Helm: 'We are free in doing an action only if, every circumstance other than our decision remaining the same we could have done otherwise.'⁹ The problem with Determinism, according to indeterminists, is that it means that man lacks self-determination, for everything is determined by some other cause. Some scholars such as Roderick Chisolm¹⁰ suggest that there are, in fact, two kinds of causation—causation by events (transeunt¹¹ causation), the type determinists talk of, and causation by agents (immanent causation) and it is immanent causation that allows for free-will, an absolute necessity if we are to be 'true' human beings.

The third approach is Compatibilism where scholars hold free-will and Determinism together in creative tension. This view is often held by those who want to uphold the biblical concepts (as they are traditionally understood) of the sovereignty of God and the freedom and responsibility of human beings. Those who advocate compatibilism want to hold two statements together, namely, that—

(1) God is absolutely sovereign, but his sovereignty never functions in Scripture to reduce human responsibility.

(2) Human beings are responsible creatures—that is, they choose, they believe, they disobey, they respond, and there is moral significance in their choices; but human responsibility never functions in Scripture to diminish God's sovereignty or to make God absolutely contingent.¹²

This requires one to hold that these two statements are not mutually exclusive and therefore not contradictory. It may require a different understanding of human freedom to that of the indeterminists, an understanding that does not entail freedom from absolutely any constraint. It may also involve a different understanding of Determinism, an understanding that does not necessarily hold that God ordains everything symmetrically. So in the case of good and evil he can be credited as the cause of good, but evil can be credited to secondary agents, still under his sovereign rule. Compatibilists like Don Carson want to hold that God is both transcendent and personal and so these two statements cannot be mutually exclusive.

Many argue that what is lacking in Determinism is any concept of responsibility which would appear to undermine the biblical concepts of human responsibility, human judgement and ultimately divine retribution and judgement, all of which are major themes throughout Scripture. Indeterminism is also found wanting by Compatibilists. Views such as Polkinghorne's¹³ and those who propose a 'freedom' of the gaps due to Heisenberg's uncertainty principle, suggest very little connection of the will and actions producing a system that seems more like chance than deliberative decision in order to act. Indeterminism also proves to be inconsistent with scriptural data. Indeterminists propound a 'risk' view of God and this inevitably leads to a number of compromises concerning the character of God; first, he cannot be omniscient in the traditional sense. Swinburne in the *Coherence of Theism*

argues for this stance and concludes that God has limited himself so that he can only know what is physically necessitated in order to preserve freedom, so he is unable to know what depends on the non-physical. Swinburne illustrates this using the fact that God is seen to 'change' his mind in the Old Testament and argues that there would be no need for God to make conditional promises if he knew what men would do.

The second concession that is made concerns God's will; those who advocate the risky view of God argue that God can unconditionally and conditionally decree and his decrees can be broken if they fall foul of the free-will of man. Therefore, God's decrees can be thwarted by the acts of man, reducing his decrees to mere wishes that are not binding upon man.

The final major compromise made concerns God's goodness, the problem of evil, and the effectiveness of God's wishes to do good. Paul Helm¹⁴ argues that the plain and figurative language in the Bible points to God's grace being effective and one cannot hold effectiveness and indeterminism together. There are instances such as Acts 7:51 where God's grace is resisted, but the instances of the effectiveness of his will far outweigh the cases of it not being so. Indeterminists argue that there is too much of a cost involved in his will being effective but, as Helm points out, this is ironic as John 8:36 teaches that whoever the Son makes free is free indeed.

Whether these objections are sufficient for rejecting Determinism or Indeterminism does not really concern us here. There is no doubt that both make compromises with regards to scriptural data and the aim here is to see whether another proposal can help in illuminating the issues of Providence and free-will. This proposal was made by D. M. MacKay as early as 1960¹⁵ and has been subsequently developed. Before we look at the nature of prophecy, however, we need to look at MacKay's proposals, evaluate them and decide whether they do indeed allow for human freedom and Divine sovereignty.

MacKay on Logical Indeterminism—his criterion

As MacKay thinks through his propositions he acknowledges that we must do justice to a number of things—first, our conscious experience; secondly, scientific data; and finally scriptural data—and so he attempts to reconcile these three and provide an acceptable model which aids our understanding of

freedom of action.

MacKay begins with a working assumption of mechanistic brain science; that ‘all a human agent (A) believes or knows is represented, explicitly or implicitly, in the physical configuration of his brain’. This means that no change can take place in A’s belief without a correlated change within his cognitive mechanism (CM).

MacKay depicts this by looking at two simultaneous stories, the I story and the Observer story (Brain Story). These can be told as follows:

I story	Brain Story
I see.....	Subsystem N1 is doing.....
I hear.....	Subsystem N2 is doing.....
I remember.....	Subsystem N3 is doing.....
I believe.....	Subsystem N4 is doing.....

MacKay suggests that these two stories should not be understood as two trains of parallel events but ‘inner and outer aspects of one complex train of events that constitute my logical agency’.¹⁶ These two stories are seen to bear witness to complementary and essential facts that the other may ignore, for MacKay sees in our human nature an irreducible duality—but a duality of aspects rather than substances. It is important to note that these two ‘stories’ are complementary descriptions of what is taking place, one does not rule out the other.

He acknowledges the fact that it is not currently possible to measure every aspect of the cognitive mechanism, and may never be, but he seeks to develop his ideas as a thought experiment and so suggests that we think of a Super scientist (S). S has been fully informed so that he is able to give a complete description (D) of A’s cognitive mechanism (CM) at time *t* so—

$$D=CM (t)$$

MacKay suggests that A is free if there is no prediction of our future actions involving decisions which is logically binding upon him. By this he means that there is no prediction concerning A's cognitive mechanism that can lay claim to A's unconditional assent, that is a prediction that A would be correct to believe and, in error, to disbelieve.

MacKay proposes that in order to ascertain whether A is free in his action we should take the prediction to a logical court in order to determine upon whom this information would be logically binding. The logical court, MacKay suggests, would conclude that S (or any non-participant onlooker) would be correct to believe and in error to disbelieve what D specifies. The next question that needs to be asked of the logical court is 'how binding is specification D upon A (the agent)?' One would assume that if it is binding upon S it should also be binding upon A, but the logical court returns a different verdict, if t is the present or the near future then A would be in error to believe it for no change in his belief could take place without a correlate in his CM. Therefore D has no unconditional claim to A's assent, that is, he would not be correct to believe it and in error to disbelieve it. D is a description of A not believing it, so if he were to believe it, it would immediately become obsolete. This situation is logically relativistic, and is a situation that only occurs with cognitive mechanisms, statements concerning situations outside of the cognitive mechanism are logically binding, but here, what is true for S is not true for A. MacKay points out that if D were embodied in A's CM then it would not correctly specify every detail of CM at t, and so it would become immediately out of date.

A possible solution to MacKay's logical problem may become clear to us as we think of S. Why does he not simply produce $D1=CM1(t)$ accounting for the change in A's CM as he is told the prediction (i.e., D would include A believing the prediction)? MacKay allows for this proposal and suggests that we also take this to the logical court and see its verdict. The court would conclude that A would indeed be correct to believe it; however he would also not be in error to disbelieve it, for it is designed only to be correct if A believes it. This suggestion means that S simply produces D1 whose correctness is up to A who can believe it but would not be in error to disbelieve it; again D1 in this case is not logically binding upon A, it does not have unconditional claim to A's assent. Even if S were to work out whether A was going to believe it the logical

point remains: an A who did not believe it would not be in error; nothing is inevitable for A. This type of prediction, however, also has important consequences for the detached observer, for it cannot lay claim to his unconditional assent either, for it all depends on A and whether he believes it or not, for there is a possibility that the observer would be incorrect to believe the prediction; conditional predictions can lay claim to no-one's unconditional assent. Therefore, MacKay concludes that the only type of prediction that is of any value is an unaltered prediction because then, at least, it can lay claim to the unconditional assent of the observers instead of no-one at all.

An objection can now be made as we ask, 'What room is there for me to have a say in the matter?' For, if the mesh can be made complete we can say 'purely physical factors completely determined the physical activity that expressed my decision'.¹⁷ MacKay argues that this is only a problem if we hold the false supposition that 'claims to determination are always mutually exclusive'.¹⁸ Our claims to determination here are framed at disparate logical levels. They 'are not competitive but complementary'¹⁹ when seen from alternative logical standpoints. From the standpoint of S our actions are determined by our brains and he can know exactly what we will do, but from our point of view, there is no specification of our future actions that we would be correct to believe and in error to believe, we still have to 'make up our minds'. This will be discussed in more detail below when we look at Hasker's criticisms.

Certain scholars have taken MacKay to task, some, such as John Thorp,²⁰ providing relatively weak criticisms which can perhaps be best summed up by those of William Hasker.²¹ The advantage of these criticisms is not only that Hasker carefully works through MacKay's argument but that we have the opportunity to look at MacKay's response.

Thorp on MacKay

To begin with we shall look at Thorp's criticisms. He begins by criticising MacKay's suggestion that 'a man can never know the state of his own central nervous system because by so knowing he alters it and therefore does not know it as it is'.²² He argues that there is no difficulty in knowing the state of one's own CNS. Thorp proposes neural state *j* which is the correlate of this mental state and one could not have neural state *j* unless one knew one had it. This, he claims, shows MacKay to be wrong, for Thorp has managed to show that

one can hold in one's cognitive mechanism a belief of a prediction without falsifying it. He then concedes however, if one believes that causes must precede their effects one can only say it is a correlate of believing, not knowing. Once he concedes this he argues that our intuitions would suggest otherwise, and would presume that it is still knowledge. It is a shame that he has to appeal to intuitions, for intuitions, especially about our brain states should not be used to refute something that seems logical, and here is clearly mechanistic. Therefore, it seems that it is not 'all that the refutation of MacKay here would require'.²³ MacKay is on more solid ground with his reasoning than Thorp. Not only this, but, as we have seen, it is not a case of A's psychological capacity to believe the prediction but a case of the rational obligation for him to believe it, Thorp misses this point entirely.

Secondly, Thorp suggests a scenario in which a computer capable of making predictions feeds A with adjusted predictions, taking into account A's reaction to the given prediction, thus producing prediction about A's beliefs. Thorp argues that, because it is possible, it is sufficient to show that MacKay is wrong. Thorp argues that in three out of four of his paradigm cases it would be right for him to 'believe a prediction of [his] decision; [he] should not thereby falsify it'.²⁴ He concludes that 'MacKay is thus wrong, after all, to hold that 'no complete prediction of the future state of the organising system is deducible upon which both agent and observer could correctly agree'. In some cases, at least, such a prediction is possible'.²⁵ Thorp is correct in what he claims for the prediction, but he is wrong in what he quotes as MacKay's view. MacKay would agree that agent and observer could correctly agree. But Thorp talks in the language of 'could' and 'should' and this is not the language that MacKay uses. MacKay uses the language of 'must'. His question is 'does the prediction have a claim to A's unconditional assent?'; 'would A be correct to believe it and wrong to disbelieve it?' Thorp simply suggests that A would not be wrong to believe the prediction. However, he would not be wrong to disbelieve it, that is, it would also be right for A to disbelieve a prediction of his action because it would become false. It seems that Thorp has fundamentally misunderstood MacKay and so his criticisms are of an idea that is certainly not propounded by MacKay.

Having decided that MacKay's criterion is wrong, Thorp continues to look at what MacKay's theory would mean if it were correct. Since Thorp's criticisms

fail, he ironically describes what MacKay's criterion actually does mean for us; 'the two contradictory propositions are both qualifiedly true: (a) X's decision to do y was a free decision, and (b) X's decision to do y was causally determined. As far as X is concerned, (a) is true, and as far as everybody else is concerned (b) is true'.²⁶

Hasker on MacKay

We now turn to Hasker's fuller and more detailed criticisms. Hasker begins by outlining what he thinks MacKay is trying to say. He suggests that a mechanistic explanation of human behaviour could be seen to eliminate both free will and moral responsibility; but he notes that MacKay thinks that the mechanism retains the 'logical indeterminacy which is required for moral responsibility'.²⁷ To explain his concerns Hasker adopts the story of Osmo.²⁸ This story describes a young man who discovers an ancient book which describes his life so far most accurately and purports to describe his life up until his untimely death in an aeroplane crash. These things take place as described despite Osmo's attempts to prevent them. This, Hasker argues, would constitute a loss of freedom even in MacKay's eyes. As a result of this story, Hasker concludes that—

[f]or me to be free requires not only that I am not aware of any prediction of my future action which I am rationally bound to accept as inevitable, but that there is no such prediction, whether known to anyone or not—that there cannot be any such prediction.²⁹

This first statement, rather than being a criticism of MacKay, sums up MacKay's viewpoint; these requirements are exactly the same as MacKay's and he argues that no such prediction can exist, only a prediction which the predictor and other detached observers would be rationally bound to accept. This is not to say that there are not predictions or statements that demand unconditional assent from all, observations of nature require it, but observations of the cognitive mechanism logically cannot demand this. If we look at our own cognitive mechanism, there is one part we could not observe, the part which is processing the information about what we are observing. MacKay shows this with his example of a cerebroscope³⁰ which could, in theory, allow us to observe our own brains—all but the area that is processing the information, like a video camera directed at a monitor which is displaying

what it is filming; at a certain point the camera is no longer able to produce a picture, for it is filming it's own output.

Hasker's main criticism however, concerns MacKay's claim that 'a prediction of my behaviour may be falsified by my believing it'.³¹ Hasker has problems with this because MacKay argues that the prediction is based on all the outside influences, which Hasker argues must include the predictor (if he intends to tell A his prediction) telling A; so the prediction will, in fact, have this built into it. Hasker is not convinced that simply because the predictor has predicted that the subject will believe him, its truth depends on him believing it, leaving it up to the subject whether the prediction is true or not. He argues that although it may be logically possible for him to disbelieve it, it is not actually impossible for him to disbelieve it and so it is not in one's power to falsify the prediction because it will take place. Hasker also suggests a scenario when it is impossible for one not to falsify the prediction where it becomes impossible for the predictor to show you the true prediction, but this just as much diminishes our free-will as the other scenario.³²

So, how can MacKay's theory stand up to this? MacKay suggests that Hasker has become confused by the story of Osmo and is 'treating the question of rational obligation in principle as if it were a matter of psychological capacity in practice'.³³ If A is to be rationally obliged to accept the prediction then a two-fold condition is necessary, that A would be correct to believe and in error to disbelieve it if only he knew the prediction. As we have seen, this cannot be the case for an unadjusted prediction, for it becomes false if he believes it. Hasker, therefore demands an adjusted prediction. If one looks at the adjusted prediction then one must conclude that the logical court can agree that A would be correct if he were to believe it but not in error if he were to disbelieve it because while he does not, it remains incorrect. If it remains unrevealed it becomes a prediction that no-one can correctly believe for it is not accessible for A to believe and therefore others cannot believe it because A does not. The only prediction that can lay claim to the unconditional assent for anyone is an unadjusted prediction that can claim assent from the detached observers. The question that is posed when one is confronted with a prediction is not 'Can I (psychologically) reject this?'³⁴ but 'Have I a rational obligation not to reject this?' The logical court needs to ask 'whether [S]'s interference with A had so affected A's brain mechanism that the prediction would be equally well founded

(in mechanistic theory) even if A disbelieved it'.³⁵ The outcome is still up to A, 'not in the sense that detached onlookers could not predict his assent to it, but in the sense we have explicated, that their evidence leaves either outcome rationally open to him until he determines one by making up his mind'.³⁶ The outcome is still up to A unless the sufficient causes of the predicted outcome are now independent of the state of A's cognitive mechanism. A would be rational if he believed whatever prediction described what he decided to—'there is no one outcome that A would be correct to regard as the only one rationally open to him as a personal agent beforehand, even though he accepts that deterministic laws apply (*ex hypothesi*) to his brain.'³⁷

MacKay wants to ensure that we do not carelessly mix concepts from the two levels of '(1) rational obligation, determined by reasons, and (2) physical brain activity, determined by causes.'³⁸ He highlights the flaw in Hasker's argument by asking, 'Of what are you saying that A is ignorant? If you mean that he does not know what P knows, that is granted at the outset; but what we have seen is that what P knows of A's future would not be knowledge for A if he had it.'³⁹

Hasker replies to MacKay, re-asserting his conviction that 'a thorough-going mechanism with regard to brain function is incompatible with the belief that we are free and responsible agents'.⁴⁰ He then proceeds to work through MacKay's thesis with every situation he can conceive. First, he looks at the case where A is not confronted with a prediction and concludes, rightly, that it cannot fulfil MacKay's criterion for a lack of freedom. He then looks at situations when A is confronted with either an adjusted or an unadjusted prediction again concluding that, according to MacKay's criterion, A remains free.

He sums up by saying that '[a]ccording to MacKay's criterion, I am free and responsible in my actions unless it is possible for there to be a prediction of my actions which I am rationally obligated to accept—which he takes to mean that the prediction must be sound whether or not I believe it'.⁴¹ He concludes that this is tautologous. Since the statement that 'I am a free and responsible agent' flows from this (a statement that he claims is not a tautology) MacKay's criterion must be wrong for only a tautology (which the above is not) can flow from a tautology. But is it true that, given the mechanistic assumption, the statement that 'no prediction that I know can be sound whether or not I believe it' is tautologous?

Because Hasker simply states that MacKay's criterion is a tautology, we do not have an explanation of why we are to understand it as a tautology. Neither is it immediately obvious that it is a tautology. As E. J. Lowe⁴² states, there are two particular ways in which the term 'tautology' (a somewhat ambiguous term) is used. The first is to describe a logical truth in the strict sense, something which MacKay's criterion is not. The second is to describe something that is analytically true, but again it does not seem that MacKay's criterion is this either. Without possessing the reasons that Hasker had to come to the conclusion that MacKay's criterion is a tautology, it is difficult to assess whether he is correct in his assertion. We can say, however, that it is not clear that MacKay's criterion is a tautology. There is, however, another option open to us here, the statement may not be tautologous, but in fact a necessary truth. For it is possible for a statement to be a necessary truth without being a tautology, this would mean that the statement—'I am a free and responsible agent'—is also a necessary truth. If MacKay's criterion is a necessary truth then Hasker's criticism fails and MacKay's criterion is still valid.

Ultimately it seems that the problem is not in MacKay's hypothesis. Hasker has to reject it despite the fact that it works within itself and fulfils all the necessary criteria; it is the criteria that is a problem, or to be more precise, the concept of freedom. For Hasker, freedom requires that 'some human actions are chosen and performed by the agent without there being any sufficient condition or cause of the action prior to the action itself',⁴³ but for MacKay, freedom simply requires that there is not prediction that one is rationally obligated to accept. So who is correct in their understanding of freedom? MacKay's hypothesis stands or falls depending upon whether one's concept of freedom is in line with his. It is quite clear that Hasker, although he does not eliminate causes or conditions influencing our actions, cannot accept that at all times there is a sufficient cause.

MacKay on God in dialogue

Although we believe that we have successfully answered many of these issues concerning human freedom and determinism, some issues still remain unresolved. It would seem that MacKay goes too far in applying logical indeterminism when he turns to God-in-dialogue. What MacKay proposes when he talks of God in dialogue with man is the next logical step for us and seems to be logically true. It is not, however, quite so clear whether it can be

theologically true and so it needs to be evaluated in this light. We are not simply attempting to fulfil White's criterion of internal consistency and coherence but we are attempting to remain consistent with Scripture and what that reveals about God.

Developing the well known analogy of God as author proposed by Dorothy L. Sayers,⁴⁴ MacKay argues that in order for God (S) to enter into true dialogue with A he must forgo his knowledge of the determinate future. This is so because 'there does not exist (this is a logical 'there does not') a complete specification of that dialogue and of its outcome which either of them would be unconditionally correct to believe and mistaken to disbelieve'.⁴⁵ Not only is A a determinator but God becomes a determinator too, of a future which is indeterminate, both for us and for Him in dialogue with us. Thus, one must conclude that God 'does not have the kind of predictive—or, if you like, determinative—timeless knowledge of the space time of his creatures that the author has'.⁴⁶ Knowledge for the one in dialogue with us is not knowledge for the creator in eternity. This may well be acceptable when we turn to the incarnation and look at how Jesus interacted with other men, but it seems that one runs into problems if one attributes the same situation to God-in-dialogue in another form. For MacKay wants to talk of God-in-dialogue (with the hyphens) as a person resulting in what he wants to call 'two persons of the same Godhead'. What he is proposing seems to come dangerously close to a polytheistic or tri-theistic view of God, particularly when he comes into dialogue with man, giving up some of his intrinsic qualities such as omnipotence. If this is the case then it seems to be untenable to push his hypothesis to its logical conclusions when contemplating the nature of God.

A possible way in which we may resolve this problem is by employing the idea of the extra-calvinisticum⁴⁷ and applying it to those aspects of God involved in this discussion. This would involve us looking at how Christ is understood to have continued to fill the world as the eternal Logos while also descending to the earth and being found in the form of man and attempting to see whether we could understand the God in dialogue in these terms. This may allow for God to enter into dialogue with man, within the framework that MacKay's hypothesis proposes, whilst remaining in heaven retaining his omnipotence and knowledge of the outcome of the dialogue. However, it is not within the scope of this paper to explore these possibilities.

Conclusions

To summarise: it seems possible in principle for our brain mechanisms to be deterministic enough for a prediction of our future to be produced by a sufficiently informed predictor. But this does not mean that the outcome of our choices is already fixed.

The outcome can be predictable for a detached observer and so *inevitable* from their standpoint. But, it is only inevitable for the subject *if* the predictor could show that the subject would be correct to believe the prediction and in error to disbelieve it. As we have demonstrated, this is not possible because one's beliefs are represented in one's cognitive mechanism and so any change in belief would upset the basis upon which the prediction was made. Therefore, there cannot be a completely determinate prediction that one would be unconditionally correct to believe, and in error to disbelieve. So, from the standpoint of the subject his future has no determinate specification, the outcome of his decision is completely up to him for he has no rational obligation to accept any prediction. If we accept this understanding of freedom, in terms of rational obligation, we are able to reconcile the existence of a description which claims the unconditional assent of detached observers with the freedom of man.

CHRISTOPHER TINKER will be ordained in the summer of 2004 and serve his title at Houghton in the Diocese of Carlisle.

ENDNOTES

1. Clark Pinnock *et al.*, *The Openness of God* (Carlisle: Paternoster, 1994).
2. *Ibid.*
3. Karl Barth, *Church Dogmatics* (E.T., Edinburgh, 1957).
4. Vernon White, *The Fall of a Sparrow: A concept of special divine action*, (Paternoster Press, 1985).
5. *Ibid.*, p. 22.
6. *Ibid.*, p. 23.
7. J. R. Lucas, *The Future* (Oxford: Blackwell, 1989).
8. Richard Swinburne, *The Coherence of Theism* (Oxford: Clarendon Press, 1977).
9. Paul Helm, *The Providence of God*, (IVP, 1993), p. 43.
10. Roderick Chisolm, "Human freedom and the self," in Gary Watson (ed.), *Freewill* (Oxford: Oxford University Press, 1982).

11. Please note that this word is transeunt and not transient. (see, Roderick Chisolm, "Human freedom and the self" in Watson (ed.), *Freewill*).
12. D. A. Carson, *A Call to Spiritual Reformation* (IVP, 1992), p. 148. This topic is discussed further in his doctoral thesis, *Divine Sovereignty and human responsibility: Biblical perspectives in tension*, (Marshall, Morgan and Scott, 1981).
13. To quote Polkinghorne, "The clockwork universe is dead....Physics shows an openness to new possibility at all levels, from the microscopic to the macroscopic. In that sense, Physics describes a world of which we can conceive ourselves as being inhabitants....Speculative as all this is, remember that it appeals to the basic human experience of willed action, an ability which it interprets as arising from the open flexibility of the process of our bodies." In short, Polkinghorne argues that because of certain uncertainties seen in physics we can see space for our freedom, our minds and decisions are not completely physically determined. John Polkinghorne, *Science and Providence* (SPCK, 1989), p. 33-34.
14. Helm, *The Providence of God*, p. 50.
15. D. M. MacKay, "On the logical indeterminacy of a Free Choice," *Mind* 69, (1960).
16. D. M. MacKay in Melvin Tinker (ed.), *The Open Mind* (IVP, 1988), p. 56.
17. *Ibid.*, p. 57.
18. *Ibid.*, p. 57.
19. *Ibid.*, p. 57.
20. J. Thorp, *Freewill: a defence against neurophysiological determinism* (Routledge and Kegan Paul, 1980).
21. William Hasker, "MacKay on being a responsible mechanism: Freedom in a clockwork universe" in *Christian Scholars Review*, Vol. VIII No. 2, (CSR, 1978).
22. Thorp, *Freewill*, p. 78.
23. *Ibid.*, p. 79.
24. *Ibid.*, p. 81.
25. *Ibid.*, p. 81.
26. *Ibid.*, p. 82.
27. William Hasker, "Mackay on being a responsible mechanism," p. 132.
28. Richard Taylor, *Metaphysics*, 2nd ed. (Englewood Cliffs, NJ: Prentice-Hall, 1974), pp. 62-64.
29. William Hasker, "MacKay on being a responsible mechanism," p. 134.
30. D. M. MacKay, *Behind the eye* (Blackwell, 1991), p. 208.
31. Hasker, p. 134.
32. *Ibid.*, p. 137.
33. D. M. MacKay, "Responsible mechanism or responsible agent?" in *Christian*

Scholars Review, Vol. VIII, No. 2, (CSR, 1978): 142.

34. *Ibid.*, p. 145.
35. *Ibid.*, p. 145.
36. *Ibid.*, p. 145.
37. *Ibid.*, p. 145.
38. *Ibid.*, p. 146.
39. *Ibid.*, p. 147.
40. *Ibid.*, p. 149.
41. *Ibid.*, p. 151.
42. E. J. Lowe, Personal Communication, 13th March, 2000.
43. William Hasker, *Metaphysics* (Downers Grove, IL: IVP, 1983), p. 32.
44. Dorothy L. Sayers, *The Mind of the Maker* (Methuen, 1941).
45. MacKay, *Behind the Eye*, p. 235.
46. *Ibid.*, p. 236.
47. This can be summed up from Calvin's Institutes of Religion, it concerns the infinite more which remained even when the Word became flesh, "Another absurdity which they obtrude upon us—viz. that if the Word of God became incarnate, it must have been enclosed in the narrow tenement of an earthly body, is sheer petulance. For although the boundless essence of the Word was united with human nature into one person, we have no idea of any enclosing. The Son of God descended miraculously from heaven, yet without abandoning heaven; was pleased to be conceived miraculously in the virgin's womb, to live on earth, and hang upon the cross, and yet always filled the world as from the beginning." Inst. 2.13.4, (John Calvin, *Institutes of the Christian Religion*, trans. Henry Beveridge, (Grand Rapids, MI: Eerdmans, 1983). Applied to the God in dialogue, we may be able to maintain his essential nature whilst allowing him not to have a specific knowledge of the future while he is in dialogue with man.