

**The Process of the Cosmos:
Philosophical Theology and Cosmology**

by
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THE PROCESS OF THE COSMOS:
Philosophical Theology and Cosmology

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SUMMARY

This thesis argues that with the advance of scientific knowledge, particularly in cosmology, Natural Theology can now provide an answer to the question as to the reason for the existence of man and the world. Aristotle had reasoned from the contingency of the world to the necessity of a God. He had also concluded that the world was unworthy of God's concern, as God could not be concerned with a world which was significantly different from God himself. Aristotle's reasoning from the world up to God, together with his inability to reason down from God to the world, established an antinomy.

The history of subsequent attempts to avoid this antinomy, and to provide an explanation for the existence of the world, is considered. No such attempt is found to be successful. A hidden assumption in Aristotle's reasoning is exposed. Aristotle's conclusion that the world was not worthy of God's concern followed from his unstated assumption that the world was complete, rather than in process. The thesis argues that the world we know represents a stage in a process towards the possible self-creation of an entity which is similar to God, and so worthy of God's concern. Only a process of self-creation could produce an entity which would be self-existent, and so not significantly different from the self-subsistent God. Each stage of such a process of self-creation, before the final stage, would necessarily be less than perfect.

Early in the 20th Century the Emergent Evolutionists had sought to explain the emergence of the biological and mental levels from the material level, without success. Nicolai Hartmann's subsequent ontological investigations made clear the stratified nature of reality. Hartmann's ontology is brought to bear on the problem of Emergence. Hartmann's analysis of ethics and his phenomenology of human nature are also brought to bear on the problem of the nature and role of man in the world.

The thesis argues that the world can be understood as a process involving the possible self-creation of an entity like God. In the series of the emergent ontological strata of reality, the physical, biological, conscious and spiritual strata, each stratum is less rigidly determined, and exercises greater freedom than does the previous stratum. The laws of nature vary from stratum to stratum, becoming less deterministic at each new stratum. The present human moral-cultural, or spiritual stratum, exercises complete freedom in relation to the law of this stratum, the moral law. The moral law commands but can not compel. The possible outcomes of this process of Emergence could be either the self-creation of a stratum which is not significantly different from God, or the self-destruction of humanity. In this context, Christ could be considered to be a proleptic exemplar of the final emergent stage.

DECLARATIONS

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed:  Candidate.

I believe that this thesis is properly presented, conforms to the specifications of thesis presentation in the University and is prima facie worthy of examination.

Signed:  Principal Supervisor

THE PROCESS OF THE COSMOS

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INTRODUCTION

In the first chapter of this thesis I argue that Aristotle was correct in his conclusion that God could not cause a world which was significantly different from himself. I utilise Patrick Madigan's account of the historical development of the question of the motive for creation, set out in his Christian Revelation and the Completion of the Aristotelian Revolution (1988), in order to trace the attempts to avoid Aristotle's conclusion and to provide some motive for the apparent production of an imperfect world by a perfect God. I argue that logically God could not directly create a world which was similar to God. Only a process involving free self-creation at some stage could possibly produce an entity which was also self-existent, and so not significantly different from God. I argue that the imperfect world represents a stage in such a process.

In the second chapter I utilise the findings of modern Physics and Cosmology to present an argument from Natural Theology that the world is involved in such a process of self-creation.

In the third chapter I bring the phenomenological work of Nicolai Hartmann, in particular his New Ways of Ontology (1953) and his Ethics (1932), to bear on the thesis that the world is in process and that man has a significant role to play in that process.

Hartmann shows the stratified nature of reality, with each succeeding stratum exercising greater freedom, and being less rigidly determined than the previous stratum. He also shows that the present moral-cultural or spiritual stratum is completely free in relation to the application of the law of that stratum, the moral law. Hartmann's insights, from a non-theistic perspective, support my thesis that the world process is a process of self-creation.

In the fourth chapter I argue that the present human moral-cultural or spiritual stage of the process of the cosmos is a relatively recent phenomenon. I consider a number of studies of the literature and history of both the ancient Greeks and the Biblical Hebrews. The transition from a pre-moral way of thinking to a new way of thinking is more fully documented in the Greek culture of the Classical period than in any other culture. This change in men's minds has been the subject of many conjectures as to its cause. I argue that the change was the result of a newly emergent moral sense, and I show that this most recent emergent stage is primarily a phenomenon of about the first millennium BC.

In the fifth chapter I argue that the Cosmological evidence of the development of the cosmos to the present time is consistent with the cosmos being involved in a process of self-creation. I also propose a novel resolution of the problem of evil. This resolution is consistent with my overall thesis.

In the sixth chapter I relate my thesis to the problem of Emergent Evolution. I survey various approaches which have been made to the problem of Emergence, particularly the contribution made by Samuel Alexander who proposed the eventual emergence of Deity. The phenomenon of emergence has never been explained. I argue that the problem of Emergence is resolved by this thesis.

In the seventh and final chapter I consider other attempts which have been made to provide an overall explanation of the cosmos, particularly the neo-Darwinian approach. These approaches include Smolin's attempt to find a form of natural selection in the process of the cosmos, as set out in his The Life of the Cosmos (1997). I argue that not one of these other approaches is satisfactory.

Chapter One.

THE PROBLEM OF THE MOTIVE FOR CREATION.

A brief history of the quest for a sufficient reason for the existence of the world has been set out by Patrick Madigan (1988). Madigan argues that contrary to the Enlightenment view that Christianity had diverted and perverted the patrimony of classical Greek philosophy, the insights provided by Christianity had enabled the completion of the Aristotelian project to generate an adequate explanation of the world. (1988,1-2)

Madigan maintains that Aristotle had been unable to complete his project of providing a scientific explanation of the cosmos. Aristotle had concluded that God could only be engaged in the highest activity, that of thinking or contemplation. This activity could only be directed towards God himself, as the highest object. It would be unworthy of God to attend to anything lower than himself. The world, as it existed, was therefore not worthy of God's concern. (1988,3-7)

Madigan's primary thesis is that Aristotle failed in his original project to provide a full explanation of the world. He maintains that Aristotle had realised that he could not succeed in this project because he could not provide a satisfactory theory of the production of the world from an immutable God. In Madigan's opinion, Aristotle had then sought to avoid the appearance of failure by shifting the focus of the question from the nature of the ultimate efficient cause of the world, to the eternity of motion. (1988,42) In the presentation of his argument Madigan traces the debate concerning God's motive for creation, from Parmenides to Aquinas and beyond.

Aristotle had proposed to give a full scientific explanation of the world. In his terms this would have meant the identification of the material, formal, efficient and final causes of the production of the world. He had established that God was necessary as a first mover to explain the existence of the world, and he had also established that God could not cause a world which was significantly different from himself. These two conclusions appeared to be contradictory. Madigan considers that not only had Aristotle failed to explain the world, he had also discovered that such an explanation was impossible. While our world requires a first cause, the attempt to explain the world from this first cause could not succeed. (1988,16-18)

Madigan shows that the Greeks, from Parmenides on, had been able to reason up to a realm of true being, or God, but none of them had been able to connect this realm with the world of appearances. (1988,27)

Plotinus had subsequently argued that the world had been produced necessarily and unconsciously as an automatic

emanation from God's nature. (1988,62) No such attempt to explain creation was ultimately satisfactory.

Madigan then argues that it was only the Christian 'good news' which could provide an escape from the impasse into which classical philosophy had fallen. His argument relies upon the necessity of salvation. Madigan argues that while creation is first in the order of time, it is salvation which is first in the order of explanation. Salvation is what provides God's motive for creation. From God's viewpoint, Madigan claims, creation and salvation are not separable, but should be viewed as two moments of a single divine initiative. He maintains that creation is essential in order to make salvation, as friendship or fulfilment, possible. (1988,76) Madigan understands salvation as the call to a relationship with God, although he admits that just what salvation will turn out to be is, and will remain, a mystery at the philosophical level. However, salvation has to imply some sort of relationship between man and God, involving mutual recognition and friendship. (1988,77)

Madigan sees the attempt to provide an adequate explanation of the world as having moved towards a final stage in its development, when Thomas Aquinas proposed that God could act simply to communicate his perfection, rather than acting as a result of the existence of a need on God's part. Aquinas had argued that 'every agent, insofar as it is perfect and in act, produces its like', and he concluded that it was appropriate for God to communicate his good to others as much as is possible. (1988,102-4)

Aquinas' argument, that every agent produces its like, has never been taken to its logical conclusion that God can only be concerned to produce another entity like God. Madigan almost reaches this conclusion but is hindered by his concept of direct creation, concluding that there is a limit as to how far God's aim can be achieved when using creatures. (1988,104) He does not consider whether there is another way in which God's aim may be achieved.

Madigan's argument.

For our purposes, Madigan's final chapter is the most relevant. He maintains that the integration of the doctrine of God's necessary self-love with the Christian good news of Christ's incarnation and suffering on man's behalf, was the significant intellectual advance made by the Scholastics. Madigan argues that this integration provided the resolution of the problem of the motive for creation, a type of resolution that classical philosophy was not able to reach.

Madigan's account of the argument as to God's motive for creation, particularly as put by Aquinas, is detailed. My question is whether the arguments which Madigan relates and which have been put over time, warrant a different conclusion from the one he reaches. I do not argue with his conclusion that the motive for creation is provided by salvation, understood as involving some sort of relationship between man

and God. The issue is the nature of that relationship and the process by which it may be achieved. In order to examine the arguments which have been put over time, I will set out Madigan's account in some detail.

Madigan begins with Aristotle's observation that God needs nothing, and that if he does produce a world it must be for a sufficient motive. Madigan notes that even the motive of love will require that the love has to be proportional to the worth of the object of love. Aristotle maintained that God and man could not be friends, as God could get nothing from such a relationship. Aristotle also maintained that for God to act for less than a proper motive would be inappropriate. This view re-emerged in the Middle Ages, and inspired a new attempt to provide a complete explanation of the world. Creation was by then understood to involve a consideration of salvation, which in turn was to be 'understood as God's interest in engaging in a relationship with beings other than himself'. (1988,102)

Aquinas' response to Aristotle was not in the nature of an explanation of how God had gone about the process of creation, but was an attempt to identify an appropriate motive for creation. Aquinas argued that God had intended to communicate His perfection, which is his goodness, to His creation, and that this desire to share his goodness with beings other than himself could provide a motive for the creation of the world. (1988,103) Madigan summarises Aquinas' conclusion as follows:

Thus, as far as he can (for like produces like), God will create another 'god', the closest approximation to himself. There is a limit as to how far this can be achieved, when using creatures; but this still seems the best (or least inadequate) description we can give of God's project. God wants to share himself as fully as possible with some one else, to bring about the closest possible imitation of and communion with himself. (1988,104)

Madigan asks whether human beings are worth Christ's condescension, self-sacrifice and self-expenditure on man's behalf, and he recognises that such an event seems out of proportion and unseemly. He notes that Aquinas had already clearly recognised the problem that God's love for lesser beings posed for the generation of an adequate account of the production of the world. The resolution proposed by Aquinas was that God's self-regard would move him to want to share his nature beyond the godhead and with creatures, in particular with a creature able to appreciate God's glory and reflect it back. (1988,105-7)

Aquinas had argued that the Incarnation would not have been necessary had man not fallen. Later thinkers including Duns Scotus and Suarez could not accept this. They argued that in creating man with freedom, God would have known that man would sin. Aristotle's position that God and man could not

be friends had consequently reasserted itself. These later thinkers had concluded that if God was going to create a world at all, it could only be to enable Him to receive acknowledgment and praise from the *greatest and most perfect* being that creation was capable of producing. For God to receive praise from any less perfect being would mean that God was willing to accept that His creation was producing *less* than it was capable of. This also would not be compatible with the divine nature, as God could not be lacking in power to achieve the best possible outcome. (1988,110)

Madigan recognises that the idea that God should sacrifice himself for man seems inappropriate, and even impossible from an Aristotelian perspective, as God's love must be directed to himself as the highest object. Aquinas' response to this difficulty is to assert that if God's self-love is great enough it will move him to want to share his nature with creatures, particularly with a creature able to appreciate his glory and reflect it back. This suggestion of a motive for creation had first been made by Dionysius the Aeropagite. God's motive is assumed to combine both altruism and egoism. His self-love makes him want to call other beings into existence to appreciate, share and reflect back his goodness. (1988,106-7) Madigan comments that in this scenario God's goodness seems to function as something almost distinct from God. Thomas does not intend this but, as Madigan says, 'this way of putting it helps to explain - as well as it can be explained - how God can be self-contained, and also naturally (but freely) productive'. (1988,108)

The later Scholastic thinkers had argued that it was only the prospect of the creation of Jesus Christ which could have moved God to produce a world, the production of Jesus Christ being God's intention and purpose from the beginning, as Jesus Christ is the only creature who justifies the whole enterprise of creation. These thinkers rejected Thomas' idea that God had assumed a human nature because of the needs of fallen man. They continued to adhere to the attribution of the motive for creation as consisting in the reception by God of acknowledgment and praise from the greatest being of which creation was capable. This being is Jesus Christ as the pinnacle of creation or the perfect creature. Only this being could have moved God to produce the world. Madigan quotes Scotus' argument that God foresaw the union between the Word and the human creature, Christ, the creature who would owe God supreme love, even had there never been a Fall of man.

Madigan comments that Scotus implies that if God could have created Christ without creating the rest of mankind, he might have done so. (1988,109-11) He notes that it was the opinion of a number of later thinkers that the world was created in order to produce Jesus Christ. For Madigan himself, Christ is the proleptic anticipation of the life-form which should eventually characterise the world as a whole, although he does not offer any explanation as to how this might

eventuate. (1988,112, note 6) Christ, as the second person of the Trinity, was present at creation. As the perfect creature he was also the *goal* of creation. As the divine *Logos*, he was not only the efficient cause of the universe, but, when united to a human nature, he was also its *final* cause. In this perspective, the Incarnation was not the divine response to what Augustine had called our 'fortunate fall', but it would have happened anyway, even if man had not sinned. (1988,112-3)

Madigan summarises the thinking of the later Scholastics as having God embark on the enterprise of creation and salvation for himself as well as for us, the whole drama of sin and redemption, death and resurrection being the only way God could produce the Christ, as both the proper expression of God himself and the proper response to that expression. (1988,114) Madigan expresses some reservations as to the manner of expression of this Scotist strategy. He suggests that 'process' categories might be found to be more helpful, as such categories could express the situation in a way which would better safeguard both divine and human freedom. This is because process categories are less time-bound, and more true to our experience. (1988,116) Perhaps the Scotist strategy could be expressed as the process of the world being best understood as a necessary stage in the process of the production of the Christ. This is a theme to which I will return, together with Madigan's view that Christ is the proleptic anticipation of the life-form which should eventually characterise the world as a whole. Madigan does not comment upon the inherent contradiction in the concept that the whole drama of sin and redemption, death and resurrection was the only way that God could produce the Christ. The contradiction arises from the concurrent belief that Christ, as the second Person of the Trinity, pre-existed his incarnation as man.

Madigan argues that God's intention from the outset was to produce the greatest possible likeness to himself, thus making possible the most perfect friendship with his creation. He argues that from the fact of creation we must reason to God having the intention of our salvation, in the sense of our forming some form of relationship with God, and that this is a necessary precondition, and the only possible motivation for creation, in the mind of God. He maintains that any other attempt to explain creation simply fails. (1988,115 & 118)

From his examination of the history of the search for a sufficient motive for God's creation of the world, Madigan argues that an adequate explanation of the world only becomes possible by modifying the dividing line between philosophy and revealed theology. He argues that salvation, understood as friendship between God and man, is needed to complete the project of fashioning an adequate explanation of the world. Only when philosophy makes contact with revealed theology in this way, he maintains, can philosophy's deeper programme, the fashioning of a satisfactory explanation of the world, be

realised. Philosophy, in Madigan's view, poses a question which only revealed theology can answer. (1988,117)

Madigan's claim.

Madigan then makes his most important claim. He maintains that there is only one possible explanation of the world, and that explanation is based on God's self-love. Noting that love must be proportional to the worth of its object, he argues that the world begins and ends with God's love for himself - we are merely enfolded within that love. God loves himself as the highest object. This self-love is expressed in the procession of persons within the Trinity, but does not stop there. It expands and leads God to call into existence a world that did not have to exist, a world 'called into existence to acknowledge a love that also did not have to be as strong as it is'. (1988,119) Madigan argues that because of the strength of God's love for himself, and his goodness, the circuit of divine self-love expands to generate the world. This expansion was not necessary, but it nevertheless happened. The evidence for this, he argues, is the fact of creation, from which fact we must also reason to an intention on God's part of establishing a relationship with us, which we understand as salvation. Madigan argues that the intention of salvation is a necessary precondition and motivation for creation in God's mind, because God wants others to love him as he loves himself. (1988,118) Madigan maintains that the intensity of the divine nature, as both love and goodness, leads God to call this world, which did not have to exist, into existence. In order to fully account for the world it thus becomes necessary to propose that God also wants to enter into a positive relationship with a being which is capable of appreciating God's greatness and reflecting that greatness back to him. Madigan argues that if the most important conclusion of philosophy is that God exists, the central message of Christian revelation is the contingency of the divine goodness, which must be postulated in any satisfactory account of the existence of the world. (1988,119-20)

Assessment of Madigan's arguments.

Madigan does not base this explanation of the existence of the world, which he maintains is the only possible explanation, on God's love for man. He appreciates that God's mysterious love of other beings is the true difficulty in generating an adequate account of the production of the world. (1988,106) This love of other beings is turned by Madigan into a non-necessary by-product of the circuit of divine self-love. This divine self-love is the fundamental factor in Madigan's argument, as he recognises that love must be proportionate to the worth of the object of love. This proportionality is Madigan's primary problem, as there is no such proportionality between God and man. The generation of the world has therefore to be the result of the expansion of the circuit of divine self-love. The world is not created from the motive of love of man. Madigan's explanation of the existence of the world, its generation by the expansion of the circuit of divine self-love, is of a similar order to

Plotinus' device of an emanation of the world from God's goodness. It suffers from the same major disability as does Plotinus' explanation, in that it does not explain the existence of evil in the world. Evil could no more derive from the expansion of God's self-love than it could derive from an emanation of God's goodness. Any satisfactory explanation of the existence of the world would have to incorporate a satisfactory account of the existence of evil in the world. Whether such an account could ever be given has been a matter of doubt. John Courtney Murray asks how the world can be a place of manifold evil and an arena of human misery, if an all-mighty God exists, and he maintains that the problem of evil utterly defeats philosophy. (1964,104) I will challenge this view.

In Madigan's scheme, the world, including mankind, is saved from being a mere epiphenomenon of the circuit of divine self-love by his concurrent insistence on God having the additional motive of establishing a relationship with other beings who could appreciate his goodness and reflect it back. This motivation, which was originally proposed by Dionysius the Aeropagite, is argued by Madigan to be a consequence of the circuit of divine self-love, which contingently expands to produce the world. The evidence for the existence of this supplementary motive is derived simply from the fact of the existence of creation.

Aristotle's initiation of the argument.

Let us review the arguments which have been put over time, including Madigan's argument, to assess their worth. It is clear that Aristotle provided the arguments which initiated the problem when he demonstrated that if God does produce a world it has to be for a sufficient reason, and that God could not cause a world which was significantly different from God. The history of the problem is the history of the attempts to get around these conclusions of Aristotle.

Aristotle also argued that love had to be proportional to the object of love, which ruled out God's love for man. The Christian assertion of God's love for man did not affect the strength of Aristotle's arguments. All that the Christian assertion that God loves man succeeds in doing, in the context of the question of God's sufficient reason for the production of the world, is to indicate that the problem is not as easily dismissed as insoluble, as it had appeared to Aristotle. For Christians, at least, there had to be a resolution or dissolution of the antinomy which Aristotle had discovered. The question is whether this antinomy has yet been resolved or dissolved, or whether it has simply been avoided. If it has not yet been resolved or dissolved then the question is whether it is capable of resolution.

Avoiding Aristotle's argument.

All of the subsequent arguments which seek to provide some justification for God's production of the world, including Madigan's, can be seen as attempts to avoid the force of Aristotle's arguments, rather than to resolve the conflict

between his conclusions. They seek to introduce some additional factor to provide an explanation of the existence of the world, but they do not confront Aristotle's arguments directly. Thus Plotinus has the Good being diffusive and the world existing as an emanation from the Good, and Madigan has an extension of the circuit of divine self-love as expressed in the procession of persons in the Trinity. Dionysius the Aeropagite has man's role reducing from one of friendship to one of appreciating and reflecting God's goodness. Attempts to avoid the dilemma introduced by Aristotle's antinomy continue to re-appear, even in Madigan's argument. This is despite the fact that God's love of man is central to Christianity and is an essential part of the Christian 'good news', which Madigan maintains enables the completion of the Aristotelian revolution. If the antinomy between the nature of the world and the conclusion that God could not cause a world which was significantly different from himself is to be resolved, it has to be confronted directly, rather than avoided.

The problem of direct Creation.

Aquinas' view, following Aristotle, is summarised by Madigan as arguing that God will, as far as possible, create another 'god', the closest approximation to himself. How far this creation can go is limited by the fact (in Aquinas' understanding) that God is directly creating this other 'god'. If man represents the limit of this creation, it could be argued that the project to create another 'god' does not get very far. The later Scholastics sought to avoid the uncomfortable reality of man in general by focussing on Christ as the one man who justifies creation, not just as man, but in his role as the second person of the Trinity. They reasoned that the world was created as the only way to produce Jesus Christ. In commenting on this, Madigan recognises that Christ is the proleptic anticipation of the life-form that should eventually characterise the world as a whole, although how such a transition is to take place is not discussed.

Madigan does not challenge Aristotle's arguments that God could not cause a world significantly different from himself, that God needs nothing, and that if God was to produce the world it would have to be for a sufficient motive. He accepts Aristotle's deduction that love has to be proportional to the worth of the object of love. Aristotle had consequently stated that friendship between man and God was impossible. (Ethics, 1159a)

Aquinas had also dealt with the question of the possibility of friendship between man and God. Aquinas concludes that it is possible for man and God to be friends, despite their being infinitely unlike one another. The basis of Aquinas' conclusion is that there is a communication 'between man and God' which resolves to God communicating his happiness to us. (Aquinas, 1952, 483) Joseph Bobik, (1986) analyses this approach and points out that this communication is merely an offer, which opens the possibility of friendship. He quotes

Aristotle to the effect that a great disparity between two humans will make friendship between them impossible, despite their common nature, unless the superior shares with the inferior the knowledge or other goods which provide the basis of his superiority. (1986,258) He also quotes Aquinas to the effect that God has decided to share his beatitude with man, and this communication, this sharing, provides the link out of which friendship ought to grow. (1986, 258-9) Bobik concludes, with Aquinas, that whenever two persons have nothing in common, but the superior offers a shareable gift to the inferior, it then becomes fitting that the inferior contribute to actualising the friendship. Aquinas regards having something in common as absolutely indispensable to friendship. (1986, 259-60). In seeking to flesh out this communication, or sharing, and relate it to those things which human friends have in common, Bobik argues that Aquinas can only fall back upon humans generally having a common origin in God, with the only other basis Aquinas can identify applying only to members of a common faith. (1986,270) However it is clear that common origin is a circumstance which does not always guarantee friendship between humans, and even when they belong to a common faith that fact does not guarantee friendship between them. These factors can provide a basis for a human friendship to arise, but they can not ensure it.

There is a more significant fallacy in Aquinas' reasoning, which Bobik does not challenge. Aquinas points out that every friendship is founded in something which the friends have in common. That clearly relates to their common possession of whatever it is, at the time they are friends, as is clearly implied in the passage Bobik quotes from Aristotle. It is not reasonable to assume that an offer to share something in the distant future, with conditions, has the same effect as common possession in the present. The dimension of the obvious gap between created man and God is a problem for any current attempt to establish the motive for creation in the postulated possibility of friendship between man, as such, and God, as the gap between man and God is still too great.

Madigan summarises Aquinas' conclusion to the effect that God, as far as he is able, will create another 'god', the closest approximation to himself, as like produces like. This formula is at first sight convincing, but it does not constitute a description of man. When Aquinas refers, in Madigan's later reference, to God's self-regard moving him to want to share his nature with creatures able to appreciate his glory and reflect it back, he is significantly reducing his earlier criterion of the creation of 'another god', the greatest possible likeness to himself. Appreciation and reflection is not likeness, nor is Aquinas' latter formulation convincing.

Aquinas' attribution of the Incarnation to man's fall, is not convincing either, as later thinkers realised. These also considered that the motive for God's creation had to be the

production of a perfect creature, which they argued had been realised in the person of Jesus Christ, 'the creature that uniquely justifies the enterprise of creation'. (Madigan, 1988,111) While I do not deny that Jesus is the perfect man, the argument that the purpose of creation was finally accomplished nearly two thousand years ago raises the question of man's present purpose in a still imperfect world. The invocation of Christ to resolve the difficulty of the glaringly apparent imperfection of mankind, appears to be a device to avoid accounting for that imperfection. God's love is held to apply to all men, not simply to Christ.

Confronting Aristotle's argument

None of the arguments which have been considered really confront Aristotle's argument that God is necessary as a first cause to explain the existence of the world, and that God could not cause a world which was significantly different from himself. Aristotle's argument appears to be supported by Aquinas' conclusion, as summarised by Madigan, that God will, as far as possible, create another 'god', the closest approximation to himself. While neither of these arguments is presented in their authors own words, they can serve as a basis for consideration as to how the essential argument might be confronted directly.

As represented, Aquinas' argument is more specific than Aristotle's, as it speaks of another 'god' both as created, and as being the closest possible approximation of the original. These descriptions are self-contradictory. There can be no 'close approximation' between a creator God, and any entity which is created or made. The difference between creator and created is significant, perhaps the most significant difference which could ever be discovered between any two entities.

Aristotle did not speak of creation. His position that God could not cause a world which was significantly different from himself is a much more supportable claim. The concept of cause is a much wider concept than that of direct creation. An outcome can be caused in many different ways. Is it possible that we have contributed to the failure to resolve the Aristotelian antinomy by our adoption of the Hebrew concept of God as Creator, responsible for the direct creation of man? Has the implied restriction of God's causal activity to direct creation, hindered us from recognising that God could operate in other ways?

For example, could not God initiate a process involving the possible, but by no means certain, self-creation of 'another god'. Any outcome of such a process, as a self-created entity, could possibly constitute an entity which was not significantly different from God.

Aristotle's hidden assumption.

The contradiction between Aristotle's conclusion that God was necessary as a first cause to explain the existence of the world, and his conclusion that God could not cause this

world, which is significantly different from himself, is only apparent. The contradiction relies upon the empirical evidence that the nature of the world, as it presents to us, is not worthy of God's concern. The world is obviously significantly different from the nature of a God who could operate to bring a world into existence. The contradiction also relies on the unstated assumption that the world, as it appears to us, is not merely a stage in a process, but is the finished product. The assumption that the world was a finished product has remained hidden and was never challenged in the context of this apparent contradiction, although it is now common to see the world as evolving or in process. The idea of a completed world was reinforced by the inference, drawn from the Bible, of a completed creation. Clifford notes the effect Mesopotamian myths had upon biblical cosmogonies, and he provides an example which shows how profound was the belief in Mesopotamia that things were fixed permanently on the day of creation. (1988, 151-2) This assumption, that the world is a finished product, is untenable in the light of what is now known of the development of the cosmos from its initiation.

If the world as it appears to us is merely a stage in a process which could possibly lead to the production of an entity which is not significantly different from God, the apparent contradiction between Aristotle's two conclusions disappears.

Is the world in process?

If the world is involved in a process which is capable of moving towards the production of an entity which is not significantly different from God, it is clear that this can not be a process of direct creation. Whatever is created in a process of direct creation has to be significantly different from the self-subsistent first cause which is God. While the possible product of a process which could produce a world which would not be significantly different from God, could obviously not be self-subsistent, any such product would have to be self-created, if it was to be, in essence, not significantly different from God. Both God as a self-subsistent entity, and any self-created entity, would be self-existent, and so essentially similar.

If there is such a process of self-creation, would mankind have a role in that process? Mankind is significantly different from God, but man shares some of the characteristics of God, to a limited extent. Mankind as such cannot be the purpose of the process of the cosmos. Mankind could, however, represent a stage in such a process. God's attributes are generally taken to include being personal, free, creative, all-powerful, all-knowing, self-subsistent, necessary, eternal, immutable and good. Man has some of these attributes, to some extent. He is personal, to some extent free, creative, able to exercise some power and able to acquire knowledge. To a certain extent he is what he makes himself, and so is self-creating to some degree. He is capable of goodness but also, unlike God, capable of evil.

The extent to which he exhibits any of these attributes is dependent upon both his own efforts and on the culture within which he operates, a point which I will consider later. Suffice here to say that he can contribute something to the self-creation of others both directly, in the case of individuals he can influence, and also indirectly to the extent that he contributes to his culture.

If the process of the cosmos is the process of the possible production of an entity which is not significantly different from God, which we could for identification purposes call Deity, we can consider what attributes could be expected of that Deity. We can also consider whether it is reasonable to assume that our world is merely a stage in the process of production of such an entity. In particular we would have to ask how the attributes of man would compare with the attributes of Deity, in order to assess whether mankind may represent a stage in that possible production.

We may accept that God's attributes include those of being personal, free, creative, all-powerful, all-knowing, self-subsistent, necessary, eternal, immutable and good. The criteria of Deity would have to be similar to those attributes, except where they could conflict with the attributes of God. The areas of conflict would appear to be with God's attributes of being all-powerful, self-subsistent, necessary and immutable. In relation to these latter attributes, we could expect Deity to be powerful to some extent, and also to be self-created. There would be no conflict between both God and Deity sharing God's attributes of being personal, free, creative, all-knowing and good. We could therefore expect the criteria of Deity to include being personal, free, creative, powerful, all-knowing, self-created and good. Deity would then not be significantly different from God. These criteria of Deity compare with mankind's present attributes of being personal, being morally free and enjoying other freedoms to some extent, being creative, powerful, knowing and, to an extent, self-creating. Man is capable of good, but also of evil. It is in this last attribute of goodness that man is significantly different from Deity, other differences being differences of degree.

If we accept the attributes set out above as identifying the criteria by which Deity could be known, we can now consider how a process of the production of Deity could operate. A process generally involves a series of stages, with each successive stage building upon the previous stage. A process involving the self-creation of Deity would have to involve the prior self-creation of a less perfect entity, in as free a manner as possible, from a series of progressively less perfect entities. The final less than perfect entity, prior to the emergence of Deity would be expected to exhibit characteristics which were not significantly dissimilar from the characteristics which Deity would possess. They could be similar to mankind's characteristics of moral freedom, personality, knowledge and the possession of a potential for goodness. There would have to be some sort of continuity

established between the prior entities and Deity, so that the goal of self-creation could be achieved. The process of production of the prior, less perfect entities, would also need to be as free as possible. Whether the world is involved in such a process will be considered later.

Madigan's other claim.

Madigan considers that all philosophy is part of a deeper programme, which he identifies as the fashioning of a satisfactory explanation of the world. He maintains that this deeper programme poses a question which only theology, in the sense of revealed theology, can answer. (1988,117) While this may have been the case at an earlier time, I will argue that with the advance of scientific knowledge, natural theology can now provide an answer to the question as to the reason for the existence of the world.

Chapter Two.

NATURAL THEOLOGY AND THE MOTIVE FOR CREATION.

Natural Theology is a type of speculative philosophy. The task of a speculative philosophy is to provide an understanding of some aspect of the world, taking account of known facts. Philosophy can not discover any new facts, it can only show the significance of the facts which others have discovered, and show how those facts fit into an overall picture.

Aristotle distinguished three types of what were then considered to be speculative philosophy. These three types were the mathematical, the natural and the theological. Theology, in the Classical Greek world, was natural theology. Natural Philosophy was concerned with things which exist separately, but which were contingent and changeable. We now call it Science. Mathematics dealt with entities which were changeless but did not have their own separate existence. Natural Theology was concerned with what was self-existent, and changeless. (Met. 1026a) Natural theology, as in this chapter, argues from available facts. It does not rely on any revelation.

In their Natural Theology the classical Greek philosophers were able to argue their way up from the existence of contingent things, to the necessity of a self-subsistent, perfect being or God. They had far greater difficulty in arguing their way back down again. A self-subsistent, perfect being was necessary for the existence of contingent things, but such a being could be under no compulsion and could want for nothing. Why then was there a world of contingent things? The world, as an unnecessary and imperfect entity, contingent upon a perfect God, should not exist. But the world does exist. This antinomy could not be resolved by the Greeks.

Plotinus, the neo-Platonist of the Third Century AD, sought to resolve this antinomy between the necessary existence of a self-subsistent God, who had no motive to create anything, and the obvious existence of the world. Plotinus postulated the necessity of The One, a God which is prior to all existents. Using the metaphor of the light which emanates from the sun, without diminishing the sun, Plotinus postulated that Mind or Nous, which is most like the One, had first emanated from the One. The Soul of the world emanates from Nous, and in a series of emanations, each lower form emanates from the higher. The human soul emanates from the World Soul, and may eventually rejoin the World Soul. The One, Nous and the World Soul are eternal, but lower entities are not. Matter is the final emanation which, because of the downward momentum of emanation, away from rationality, encounters darkness and gives rise to evil.

Evil is thus considered a privation, rather than a positive thing, just as darkness is the absence of light. This

explanation of evil was considered by Augustine, who held that while it could sometimes be accepted, evil was primarily the result of man's exercise of his free will.

What was needed to resolve the antinomy between a perfect God and an imperfect world, was some account which recognised the divine perfection which the Greeks had insisted upon - a perfection which included the lack of any external need - but which also provided a motive, or a sufficient reason, for God to make the world. Christian philosophers maintained that the motive for God to create the world was love of man. But Aristotle had already provided an argument which counted against this proposed solution. Aristotle had analysed friendship, which is an essential aspect of love. He had found that friendship has to be reciprocal and that friendship could be based on either goodness, pleasure or utility. Friendship based on pleasure or utility is transient, and Aristotle argues that the only real and lasting friendship can be between those who are good, and who resemble one another in their goodness. (Ethics 1156b) This resemblance in goodness is the crux of the matter. Because there is no resemblance in goodness between God and man, Aristotle denies the possibility of friendship between God and man. (Ethics 1159b) By necessary implication he also denies the possibility of God's love for man, or for anything less than man, as the motive for the existence of the world. Christian philosophers also argued that the motive for God to create the world was love of man in the person of Christ, but there are difficulties with this argument. Those difficulties will not be dealt with in this chapter as they go beyond the sphere of natural theology. The present question is whether there can be an explanation of the existence of the world in the terms of a Natural Theology.

We have at our disposal many facts which Aristotle did not have. These facts include Big Bang cosmology, the phenomenon of Emergent evolution, and the evidence of biological evolution. There is another very important difference between our position and Aristotle's. Aristotle lived in a world which was regarded as being complete, or as moving in a repetitive cycle. We live in a world in which we have been made aware of extensive and progressive evolution and change, both on planet Earth and in the universe as a whole. The world we live in is linear and progressive rather than cyclical or static.

While we know much more than Aristotle did, we still have to face the antinomy between a self-subsistent and perfect entity, which can have no need of any imperfect contingent thing, and the obvious existence of a contingent and imperfect world which has to be contingent upon that perfect, self-subsistent entity. This antinomy could not be resolved as long as the world was regarded as complete. But the antinomy would be dissolved if the imperfect world we know is merely a stage in an incomplete process. If the world, as we know it, is just one stage in a process which could lead to the production of another self-existent and perfect entity,