14 Mathematical Evidence for the Existence of God

In attempting to explicate this statement, I will consider this statement in two stages. The first stage is to consider the statement 'Mathematical Evidence for the Idea of God' and the second stage is the statement 'Mathematical Evidence for the Existence of God'. In both these statements I use the term 'evidence'. By evidence I mean data or ideas that support an interpretation of other data. Mathematical evidence is mathematical ideas or data expressed in mathematical language used to support (or shown to be consistent with) a particular idea or argument.

14.1 Mathematical Evidence for the Idea of God

The main point of this thesis has been to provide mathematical evidence for the idea of God by using Anselm's Definition to focus mathematical language and findings. Mathematics is not obviously about God. However, it has been my claim that mathematical ways of thinking are consistent with the idea of God, particularly the idea of God as expressed in the construction of Anselm's Definition. Some of the ideas that I have expressed are as follows. Recalling Galileo's phrase that Nature is written in the language of mathematics, and Wigner's recognition of the 'unreasonable effectiveness' of mathematics in the natural sciences, we may expect mathematics to give us important descriptions of the way things are. Centered around Anselm's Definition, I have used mathematical ideas of ordinal sequence, limit, infinity, algorithm, incompleteness, paradox and compactness to demonstrate ways of thinking that are consistent with the idea of God. Maybe

there are many atheists who would permit the conceivability of God. This does not give us the existence of God, according to their reasoning. However, I think that these (and other) ideas are grounds for an approach to the existence of God. At least, the idea of God as described mathematically is not inconsistent with known and recognized ways of thinking.

The next question is where do thoughts come from? In human thought there is a <u>supply of ideas</u> that is different from the particular objects they can refer to. That is, the content of the concept 'tree' is different from particular trees from which the universal concept 'tree' is supposed to be derived. Using the concept (or word) 'tree', I can explain this concept without reference to any particular tree. Using a Lockean empiricism, it can be maintained that all knowledge is gained from experience by reflection upon sensation. Quine argues for a similar process where one goes from theory to sensation when 'sets of theoretical sentences logically imply observation categoricals, which are built of observation sentences, which are conditioned to ranges of neural intake' (Mautner (1997), p466). I argue that an idea of an object is radically different from an object and that we do not derive many ideas from objects. We may experience or learn ideas by means of objects but language gives a word like 'tree' and we understand and use the word by instances of particular trees. If individual learning were by induction on particulars, everyone would invent their own knowledge with their own use of language. Everyone has their own experience of knowledge whereby they come under the discipline and attain the usefulness of a

common language or knowledge expression. In general, a complex idea can be broken down into simpler ideas as components of the original idea. However, the complex idea is not just a summation of its parts. This is saying that I cannot have an idea unless it is supplied. Ideas are irreducible to anything else, but they are recognized and learnt by the experience of particulars. Some ideas can be explained or described by other ideas that point to the main idea. A tree can be described by its various parts such as leaves, branches, roots, bark etc. But we need the concept of 'tree' to assemble the tree from its constituent parts. We need the total concept before we can explain the parts and, in particular, how the parts function with respect to the whole. I claim that each person does not invent the number 5 for themselves. The number 5 is provided for us by means of the language and we learn about the number (concept) '5' by our experiences of collections of five things. A line is an idealization of a collection of points, a limit position with respect to the points that make it up. Infinity, as a concept, says something that no other word can. 'Infinity' is more than the words that are used to define it. In an infinite sequence, induction on the numbers that make up the sequence does not give us infinity, although they approach the limit. To say we have infinity, is in fact, to be out of the sequence. In particular, can we end up with the idea of God if we do not start with the idea of God? No amalgam of ideas gives us 'God', although many ideas may be used to point to 'God'.

The obvious question becomes then, where do ideas come from if they are not built up from more basic ideas

(Foundationalism)? There are two questions here. One question is, if ideas are built up from sensations when does a sensation become an idea? Possibly, for Quine, the transition is in the 'observation sentence'. This must be when a sensation becomes a proposition. I liken this to a category mistake. A sensation does not become a proposition but 'its meaning' is recognized and expressed by a proposition. The interface between an object (sensation) and its meaning (proposition) is problematic. I attempt to account for the relationship by the theory of creation explained below.

The second question is if there are basic, atomic words (meanings) by which all over words can be explained, then what are they? I would suggest that this can not be done because meanings need not be hierarchical. A word, as a phoneme (sound) or mark on paper denoting a meaning, combines two basically different things. The word (as a physical object, or denoting a physical object) relates to an abstract or non-physical meaning. Ideas can explain other ideas, as in a dictionary, but each idea has its own meaning and use. There can be basic sounds (phonemes) but not basic meanings. Meaning collapsed into another word is a loss of meaning. This is like the claim that the Bible can be translated by means of the 500 most common words in the language. This has been done but not without loss of meaning. This is a problem with all translation and paraphrase.

I would account for the relation between meaning (proposition) and object (sensation) by means of a theory of creation. This theory says that God speaks the creation

of physical objects. This says that the creation is verbalized and conceivable as words. Which words are used depends on the language, but the principle that the actual (physical) creation is spoken means that the creation is rational and able to be manipulated by language. The conceivability or rationality of the creation is created at the creation because the creation is ex nihilo. So the creation is not conforming to a Form independently of God. Also God is not conforming to a plan in God. God's creation is arbitrarily free in God and is only actual when spoken. The source of ideas lies in the capacity of the creation to be verbal or conceivable (expressible in thought). If I posit a mind for God then I am tending to make God rational and I am fastening on God a particular mentality or prescription for being. God may always act in a rational way, but God remains God in a conceivable indeterminacy or total freedom to act. We look for patterns in God's behaviour and expect God to act in a certain way because we decide that that is God's nature and God is required to behave that way. There is a difference between saying that God is good because it is God's nature to be good, and saying that God always chooses to be good.

The conceivability of the creation supplies the concepts that are verbalized by a particular language. If I am forced to picture an origin of ideas for the creation I will use the Mind of God, not as a source for rules but as the source for ideas that conceived the creation itself.

14.2 Mathematical evidence for the Existence of God

The challenge now is to move from the idea of God to the existence of God. This is the challenge of the Ontological Argument and it's various forms.

I have made a distinction in this thesis between thought giving us existence and thought leading us to existence. Thought giving us existence is ontological argument, whereby, purely by thought we can determine if something exists. This is often done by the category of necessary existence. That is necessary which exists in all possible worlds. Could God exist in a world that was not rich enough to conceive the idea of God? If God were in such a world, then God would not be able to be described, referred to or known. God would not be conceivable. However, we need to understand that God is never part of any (created) world, which means that every world should point to God, not contain God. So a necessarily existing God should be pointed to by every world. A world in which God was not expressible (inconceivable) could not point to God. If such a world existed God would not be necessary or necessarily known by all worlds. Either every world 'book' has to be complex enough to permit the conceivability of God (in terms of its knowledge and language) or else God is not necessarily pointed to by every world. But the necessity of God cannot be made dependent on the complexity of a given world. So if necessity means 'is linked to all worlds', and God is necessary, then all worlds must be complex enough to conceive God. If every world conceives and points to the same God, how different are the worlds? Let us say that the worlds W_i pointing to God are in 1-1 correspondence with the

levels of the constructible hierarchy L_i. Each world is pointing to God, who is conceivable only as the limit-thought of the sequence. Attributes, such as goodness and truth, may be used at any particular level, but do they refer to God if God is not conceivable except in the limit? If God is necessary every world must point to God which requires a level of complexity of language and thought that can make God conceivable. If this is so then there is only one world (or variants of it) of sufficient complexity to conceive the idea of God.

There are two ways to go here. One way is to say that God is not necessary and leave each world to its own devices. In this case any given world may or may not come up with the idea of God, which given the universality of the idea of God seems improbable. Another way to go is to ask whether the idea of God is a limit idea or even a complex idea. Could not a simple world have a simple language about a simple god? (This would be language about a god not God.) So to this question I say 'No'. Language about God may be simple but that does not mean that the idea of God is simple. So the idea of God requires and draws out the complex language. If there is no complex language then there is no adequate concept of God. Seeing that we have the adequate limit-language to conceive God, I conclude from this that there is one conceivable God (Who is God at the limit of conceivable thought) and essentially one world capable of the language (or languages) necessary to conceive God. It may be argued that there are endless levels of conceivability stretching into the transfinite, but using the Lowenheim-Skolem Theorem, I would argue that

we always have a countable model of ideas of God (as with Anselm's Definition).

This has been an argument about the necessity of God. Does it prove that necessary being always collapses into one being and one world? Does this imply that if we have one world (which seems to be the case) then we have only one God? If there is a proliferation of worlds, does this imply a proliferation of Gods? That is, a conceivable God for every conceivable world? Here I would use the idea of being compacted and argue that, if God is the conceivable limit thought about the God for each world, then what is indicated is the same God and therefore the same world. The limit thought sequences about God would all indicate the same object across worlds. Possibly we can drop the use of the word 'necessary' and simply argue from the starting point of the possibility of a conceivable limit thought across all worlds. If I have shown that there can be only one world with one limit-conceivable God, can I then say that, seeing that we have evidence for only one world, can we then assume that we have only one limit-conceivable God? Have I obtained existence from thought or are we really still in the realm of the conceivable only?

My second option is thought leading to existence. In arguing for creation ex nihilo, I rule out all pre-conception of what may exist. What exists, exists as the result of the free creative choice of a Creator God. God and existence are not driven by theory but they can be recognized by theory.

The following is my attempt to get from thought to existence. To say that I need the concept of God before I can argue about the concept of God does not mean that I cannot argue for God, or that I am assuming what I am trying to prove. I need the concept of God to know what I am aiming for. I may not be able to come up with the idea of God from lesser ideas, but once I have the idea of God I can argue for it by means of lesser ideas. I will draw on ideas expressed by Quentin Smith in The Conceptualist Argument for God's Existence in Craig (2002). Conceptualism is the theory that universals such as properties and relations exist in the mind. A proposition is seen as the effect of some mind and, presumably, the evidence of mental activity. I propose an argument as follows.

Overview of the Argument.

1. An actual world exists.

2. This world is conceivable which means that it is expressible in some language.

3. Language expression is propositional. Propositions are statements about the conceivable world.

4. Propositions are accusatives of some mind.

5. The actual world is a conjunction of all true propositions.

6. The conjunction of all true propositions is a true proposition U.

7. The true proposition U is the accusative of an omniscient mind.

8. Therefore there is an omniscient mind.

9. God has the omniscient mind.

10. Therefore God exists.

This is a different style of argument, but I am using it to show how it can be argued that thought can indicate existence. The conceptualist argument (that a proposition is the accusative of some mind) has a plausibility to it. Any thought, presumably, requires a mind or thought agent to have it. The independent existence of that thought is debatable, for I maintain that thought is never independent of a creation.

Returning to the argument, I will discuss each numbered point as follows.

1. An actual world exists.

The initial claim is made that a real world exists. Existence is introduced at the beginning of the argument.

2. This world is conceivable which means that it is expressible in some language.

We are able to make statements (propositions) about the actual world. This world is conceivable and manageable by language

3. Language expression is propositional. Propositions are statements about the conceivable world.

Propositions are statements about what is conceivable. What is actual is a subset of the conceivable. The actual world can be described by true propositions.

4. Propositions are accusatives of some mind.

The occurrence of propositions is evidence of mental activity and the use of language. The possibility of propositions is the possibility of some mind using language to describe what is actual (and conceivable which may not be actual).

5. The actual world is a conjunction of all true propositions.

Any proposition that is a correct description of the actual world is true. All true statements about the actual are true concurrently.

6. The conjunction of all true propositions is a true proposition U.

All true propositions are concurrently true and can be placed in the same proposition by conjunction. A conjunction is a possibility of thought.

7. The true proposition U is the accusative of an omniscient mind.

The mind that can know all true propositions simultaneously is an omniscient mind. An actual world must be expressible as a conjunction of all true propositions about that world.

8. Therefore there is an omniscient mind.

If a proposition is the effect of some mind then an omniscient (stating all truths) proposition would be the effect of an omniscient mind. This is based on the conceptualist premise that any proposition is the effect of some mind (ibid., p191).

9. God has the omniscient mind.

God is the only one who can conceivably fulfil this description. It could be maintained that there could be an infinity of non-omniscient minds each knowing each proposition. However, the argument is that the proposition U is a conjunction of all true propositions and is in fact one proposition needing to be known by an omniscient mind.

10. Therefore God exists.

This argument depends principally on the conceptualist claim that a proposition is the effect of a propositional attitude or some mind. So the evidence of a proposition is the evidence of a mind or mental agent. The theory of creation that I have been arguing for sees relations as existing in the creation, which is a position of realism. Relations are part of what is created because created, physical objects exist in relation to other objects, which is not just a mental perception, but an actual fact. However, relations are perceived and conceived in that they become part of rational thought. So a relation becomes a concept in the linguistic manipulation of reality. Therefore relations comprise part of the statements and propositions that are made about reality. So real relations can be integrated into an argument based on conceivability.

The creation theory that I espouse claims that God is the Creator of what is and that what God has created is conceivable or propositional. As God created, God spoke the creation. Therefore the mind (or voice) of God expressed propositional truths that actualized as physical objects. These objects are now the effects of the effects of God's

propositional attitude. In all this I seek to avoid
positing in God a mind that God has to obey, some form or
nature that requires God to be less than God.

Do we have mathematical evidence for the existence of God?
We have mathematical evidence for the idea of God. That is,
mathematical ideas are consistent with belief in God. But,
if mathematics is not about God, how can I require it to
say something about God? If Anselm's Definition is a model
of ZF and mathematics is a model of ZF are these two
interpretations equivalent? Let us say that they are, then
the question becomes how uniquely does Anselm's Definition
give us God? Is the greatest conceivable being God? How can
I be sure that what is logically indeterminate is the God I
want? How do I know that the unproven truth of consistent
systems is about God? I do not know. So I cannot claim
direct evidence, but possibly I can claim a type of
collateral evidence. Elliptical orbits do not prove that
there are planets; but the property of being elliptical is
all that the mathematics says about planets. So we have to
determine the character of what we are talking about. For
instance, concerning Incompleteness, I cannot prove that a
statement about God is the unproven truth. However, it also
demonstrates that for any consistent list of formulae
attempts to exclude any statement about God cannot be
guaranteed.