**A-level Religious Education**

**(Philosophy, Ethics and Christianity)**



**Bridging Course - Week 2**

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****St Mary’s Catholic School

A-level Religious Education Bridging Course

**Review of Week 1**

In Week 1 you looked at Religious Experience, the types and various arguments for these experiences resulting from God. We considered the counter arguments that they could be the result of illusions or humans simply being mistaken. A strong argument provided against Religious Experiences is from Persinger and the God-helmet which suggests that the brain can be stimulated into creating Religious Experiences for a person.

**Week 2**

This week we are remaining with Philosophy but moving onto the Design Argument. You will have looked at Paley’s Analogy of the Watch at GCSE but this was done by skimming the surface. This week’s work looks at the analogy in more depth and more focus is given to the scholars who have provided challenges to such an argument. The key questions to consider are – Does the Universe show evidence of a designer? What kind of designer could this be? Could the Universe simply have been chance? Can we be certain that a designer exists or is it just probable? How has science tried to answer this question of design and has it proved religion wrong?

The following work requires a lot of reading, and some of the ideas might be challenging to understand on first reading. Remember to take regular breaks, go back to any of the tasks after some time away, and try your best. Your Religious Education Teacher will go over the following with you in lessons, early in Year 12.

1. You are now going to begin preparatory work relevant for Paper 1 of the A-level. Paper 1 is an exam that focuses on various elements within Philosophy. You have already studied some of the topics at GCSE which will give you a good foundation on which to build your knowledge.

We are going to move onto The Teleological Argument.



1. Have a look at the images above. This is the Milky Way which is the galaxy in which our solar system exists. Have a read of these facts about the Milky Way.
* It is warped. The Milky Way is a disc with a central bulge. This is thought to be as a result of our galaxy’s two neighbours. These dwarf galaxies, that may be orbiting the Milky Way, are believed to have been pulling on the dark matter in our galaxy like in a game of galactic tug-of-war. The tugging creates a sort of oscillating frequency that pulls on the galaxy’s hydrogen gas of which the Milky Way has lots of.
* It has over 200 billion stars. When you look up at the night sky, the most you can see from any one point on the globe is about 2,500 but this is not a fixed number.
* It has a halo but you cannot directly see it. Scientists believe that 90% of our galaxy’s Mass consists of dark matter which gives it a mysterious halo. That means all of the matter that we can see with the naked eye or a telescope makes up less than 10% of the mass of the Milky Way. The halo is invisible but its existence has been demonstrated by running simulations of how the Milky Way would appear without this invisible mass and how fast the stars inside our galaxy’s disk orbit the centre.
* It is made from other Galaxies. The Milky Way was not always as it is today. It became its current size and shape by eating up other galaxies.
* If you think you have seen pictures of the Milky Way Galaxy, you have not. We cannot take a picture from it from above due to the fact that we are inside the disc about 26,000 light years from the centre. It would be like trying to take a picture of your own house from the inside.
* There is a Black Hole at the centre.
* The Universe is about 13.7 billion years old and our Milky Way is believed to have been around for 13.6 billion of those years. The disk and bulge did not form until about 10-12 billion years ago.
* The Milky Way like everything else in the Universe is moving through space. The Earth moves around the Sun, the Sun around the Milky Way and the Milky Way as part of a local group.

 **Consider these questions:**

1. Could this amazing Universe / Galaxy have come about by chance? Give 2 reasons why someone would say yes and 2 reasons why someone would say no. Base your reasons on information from the facts above.
2. What is the most beautiful thing you have ever seen? Did this thing come about naturally or was it in some way designed?
3. What if you were in space and you saw the images above of the Milky Way. What would you think? Would think it beautiful and show presence of a designer? What do you think and give two reasons to support your view.

1. **William Paley and his Analogy of the Watch (We need to remind ourselves of this so that the challenges will make sense)**
2. Read the Analogy of the Watch below. (This is in far more detail than what you studied at GCSE)

**The Watchmaker Argument**

From William Paley, *Natural Theology*

In crossing a heath, suppose I pitched my foot against a stone, and were asked how the

stone came to be there: I might possibly answer, that, for any thing I knew to the contrary,

it had lain there for ever; nor would it perhaps be very easy to show the absurdity of this answer. But suppose I had found a watch upon the ground, and it should be inquired how the watch happened to be in that place; I should hardly think of the answer which I had before given,—that, for any thing I knew, the watch might have always been there. Yet why should not this answer serve for the watch as well as for the stone? why is it not as admissible in the second case, as in the first? For this reason, and for no other, *viz*. that, when we come to inspect the watch, we perceive (what we could not discover in the stone) that its several parts are framed and put together for a purpose, e. g. that they are so formed and adjusted as to produce motion, and that motion so regulated as to point out the hour of the day; that, if the different parts had been differently shaped from what they are, of a different size from what they are, or placed after any other manner, or in any other order, than that in which they are placed, either no motion at all would have been carried on in the machine, or none

which would have answered the use that is now served by it. To reckon up a few of the plainest of these parts, and of their offices, all tending to one result:—We see a cylindrical box containing a coiled elastic spring, which by its endeavour to relax itself, turns round the box. We next observe a flexible chain (artificially wrought for the sake of flexure) communicating the action of the spring from the box to the fusee. We then find a series of wheels, the teeth of which catch in, and apply to, each other, conducting the motion from the fusee to the balance, and from the balance to the pointer: and at the same time, by the size and shape of those wheels, so regulating that motion, as to terminate in causing an index, by an equable and measured progression, to pass over a given space in a given time. We take notice that the wheels are made of brass in order to keep them from rust; the springs of steel, no other metal being so elastic; that over the face of the watch there is

placed a glass, a material employed in no other part of the work, but in the room of which, if there had been any other than a transparent substance, the hour could not be seen without opening the case. This mechanism being observed (it requires indeed an examination of the instrument, and perhaps some previous knowledge of the subject, to perceive and understand it; but being once, as we have said, observed and understood), the inference we think is inevitable, that the watch must have had a maker: that there must have existed, at some time, and at some place or other, an artificer or artificers who formed it for the purpose which we find it actually to answer: who comprehended its construction, and designed its use.

**STATE OF THE ARGUMENT.**

**I**. Nor would it, I apprehend, weaken the conclusion, that we had never seen a watch made; that we had never known an artist capable of making one; that we were altogether incapable of executing such a piece of workmanship ourselves, or of understanding in what manner it was performed; all this being no more than what is true of some exquisite remains of ancient art, of some lost arts, and, to the generality of mankind, of the more curious productions of modern manufacture. Does one man in a million know how oval frames are turned? Ignorance of this kind exalts our opinion of the unseen and unknown artist’s skill, if he be unseen and unknown, but raises no doubt in our minds of the existence and agency of such an artist, at some former time, and in some place or other. Nor can I perceive that it varies at all the inference, whether the question arise concerning a human agent, or concerning an agent of a different species, or an agent possessing, in some respects, a different nature.

**II.** Neither, secondly, would it invalidate our conclusion, that the watch sometimes went wrong, or that it seldom went exactly right. The purpose of the machinery, the design, and the designer, might be evident, and in the case supposed would be evident, in whatever way we accounted for the irregularity of the move ment, or whether we could account for it or

not. It is not necessary that a machine be perfect, in order to shew with what design it was made: still less necessary, where the only question is, whether it were made with any design at all.

**III**. Nor, thirdly, would it bring any uncertainty into the argument, if there were a few parts of the watch, concerning which we could not discover, or had not yet discovered, in what manner they conduced to the general effect; or even some parts, concerning which we could not ascertain, whether they conduced to that effect in any manner whatever. For, as to the first branch of the case; if by the loss, or disorder, or decay, of the parts in question, the movement of the watch were found in fact to be stopped, or disturbed, or retarded, no doubt would remain in our minds as to the utility or intention of these parts, although we should be unable to investigate the manner according to which, or the connection by which, the ultimate effect depended upon their action or assistance;

and the more complex is the machine, the more likely is. this obscurity to arise. Then, as to the second thing supposed, namely, that there were parts which might be spared, without prejudice to the movement of the watch, and that we had proved this by experiment,—these superfluous parts, even if we were completely assured that they were such, would not vacate the reasoning which we had instituted concerning other parts. The indication of contrivance remained, with respect to them, nearly as it was before.

**IV**. Nor, fourthly, would any man in his senses think the existence of the watch, with its various machinery, accounted for, by being told that it was one out of possible combinations of material forms; that whatever he had found in the place where he found the watch, must have contained some internal configuration or other; and that this configuration might be the structure now exhibited, viz. of the works of a watch, as well as a different structure.

**V**. Nor, fifthly, would it yield his inquiry more satisfaction, to be answered, that there existed in things a principle of order, which had disposed the parts of the watch into their present form and situation. He never knew a watch made by the principle of order; nor can he even form to himself an idea of what is meant by a principle of order, distinct from the intelligence of the watchmaker.

**VI.** Sixthly, he would be surprised to hear that the mechanism of the watch was no proof of contrivance, only a motive to induce the mind to think so:

**VII.** And not less surprised to be informed, that the watch in his hand was nothing more than the result of the laws of metallic nature. It is a perversion of language to assign any law, as the efficient, operative cause of any thing. A law presupposes an agent; for it is only the mode, according to which an agent proceeds: it implies a power; for it is the order, according to which that power acts. Without this agent, without this power, which are both distinct from itself, the taw does nothing, is nothing. The expression, “the law of metallic nature,” may sound strange and harsh to a philosophic ear; but it seems quite as justifiable as some others which are more familiar to him, such as “the law of vegetable nature,” “the law of animal nature,” or indeed as “the law of nature” in general, when assigned as the cause of phenomena, in exclusion of agency and power; or when it is substituted into the place of these.

**VIII.** Neither, lastly, would our observer be driven out of his conclusion, or from his confidence in its truth, by being told that he knew nothing at all about the matter. He knows enough for his argument: he knows the utility of the end: he knows the subserviency and adaptation of the means to the end. These points being known, his ignorance of other points, his doubts concerning other points, affect not the certainty of his reasoning. The consciousness of knowing little, need not beget a distrust of that which he does know.

1. Now that you have read Paley’s Analogy and his extra 8 pieces of information regarding challenges that people could make against it, complete the following tasks:
* Look up any words that you do not understand or know the meaning of
* Summarise in your own words the 8 challenges that Paley gives an answer for.
* Could you think of any counter arguments against what Paley is saying?
1. Now that we have re-visited the Design Argument, also called the Teleological Argument. (Telos means purpose in Greek and this is something that Paley argues for when looking at design. In everything that has been designed there is a purpose to it and so there must be a purpose behind the Universe and this is God.)

We are now going to look at some challenges against Paley’s Analogy of the Watch. We will look at 3 scholars who are David Hume, John Stuart Mill and Richard Dawkins. For each person looked at there will be some tasks to complete. (You can of course, also do your own research on these 3 scholars if you choose)

1. **David Hume (1711 – 1776) Dialogues concerning Natural Religion**
*  Hume points out that the reasoning in the Design

 Argument is flawed as it assumes that what has been

 experienced in the past will be repeated in the future.

* The Design argument does not work as an analogy. The

 analogy between machines and the universe is weak. It

 may work for one part of the universe but we cannot

 know the whole of the universe and what it is like.

* We cannot say an intelligent designer made the universe.

 There is order in the universe but does this come from

 God?

 Order may have been as a result of things just changing

 their own order and the way things work. So the order

 we see now may have come about at some point anyway

 without a God.

* Why must there be one designer? Why not many? What is the designer is not a perfect designer? What if he copied the idea from other designers? What If there had been many designs but this was the only one that worked. “This was the first rude essay of some infant deity who afterwards abandoned it.”

1. **John Stuart Mill (1806 – 1873)**
* Mill put forward his objection to the Design argument in 1874 and

 so it was after Darwin had published his theory of natural selection.

* He observed that nature was cruel and that progress was made only

 at the cost of immense suffering.

* Many things that happen in the natural world would be punishable if

 done by humans and so nature is ruthless.

* Is it therefore reasonable to believe that an intelligent and loving

 creator would have designed a world that involves too much

 suffering?

**Read this extract from John Stuart Mill. Highlight the key arguments and examples he uses as you read it.**

If we look at the world and the rules that govern it then we see cruelty, violence and unnecessary suffering. In his essay on nature (1874) he argued that if the world had been deliberately designed, then it indicates something very different from a loving creator God.

 Living things including people, inflict cruelty on each other, and seem to be designed for that purpose. Many animals are made with special features to enable them to be efficient killers – they have sharp claws and teeth, or excellent eye sight or hearing to help them spot their prey. Some live as parasites on other creatures. Even plants often have features which them to suffocate other plants in order to gain maximum light and nutrients. The world, if it is designed at all, is designed so that some species can only exist by destroying others.

 Nature itself causes suffering, through natural disasters. Volcanoes, earthquakes, bush fires and floods are often natural occurrences, caused as an inevitable result of the structure of the earth. Mill argued that if there is a God who created and designed the world, then it must be a God who wants his creation to be miserable- it does not make sense to use the world as evidence as the existence of a good God. He argued in On Nature that we cannot want to worship a God who would design such a world – if people behaved in the way God seems to have behaved, then we would think of then as the worst kind of criminal.

….the order of nature in so far as unmodified by man, is such as no being whose attributes are justice and benevolence, would have made with the intention that his rational creatures should follow it as an example…In sober truth, nearly all the things which men are hanged or imprisoned for doing to one another are nature’s everyday performances. Killing, the most criminal act recognised by human laws. Nature does once to every being that loves, and in a large proportion of cases, after protracted tortures such as only the greatest monsters whom we read of ever purposely inflicted on their living fellow creatures…

 Next to taking life (equal to it according t a high authority) is taking the means by which we live; and Nature does this too on the largest scale and with the most callous indifference. A single hurricane destroys the hopes of a season; a flight of locusts, or an inundation desolates a district; a trifling chemical change in an edible root starves a million of people. The waves of the sea, like banditti, seize and appropriate the wealth of the rich and the little of the poor with the same accompaniments of stripping, wounding and killing as their human antitypes. Everything, in short, which the worst men commit either against life or property, is perpetrated on a larger scale by natural agents.

1. **Richard Dawkins (1941 - )**
* He wrote a book called “The Blind Watchmaker” in 1986
* He argues that if there had been a designer, then this designer had no foresight, there was no plan to what the designer wanted. Instead if there was a designer, he was blind and just as with a watch, he would be “The Blind Watchmaker.”
* Richard Dawkins is a modern supporter of Darwin and a strong critic of design arguments for the existence of God.

**Read this short extract from Richard Dawkins’ book, The Blind Watchmaker.**

Paley’s argument is made with passionate sincerity and is informed by the best biological scholarship of the day, but it is wrong, gloriously and utterly wrong. The analogy between telescope and eye, between watch and living organism, is false. All appearances to the contrary, the only watchmaker in nature is the blind force of physics, albeit deployed in a special way. A true watchmaker has foresight; he designs his cogs and springs, and plans their interconnections, with a future purpose in his mind’s eye. Natural selection, the blind unconscious, automatic process which Darwin discovered, and which we now know is the explanation for the existence and apparently purposeful form of all life, has no purpose in mind. It has no mind and in mind’s eye. It does not plan for the future. It has no vision, no foresight, no sight at all. If it can be said to play the role of a watchmaker in nature, it is the blind watchmaker.

Richard Dawkins also supports the view of John Stuart Mill, that nature is cruel and so there is no designer or at least, there is no loving designer. Richard Dawkins uses the example of the Female Digger Wasp to show what Mill means when he says, “Nature is cruel”.

**Read this short extract from Richard Dawkins’ book, “River out of Eden”.**

“A female digger wasp not only lays her egg in caterpillar (or grasshopper or bee) so that her lava can feed on it but…she carefully guides her sting into each ganglion of the prey’s central nervous system, so as to paralyse it but *not to kill it.* This way, the meat keeps fresh…the prey might be aware of being eaten alive from the inside, but unable to move a muscle, to do anything about it.”

1. **Tasks to complete**
* Summarise the arguments of Hume, Mill and Dawkins in a table. Show their similarities and differences.
* Select from each scholar what you think their strongest argument is and explain why. What do you think is their weakest argument and can you think of any argument or evidence that would challenge their argument?
* Research F.R.Tennant and the Anthropic Principle. Make notes on this principle. Do you think this principle could provide a strong challenge to Hume, Mill or Dawkins or do you think it provides support? Give reasons why.

**4.** Now that we have explored some key scholars and their challenges to Paley’s Design Argument, have a look at

 these following quotes and answer the questions beside them.

1. **Richard Swinburne – The Card Shuffling Machine**

Imagine a man kidnaps somebody and tells then that there are ten decks of cards and that each deck will shuffle simultaneously and then one card will be drawn from each deck. The card machine is linked to an explosive device and that if each randomly drawn card from each deck is not the ace of hearts then the victim will die. The cards shuffle and the victim is still alive, the victim thinks that it is extraordinary that he is still alive as the chances of those cards being drawn is very little. However, the kidnapper thinks it is “hardly surprising”. He adds that “you would not be here to see anything at all if any other cards had been drawn”. Swinburne says the kidnapper is wrong and the victim is right.

**Questions to answer**

* What is Swinburne trying to show through this scenario? (Clue – it links to the Anthropic Principle)
* Why is the victim right and the kidnapper wrong?
* Can you write your own scenario which would show the idea that things have been fine-tuned for life to thrive?
1. **Fred Hoyle**

“The chance that higher life forms might have emerged in this way is comparable with the chance that a tornado sweeping through a junk-yard might assemble a Boeing 747 from the materials therein.”

“The universe, just like the Rubik Cube, requires an intelligence”

**Questions to answer**

* Do you think Fred Hoyle is a supporter of the Design Argument? Why?
* In the first quote, he is challenging the idea of evolution. How does he do this? Explain his example.
* Do you like Hoyle’s use of the Rubik Cube or do you think there is a better comparison to be made? Explain why or how you like his comparison and what other comparisons could you provide?
1. **Albert Einstein**

“God does not play dice.”

**Questions to answer**

* This quote from Einstein means that God has left nothing to chance. There are precise laws. What challenges could you give against this idea?

**5. Watch this clip which summarises the Teleological (Design) Argument and answer the questions below.**

<https://www.youtube.com/watch?v=7e9v_fsZB6A>

1. What other name does the Teleological Argument have?
2. What style of argument is Argument by Analogy?
3. What does Teleological means?
4. What else does Paley compare a watch to?
5. What challenges are given against Paley’s analogy from the natural world?
6. What argument does Bertrand Russell give?
7. What argument does Hume give? Give two examples mentioned in the clip.
8. What modern argument does Swinburne give?
9. What ideas are fine-tuning arguments based on?
10. Why do these arguments work more than Paley’s analogy?

**6. Bringing all of your work together complete these exam style questions using the guidance you have been given. It is these answers that will be marked and detailed feedback given.**

**Assess the challenges made to Paley’s Deign Argument (12)**

*Guidance for answering this style of question:*

* *This question is asking you to show your knowledge of the thinking of Paley.*
* *The question is also asking you to give some challenges that scholars makes against the Design Argument. Have 4 challenges to write about in this answer.*
* *You will need 6 paragraphs. (1) Set the scene about Paley and his design argument (2) – (5) Work your way through the scholars and their challenges to Paley but you must also say what is strong in their argument but also what a weakness is. By doing this you are ASSESSING the arguments which is what the question is asking for.*
* *Paragraph (6) should be a conclusion where you pull everything together and share a view of which side appears to be the strongest based on the arguments you have assessed. Do you feel there is too much evidence against Paley? Is there too much evidence to say that there is no designer due to the cruelness of nature? Is the fine-tuning of the universe a strong supporter of Paley? Is it a case that Dawkins and Darwin have it right?*

**Clarify the view Paley regarding the universe having a designer. You must refer to the extract below. (10)**

Nor would it, I apprehend, weaken the conclusion, that we had **never seen a watch made**; that we had **never known an artist capable of making one**; that **we were altogether incapable of executing such a piece of workmanship ourselves**, or of **understanding in what manner it was performed**; all this being no more than what is true of some exquisite remains of ancient art, of some lost arts, and, to the generality of mankind, of the more curious productions of modern manufacture. Does one man in a million know how oval frames are turned? **Ignorance of this kind exalts our opinion of the unseen and unknown artist’s skill**, if he be **unseen and unknown, but raises no doubt in our minds of the existence and agency of such an artist, at some former time**, and in some place or other. Nor can I perceive that it varies at all the inference, whether the **question arise concerning a human agent, or concerning an agent of a different species**, or an agent possessing, in some respects, a different nature.

*Guidance for answering this style of question:*

* *This question is asking you to show your knowledge of the thinking of Paley and how he counters challenges made to his analogy of the watch.*
* *The question is asking you to show knowledge of Paley’s further arguments. You need to take quotes from the extract given to you and explain them. These quotes should be short phrases and not large pieces of the text.*
* *You also need to put this extract into its context and so you can also refer to some of the other challenges Paley refutes which may not be found in the extract given to you. You are clarifying the ideas of Paley!*
* *You will need 4 - 5 paragraphs. You could set the scene first and then work your way through some argument.*
* *I have highlighted some key phrases which you could use in your answer as a quote and then you need to explain them further.*
* ***Remember, there is no need to say if an argument is strong or weak! This is all about your knowledge!***

**Answers and suggestions**

From task 5 – Answering the questions whilst watching the clip

1. **What other name does the Teleological Argument have?**

Intelligent Design

1. **What style of argument is Argument by Analogy?**

 Inductive

1. **What does Teleological means?**

Goal-orientated or Purposeful

1. **What else does Paley compare a watch to?**

A living organism – the human body

1. **What challenges are given against Paley’s analogy from the natural world?**
* Why would God have designed our eyes to have a blind spot?
* We do not understand how things work or how they were created?
* Some things designed do not have a purpose such as a blind spot
* We could begin to make up the purposes of things
1. **What argument does Bertrand Russell give?**

Could look at a bunny and say it was given a little white tail by God so that hunters would be able to see it more easily.

1. **What argument does Hume give? Give two examples mentioned in the clip.**

If we were to take the analogy seriously then we would have to accept that the designer makes mistakes. For example, why are we given such tissues in the body which a prone to cancer? Why would make umbilical cords which easily wraps around a baby’s neck?

1. **What modern argument does Swinburne give?**

Even if there is another possible explanation for the universe, we should go with the explanation that is most likely to be true. More probable that God designed the world.

1. **What ideas are fine-tuning arguments based on?**

These accept the Big Bang and evolution as scientific truths but for the life to have occureed it is more llikely that God set up the conditions for it to be so. The Goldilocks Zone.

1. **Why do these arguments work more than Paley’s analogy?**

People have moved from certainty to probability. These seem easier to get right and defend.