Why I Believe George Varghese

When I came to UCSD, a professor asked me how I could be a professing intellectual and still be a Christian. The topic came up a few weeks back as well. So I thought I would collect my thoughts about reasons that I personally find helpful when considering whether Christianity makes sense. Note that I do not accept the definition that faith is "belief without reason". Instead I prefer the definition of faith as "trust without reservation". I write in the hope that people who find Christianity implausible and irrelevant will perhaps find one or two ideas that will, at the very least, provoke some thought.

This may be needed because the prevailing belief in academia is illustrated by the following story. "If God applied to the NSF for a research grant for the development of a heaven and earth, he would be turned down on the following grounds:

His project is too ambitious.

He has no previous track record.

His only publication is only a book and not a paper in a refereed journal.

He refuses to collaborate with his biggest competitor.

His proposal for a heaven and earth is all up in the air."

I am indebted to three sources: a book called Know Why you Believe [6] by Paul Little, an article by Henry Shafer on Scientists and their Gods, and an article on Christian scientists by Ian Hutchinson, a plasma physicist at MIT, both on the web. All three are referenced at the end.

Let me start with an argument that I personally find the most helpful:

a) Arguments from prophesy: There are a number of remarkable prophecies in Jewish scripture that dovetail well with the life of Jesus. Since early copies of the Jewish scriptures (including Isaiah, a key source of prophecies) have been dated by the Dead Sea Scrolls to be around 150 BC (at least several years before Christ was born), it is difficult to explain the coincidences unless either 1) the Jewish scripture was falsified after the fact or 2) Jesus somehow arranged to make the prophecies true. Neither hypothesis seems tenable. Comparisons between the Dead Sea Scrolls (which were hundreds of years older than the manuscripts known before) show only cosmetic changes over hundreds of years. Further, as Pascal argues, what incentive would the Jewish people have to legitimize Christianity by falsifying their own scriptures? These prophecies are still read in Jewish synagogues today. Further, several of these prophecies relate to Jesus' birth, death, and burial, which were outside the (earthly) Jesus' control. Such an interpretation (wish fulfillment, madness) also do not square with the rationality and wisdom of Jesus' teaching.

Specific prophecies [4] include: the Messiah would come from King David (2 Samuel 7:12), would be born in Bethlehem (Micah 5:2), would begin work in Galilee (Isaiah 9:1-2), would

enter Jerusalem on a donkey (Zechariah 9:9). would be sold for 30 pieces of silver (Zechariah 11:12). would be wounded and pierced (Zechariah 12:10), would be mocked and hated (Isaiah 53:3), would die with sinners (Isaiah 53:9), be buried in a rich man's grave (Isaiah 53:9, 12), and would rise from the dead (Hosea 6:1)

a) **Arguments from the resurrection:** The fact of Jesus's life and death are a part of the historical record, attested to by other historians. For example, in the Annals of Tacitus, the famous Roman historian it says: "*Christus*, from whom their name is derived, was executed at the hands of the procurator Pontius Pilate in the reign of Tiberius". On the other hand, the Bible also claims that the tomb was empty, and that Jesus appeared again to the disciples. First, could the disciples have lied and made up this story and even have stolen the body?

This seems hard to believe because all the disciples paid severely (again part of historical record) for their belief. Pascal, the inventor of probability theory and hydraulics, wrote a surprisingly readable book called the Pensees, which says:

The hypothesis that the apostles were knaves is quite absurd. Follow it out to the end and imagine these twelve men meeting after Jesus's death and conspiring to say that he had risen from the dead. This means attacking all the powers that be. The human heart is singularly susceptible to fickleness, to change, to promises, to bribery. One of them had only to deny his story under these inducements, or still more because of possible imprisonment, torture and death, and they would all have been lost.

The second possibility is that the Jewish or Roman authorities stole the body to mislead the disciples but once again, what possible incentive could they have? When the Christian movement gathered force, why did they not produce the body and stifle the new religion? The third possibility is that the disciples hallucinated or imagined things. However, the disciples record Jesus appearing to a remarkable number of people of very different personalities. One or two hallucinations seems plausible [6] but not ten or more to people of very different personalities ranging from an earthy fisherman (Peter) to a subtle scholar (Paul). If we can dismiss this as mass hysteria, we could use the same arguments to doubt every other historical fact that rests on much less corroborative evidence. Finally, there is the swoon theory that Jesus revived after the cross. This is hard to square with the efficiency of Roman executions and the implausibility of the disciples mistaking a wild, half-dead man for a virile and serene risen savior.

None of these arguments are "proofs"; instead, all I hope to suggest is that the resurrection which seems so much like a fairy tale to modern ears *may* have some basis in history.

c) **Argument from creation:** Paley's argument was that if we saw a watch lying of the sea shore we would never think that it assembled together by chance. Similarly, the complexity and beauty of the universe seems at odds with the possibility of random self-assembly. I, for one, am especially struck with the beauty of the universe that seems to have no particular functional or scientific reason except to delight its beholders. Witness the scudding of clouds or the scent of a rose or the majesty of mountain ranges. These seem more consistent with an artist than random happenstance.

While some scientists (notably Urey and Miller) have shown how some critical components for life such as amino acids can be synthesized in the laboratory, progress since then has been very limited if non-existent [1]. Fundamentally, the Miller experiment has poor yield, produces only the simplest amino acid and produces equal quantities of right and left handed forms when right handed forms are often inimical to life. Finally, the step to more complex amino acids and to then go up the ladder and reach proteins by synthesis in the lab seems out of sight --- at least today.

Next, the fact that the physical constants (speed of light, specific heat of water) seem so fine-tuned (small changes will prohibit life) also argue for a creator in the simplest of explanations. Not just the constants but the earth's distance to the sun, our position in the solar system etc. To be sure, some scientists dismiss this using what they call the *anthropic principle* (the universe had to be fine-tuned for us to be able to observe it, we would not have been around to do so if it the constants are not tuned). In other words, in all the possible worlds that randomness could create, the ones without the constants would not have included us. I find this to be rather a copout. As Stephen Jay Gould (certainly not a defender of Christianity!) says, one might as well say that "sausages were made long and narrow so that they could fit into modern hotdog buns".

Finally, there was a great deal of discomfort with the notion of a beginning of time as in the Book of Genesis. However, currently the big cosmological theory is the Big Bang Theory. Two big pieces of evidence in its favor are the Hubble effect (further galaxies have been observed to be moving apart faster, which if you reverse the flow of time should result in all the galaxies coming together in one dense mass at the time of the first creation) and the discovery of cosmic radiation that follows a bang by Penzias and Wilson. Several scientists have commented on these effects:

The more I examine the universe and the details of its architecture, the more evidence I find that the universe in some sense must have known we were coming. Freeman Dyson, co-creator of Quantum Electro Dynamics (QED), Princeton Physicist

A common sense interpretation of the facts suggests that a superintellect has monkeyed with physics, as well as with chemistry and biology, and that there are no blind forces worth speaking about in nature. — Fred Hoyle

d) **Argument from limits to thought**: The greatest discoveries this century (to my mind) are limits to knowledge. For example, the theory of relativity has many bizarre manifestations but there is one thing that is not relative: the speed of light. If we travel as fast as light our mass will grow infinite and our time would slow down. so we effectively cannot. But a being that could travel faster than light must be outside time and space: possibly even like God. Second, Godel's uncertainty theorem showed that logic has its limits: there are some statements in mathematics that cannot be proved. Third, the Heisenberg Uncertainty Principle shows that we cannot know both the position and velocity of an electron, There are several other limit theorems including the second law of thermodynamics (entropy always increases) and the difficulty of weather predictions articulated by Lorenz that started modern chaos theory (the fluid differential equations underlying weather are chaotic: even the tiniest errors will cascade through the system and lead to enormous errors after a few iterations).

To my mind, this finiteness and limits to man's knowledge tend to suggest the possibility of an infinite and omniscient God.

Erwin Schrodinger was the founder of wave mechanics and the originator of Schrodinger's equation. He had this to say about the potential reductionism to materialism that science appears to suggest:

"the scientific picture of the real world is very deficient. It gives a lot of factual information, puts all our experience in a magnificently consistent order, but it is ghastly silent about all and sundry that is really near to our heart, that really matters to us. It cannot tell us a word about red and blue, bitter and sweet, physical pain and physical delight, knows nothing of beautiful and ugly, good or bad, God and eternity. Science sometimes pretends to answer questions in these domains, but the answers are very often so silly that we are not inclined to take them seriously."

Let me change gears from giving plausibility arguments *for* Christianity to review some common criticisms *against* Christianity and to offer some potential responses. I am sure you will have some more so please do send them to me.

a) Christians have a psychological need to believe: "If God did not exist, it would be necessary to invent him," said Voltaire. But the Christian idea of a dying God who comes down to earth does not seem so likely to invent to me as (say) the notion of God in other religions. More interesting is the following provocative counterargument which I quote from an Amazon review of [2] which should be taken with a pinch of salt.

"Paul Vitz is a professor of psychology at New York University and was himself an atheist until his late 30's. Vitz turns Freud's theory of religion (belief in God is an illusion that derives from our childish need for protection and security) on its head, and argues that "the atheist's disappointment in his own earthly father unconsciously justifies his rejection of God" (16).

Vitz's thesis is that absent or deficient fathers predispose their children to atheism. A good part of the book consists of 20 biographical sketches of prominent post-Enlightenment atheists, focusing on their relationships to their fathers or father figures. This group includes Friedrich Nietzche, David Hume, Bertrand Russell, John-Paul Sartre, Albert Camus, and H.G. Wells. As a control group, the book also provides biographical sketches of a similar number of prominent theists from the same period, including Blaise Pascal, G. K. Chesterton, and Dietrich Bonhoffer. Vitz finds that, the atheists had weak, bad or absent fathers, while the theists had good fathers or father substitutes."

- b) You cannot be a scientist/doctor and a Christian. The following is a summary of a much longer argument from [3]. Any list of the giants of physical science would include Copernicus, Kepler, Boyle, Pascal, Faraday, Maxwell, all of whom, despite denominational and doctrinal differences among them, and opposition that some experienced from church authorities, were Christians. More recently, Charles Townes who won the Nobel Prize in 1964 for his work on his lasers at Berkeley is a Christian. Maxwell, (see [4]) in particular, was a contemporary of Darwin and found no contradiction in his Christianity despite the rise of evolutionary thinking in his day.
- c) The theory of evolution contradicts the Bible: First, it is worth differentiating macro-evolution (one species can evolve to a very different one, from say mice to men) versus microevolution (organisms adapt to their environment without changing species as in a moth changing color in an industrial area). The evidence for the latter is very strong but the evidence

for the former (in terms of say fossils that connect species, etc.) is less strong. Nevertheless, it is the only scientific theory on the block so it is hard for workings scientists not to accept.

However, I see no reason why God (assuming there is a God) cannot use evolution (random mutations) even to change species were He to chose to do so. Early evolutionists like George Gaylord Simpson made fun of the idea of God doing so since it then appeared that chance controlled the universe and not God. However, in the light of modern computer science I find the latter to be a false argument. First, many of the most efficient algorithms (e.g., Rabin-Karp for testing whether a large number is a prime, very useful in public key cryptography that is used in online banking) are randomized: random numbers are used within the algorithm to guide its progress. To an uniformed observer, it may appear chaotic but to the creator/programmer it will not. Second, computer scientists know that simple numerical rules based on arithmetic as simple as multiplication and division can create a sequence of numbers that *appears* random but really is generated by a simple function and is hence said to be pseudo-random. In summary, it is a philosophical error to think of randomness as necessarily being purposeless. An example of a Christian who is a staunch evolutionist is Francis Collins, the leader of the Human Genome Project and now director of NIH.

d) **Bible documents have been doctored with and are unreliable**: The findings of archeology in recent years have led to increased confidence that this is not so. Consider the significance of the finding of the Dead Sea Scrolls in a cave in Qumran. One of the most significant finds was a scroll of the Book of Isaiah. From other scrolls, it is clear that the Qumran community lived from 150 BC to AD 70. The significance of this find is that, prior to the Dead Sea Scrolls, the oldest copy of Isaiah available were dated 1000's of years later. Further, the Dead Sea copy that differed from other copies that were dated 1000 years later by just a few letters, none of which change the meaning. This led credence to the fact that the Old Testament scribes took their jobs seriously.

While the New Testament has fewer copies, there are many more copies than other famous works of antiquity. Further, seeming contradictions in New Testament details have been corroborated by archaeology. For example, in Luke 3:1, Luke refers to Lysanias, tetrarch of Abilene. Historians though this was a mistake as no such Lysanias was known. However, a Greek inscription was found naming Lysanias in an area called Abila and dating around the time indicated by Luke.

e) Christians impede the flow of science: Skeptics often point to the treatment given to Galileo and Copernicus troubled by the Church wherein they were forced to recant their scientific theories (which we now believe to be true). Certainly, the Church has erred (and Christianity would say because churches are run by fallen men). Despite this, one can argue that science really was nurtured in the womb of Christianity.

For example, it is worth asking why modern science grew up almost entirely in the West, where Christian thinking held sway? There were civilizations of comparable stability, prosperity, and in many cases technology, in China, Japan, and India. Ian Hutchinson [4] argues it was precisely the *theology* of Christianity which created that fertile intellectual environment. He argues that it is precisely the teaching that "the world is the creation of a rational Creator, worthy of study on its own merits because it is good, and the belief that because our minds are in the image of the creator, we are capable of understanding the creation."

- f) Christians cause enormous problems: Skeptics often point to the Crusades -- or to the so-called Christian atrocities in say Lebanon. But anything good can be corrupted. It's the very nature of the thing. If some people are bulimic it is not follow that food is inherently bad. Further for every bad example, there are plenty of good examples. Christians began the first hospitals, started hospices, and feeding the poor. Further, there is an extant of sacrifice in some Christian examples that cannot simply be dismissed as "doing good to feel good." Consider for example, Mother Theresa's work among the dying in Calcutta or Father Damien's work among the lepers (he eventually became one himself). There is something in this notion of sacrificial love that I believe appeals to the heart (if not the mind) of modern man.
- g) Christianity's claim of Exclusivity is Intolerable: The criticism often refers to Jesus's statement that "No man comes to the Father except through me." This is certainly a "hard" teaching especially when one does not accept Christianity but perhaps some of the difficulty arises because we are used to thinking of religion as a matter of taste, as in the clothes we choose or the foods we like. I would certainly think it intolerable and intolerant if someone to say that broccoli was the only vegetable worth eating especially because I prefer green beans. On the other hand, imagine a house on fire in which all the windows are covered with smoke except the kitchen window. We would not think a fireman intolerant if he shouts to the people trapped inside the house that the kitchen window is the only way out. Similarly, we do not think a scientist is intolerant if he or she strongly believes in a theory and feels that opposing theories are wrong. The question then is not whether Christianity is intolerant in this sense but whether it is right or wrong.
- g) **Christianity is an opiate**: Karl Marx suggested that religion is the "opium of the masses". The implication seems to be that Christianity is a drug that keeps the masses from realizing their misery, that it is a form of escapism. However, the Christianity of the Bible is far more robust. Jesus invites his followers to count the cost, and pick up their own cross, to face suffering cheerfully. Far from being an opiate, Christianity claims to help a person to deal with hard facts and even death. If one wanted to be controversial, one could even turn this argument around and argue that atheism is an opiate that avoids looking at the certainty of death.

Henry Schafer [2] provides some examples of scientists on their deathbed:

The first is Lev Landau, the most brilliant Soviet physicist of this century and an atheist.

"When there was practically no chance he could be saved and a friend entered his ward, Landau was lying on his side with his face turned to the wall. He turned his head, and said, "Kollat, please save me." Those were his last words. He died that night."

Contrast the end of his life with that of the physicist and Christian, Michael Faraday. Faraday was close to death. A friend and well—wisher came by and said, "Sir Michael, what speculations have you now?" This friend was trying to introduce some levity into the situation. Faraday's career had consisted of making speculations about science and then he would dash into the laboratory to either prove or disprove them. It was a reasonable thing to say.

Faraday took it very seriously. He replied: Speculations, man, I have none. I have certainties. I thank God that I don't rest my dying head upon speculations for "I know whom I have believed and am persuaded that he is able to keep that which I've committed unto him against that day."

On a personal note, I cannot pretend that these are the arguments that swayed me though in retrospect they help me. I believe ultimately, because I have found Christianity is real in my personal experience. I believe because of appointments with people and events in my life that seem so implausible could happen by chance. I still remember a study where we first studied the gospel of John and we reached John 3 and I suddenly realized that Christianity was not just following the moral teachings of Jesus. I still remember how after getting bad grades at my undergraduate college in India I met a well known professor in a men's restroom and whose recommendation took me to MIT! When the coincidences pile up, one begins to wonder.

I believe again because of God's answers to prayer. Both my sons have had mysterious illnesses seemed to go away in answer to prayer. When Tim was 3 he had an attack of breathing trouble that even after the ER gave him medicine would not go away and we almost went back but decided to stay and pray and they went away, Andrew had mysterious headaches and well meaning friends were recommending strong measures. I remember praying and they went away. Clearly, not all my prayers have been answered but enough have for me to find it hard to dismiss them as wishful thinking. I believe finally because of guidance. In the major decisions of my life including my marriage I have felt a strong sense of guidance and these decisions appear to have been confirmed in their rightness after the fact.

For the skeptic, I would say that the way forward is not the way of mathematics, through a formal proof. The arguments above can only be plausibility arguments --- at best. To my mind, the best way forward is indeed like a scientist, by experiment. My definition of the Christian experiment is to read the Bible, to consider praying to Jesus (if Jesus is indeed God, it is a logical thing to do) and asking Him to prove himself real by intervention, answered prayer, and guidance. The Bible encourages such testable and questioning faith with exhortations such as "Seek and you shall find".

Pascal casts this invitation to the Christian experiment in the form of optimal decision theory in his famous wager. Suppose, there is some probability (say 10%) that Christianity is true. Then with probability 10% after death, the Christian reward is infinite (Christianity teaches that men will live forever after death). With probability 90%, even if Heaven does not exist, the reward is still positive (because Christianity encourages you to live a good life that has other benefits in terms of say a stable marriage, sober habits, etc.) or at the very least some finite negative benefit. However, the overall expectation (in the sense of probability theory) is infinite. Note that agnosticism is included in the argument because the agnostic (as William James pointed out) *implicitly decides* when he dies.

But Jesus, really the central figure in the Bible, put in even more simply when he said to Nathaniel: "Come and see".

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References

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- [2] Faith of the Fatherless: The Psychology of Atheism, Paul Vick, Spence Publishing
- [3] *Scientists and Their Gods*, Henry Schaefer. For 18 years Dr. Schaefer was a faculty member at the University of California at Berkeley, where he remains Professor of Chemistry, Emeritus. http://www.leaderu.com/offices/schaefer/docs/scientists.html
- [4] *James Clerk Maxwell and the Christian Proposition*, Ian Hutchinson, MIT IAP Seminar: The Faith of Great Scientists, Jan 1998, 2006 http://silas.psfc.mit.edu/maxwell. Hutchinson is a professor of Plasma Physics at MIT.
- [5] Journey to the Cross, Helen Haidle, Zonderkidz (I got this from my 7 year old!)
- [6] Know Why you Believe, Paul Little, InterVarsity Press