Conundrum Matrix of Technological Advances Challenging Christian Faith in the Modern World
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Abstract: With the advancement in technology, human beings are continuously finding strength and confidence in themselves and their achievements rather than in growing faith in God. This situation finds that several religious beliefs are being continuously challenged. One such technological advancement that caused worldwide scientific, religious and ethical debate was the birth of Dolly the Sheep who was born through an asexual process. The sheep clone and the accompanying technology received widespread and varied discussions within the church and from other religions. Though technology is not opposed to religion, it has raised debate on some of the abilities it has come with. The authors of this paper look into some of the significant debates on the conflict between Christian faith and technology. For example, a survey by the University of Chicago revealed that, as at 2010, 18% of Americans did not have a religious affiliation, a phenomenon that was attributed to an increase in the use of the Internet. The paper will discuss cloning, space exploration and the Internet to demonstrate how advances in technology are challenging faith. The Church has a well spelt structure and mostly her opinions get much attention over other religions. This report will therefore highly refer to Christian teachings on various elements of technology such as cloning, space exploration and the Internet as discussed herein.

Keywords: Conundrum Matrix, Technological Advancement, Modern world

INTRODUCTION
Technology is defined as the application of scientific knowledge to meet human needs or solve human problems. On the other hand, faith is defined as the belief without proof. In the Holy Bible, faith is described as the confidence in what one hopes and the assurance of things not seen (Hebrews 11:1). Technology therefore is meant to make human life easier without demeaning the role of faith to humans. Despite these differences however, the two have found a ground for battle due to conflicting opinions. On one side, technology offers a solution to human problem but faith could find such inventions against the teachings of the religion in question. Technology results from discovery while faith is purely a matter of believing. According to the description of faith given in Hebrews, faith only involves believing in things unknown to the believer. On the other hand, technology is tangible and can be described as scientifically factual, real and existing. The conflict that arises between faith and technology at times could be attributed to the above difference. Whereas faith believes, technology knows. The Galileo Affair proved that faith does not present facts, but only comes in to fill the space that is left because of not knowing. Richard Dawkins called this the worship of gaps [1]. Since the Galileo controversy, the relationship between faith and technology has changed greatly. In this paper, the author will discuss cloning, space exploration, the Internet and how they have affected faith in God, especially owing to the fact that most faiths believe that God is the source of all knowledge and that man cannot invent anything unlike it is the will of God.

Cloning
Before the 1997 breakthrough, experiments had been going on since the 1930s to produce identical organisms through artificial replication of DNA [2]. Before 1997 however, Jerry Hall and Robert Stilman raised controversy after they published a report that they had split human embryos [3]. The two had not sought prior authorization from the relevant ethics committees but they said that they had done that on purpose in order to trigger the controversy and debate. The issue of cloning became a reality in 1997 after two Scottish Scientists, Ian Vilmut and K.H.S Campbell, witnessed the success of their experiment through the birth of Dolly the Sheep. The impact of the news was unusual, controversial and to some extent shocking. A number of people and

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authorities tried to air their opinions in their line of expertise. Various statements were issued raising more confusion on what to be termed as reliable and what was driven by blind expression of own opinions. There arose concerns on the unforeseen effects of cloning such as having an organism with extreme and uncontrollable abilities through mutation [4]. In the midst of the debate on cloning, the Church was consolidating its stand against such a technology with the argument that it was against the Church canon on respect to human life.

The church however agreed to the freedom of research though held the opinion that such research should not negate the will of God and should also respect God as the creator of humans and source of all life. The Church through their website; www.vatican.va, published the church statement on the matter. One of the concerns from the church was what would happen to the new human being created through cloning because according to the church, the human clone would not have a soul. The church argues that the soul can only originate from God as it happened in Genesis 2:7 and that man is incapable to create a soul. The church therefore wonders what a human body without soul would be like. Matthew 10:28 tells Christians not to fear men who can destroy the body but cannot destroy the soul, but only to fear God who is able to destroy both the body and the soul. God is therefore the only one able to create and destroy the human soul. Man cannot. With this argument, the church therefore ruled out the possibility of a human clone being complete. There was also the ethical question of demeaning women.

The church argues that an attempt to accept the cloning of humans would reduce women to the role of embryo and womb donors for the purpose of scientific experiments [5]. In 1997 after the birth of Dolly, Father William Saunders argued that even though humans may have technology to do a thing, they do not have to do the thing [6]. Neither did they have the moral right to do that thing which the technology enables them to do. Concerning cloning, Father Saunders quoted the 'Domum Vitae', which is the church doctrine that teaches on the respect to human life and its origin. According to the church canon, it is wrong to clone humans because they were created in the image of God and should therefore be treated with dignity above other creations (Genesis 1:27). The Jewish religion and Islam however give room for experiments with human embryo because the two religions unlike the strong stand by the Church, do not regard an embryo as a human being that can enjoy human rights [7]. Other conservatives such as the Southern Baptists support the Church stand on cloning. Other religions such as Buddhism have not given any formal stand on the issue of cloning.

In 2012, a research by Pew Research Center found out that 4 out of 5 people are opposed to cloning of humans [8]. Only 1 out 4 s and 1 out of 3 Protestants cited their religious faith as the reason for opposing cloning. Despite the church being strongly opposed to cloning, the church adherents do not use the church argument as their reason for being opposed to cloning. It therefore follows that the decision on whether to clone humans or not to will likely come from logical reasoning through forums such as Legislative Houses, Ethics Committees, international bodies and through stakeholder conferences. The Figure 1 below shows Dolly the sheep as presented by Professor Ian Wilmut.
Maiden Trip to the Moon and Space Exploration

The landing on the moon in 1969 by NASA team had the world excited. Approximately 500 million people worldwide watched the live streaming from space. The Church was also excited to receive the news of man's successful landing on the moon. The way the church received this information was different from the way it received Galileo's discover in the 1600s. The then Roman Pope, Pope Paul VI, personally congratulated Neil Armstrong and described the Apollo II mission to the moon as “one giant leap for humankind” [9]. In 1633, the church had found Galileo guilty of heresy and imprisoned him but in 1969 the same church authorities that were opposed to Galileo's science was receptive of the NASA successful landing to the moon [10]. After the Galileo Affair, the church was highly criticized which led to major reforms within the church that allowed for a close relationship between Science and the church. Institutions such as the Pontifical Academy of Sciences were established to set a platform to accommodate science into the church doctrine. Such changes within the church may have led to the warm reception that the astronauts received within the church. After the successful landing, the News Service (CNS) reported the news with open excitement through headlines such as “Monks Sing Space Hymn” and “Pope Hails Astronauts as Conquerors of the Moon” [11]. In the US s gave the event special attention during mass including the famous "Lunar Prayer" by Cardinal Richard Cushing of Boston. The Figure 2 below shows American astronaut Edwin (“Buzz”) Aldrin walking on the Moon, July 20

![Image of astronaut walking on the moon](image)

**Fig–2:** United States of America Astronaut Edwin (“Buzz”) Aldrin walking on the Moon as depicted in the diagram above

Not all voices within the church were however happy with the NASA achievement. In August 1969, the then New Zealand Cardinal, Peter McKeefry expressed his concerns on the relationship between technology and morals. He was in agreement with Karl Rahner, a Jesuit priest, in that the two did not see why billions would be spent to send men to the moon while human beings were dying elsewhere due to hunger and other sufferings [12]. In a private meeting with the astronauts, the Pope described the achievement has having been possible through God-given intelligence. The church did not have reservations to this maiden trip to the moon because it did not negate any of her teachings unlike in the Galileo case.

Through various reforms, the church has been able to stay technologically updated and is able to revise her canons to reflect the changes especially in areas where such technological advances are not in conflict with church values [13]. The church has therefore been able to openly accept further space exploration without taking a hard line position. For example in 2011, Mark Kelly who was born a , went on a mission to the International Space Station (ISS) and before the
departure he talked with Pope Benedict XVI about how space exploration was fascinating and adventurous [14]. Kelly is the main character in the NASA experiment on how space life could affect someone's life. Kelly's brother was left on earth as a control experiment. Earlier in 1994, Thomas Jones, Kevin Chilton and Sidney Gutierrez, all s, celebrated Holy Eucharist in space. Amidst the positive reception of space exploration by the Church, there have been dilemmas on actual practice of the faith in space. For example, questions have arisen on how wine would be kept in the chalice, cleansing of the chalice, kneeling, use of candles, determination of dates, and compass directions among other such factors. Despite the puzzles however, Pew Research Center found out that almost half of born-again Christians were optimistic that evidence of life will be discovered elsewhere in the universe by 2050 [15]. The church rejects the cloning technology but accepts the space exploration. Cloning is against the church canon on respect of human life but space exploration does not negate the moral teachings of the church. The church can therefore be seen to reject technologies that go against her teachings while she embraces those that agree with the church doctrine and practice.

The Figure 3 below shows the perceived implications of the discovery of extra-terrestrial life for religion and Christians in particular.

Fig-3: The implications of the discovery of extra-terrestrial life for religion (Peters, T. 2011).

The Internet and Loss of Faith

The increase in the use of Internet since the 1990s has led to a significant drop in the number of US citizens who pledge allegiance to a religion [16]. The findings by the General Social Survey carried out by the University of Chicago show that 18% of the US population in 2010 did not have a religious preference unlike in 1990 when this figure was only 8%. Despite the challenges posed by the use of the Internet, the Church describes the Internet as a marvellous invention that has done much to meet human needs and has potential to meet even more [17]. The church has embraced the use of the Internet in a number of her processes such as communication but condemns its abuse through activities such as pornography and incitement of violence.

The case of the collapse of the tower of Babel in Genesis 11:1-9 can be interpreted to mean that human ambitions and inventions that go against the will of God will eventually fail. Those that remain the test of time therefore the church accepts as will of God. It is what happened with the Galileo Affair. On the other hand, Muslim hard liners have issued tough fatwas against the use of Internet services such as chatting and the use of Quran verses as ring tones terming such a
move as disrespectful. A research by Ipsos has however revealed that the United Arab Emirates leads the world in terms of Internet penetration at 61% despite it being dominated by Muslims [18]. The Figure 4 below shows the internet usage in the Middle East (Arab) and African countries.

![Internet users in MEA](image)

**Fig-4: Internet penetration in the Middle East and African countries. (Source: UAE National Media Council)**

More than a third of the Middle East population use the Internet a figure that is already higher than the world average. The young Muslims use the Internet to challenge traditional views and to challenge the achievements of the West [19]. They also use the Internet as a platform to challenge religious doctrines in the light of more knowledge and new research. Despite the opposition by traditions of the faith, the Internet has proved a strong force that will not be stopped by faith.

**CONCLUSION**

Technology and faith have at times agreed and other times conflicted. For example, the success of the cloning technology received strong opposition from the church with argument that it disrespected human life and its origin. There also have been ethical debates on the morality of the process itself. The Church has staged a strong opposition to the technology though adherents to the church themselves do not quote the church teachings as their reason for opposing cloning especially of humans. The church has also argued about the inability of man to create the soul, which gives life to humans. Away from the church opposition, scientists have raised their concerns on the possible effects of mutation on the cloned organism. There is still no consensus on the way forward but through high-level discussions, there is hope for a breakthrough in the debate. Regarding space exploration, there has been little opposition to the technology from the church. On the usage of the Internet, there has been mixed reactions with the Muslim hard liners opposed to the adoption of the Internet while the church has varying opinions depending on what the Internet is used for. After examination of the above three examples of interaction between technology and faith, it appears that technology has always overpowered faith and often faith had to compromise its stand to pave way for the advance of technology. In future therefore, it appears that technology may change faith from the way the world knows it today to something else.

**REFERENCES**

2. Healey JS, Connolly SJ. Atrial fibrillation: hypertension as a causative agent, risk factor for