Current Perspectives on Science and Faith in Tanzania

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Abstract
Tanzania, in East Africa, is one of the world’s least developed nations. However, there is gradual progress in the area of science and technology. This together with globalization, and the influence of the internet is naturally having an effect on the world view of Tanzanians. At St. John’s University of Tanzania (SJUT) located in Dodoma, Tanzania, the interaction between science, theology and culture is a new area of interest in education and research. Therefore, in order to better understand current beliefs regarding the relationship between science and religious faith a survey was carried out on Tanzanian staff and students at SJUT. The results, discussion and conclusions, written from a Christian perspective, give a helpful guide to “Current Perspectives on Science and Faith in Tanzania”. The present study estimated that 80% of educated Tanzanians believe science and religious faith are compatible, however, most of these have difficulty harmonizing apparent conflict. Where appropriate in this paper reasoning is given to reveal the complementary nature of science and religious faith. From the results of this survey there is clearly opportunity and interest for education in the interaction between science and theology in Tanzania.

Introduction
Tanzania, in East Africa, is one of the world’s least developed nations. The Human Development Index is 0.466, making it the 152nd out of 187 countries in 2011 (UNDP). Tanzanians and Africans in general are well known for being religious (Mbiti 1989, 1). Spiritism continues to have a strong hold on Christians (and Muslims) because African traditional beliefs permeate all parts of life from family to the community and political life (Matonya 2008, 1-23). The Tanzanian census has not included a religious survey since 1967, because it is a sensitive issue, so statistics on religion are vague and variable (International Religious Freedom Report 2007). In general an estimate of 30% Christian, 35% Muslim and 35% African Traditional Religions (ATR) is usually given (CIA World Factbook: Tanzania). In the constitution of Tanzania there is freedom of religion and people are free to change religion or faith (Tanzanian Constitution). A Public Servant can become a member of any religious sect provided that they do not contravene the existing laws (Code of Ethics). However, since the government has no religion (it is secular) (Ndaluka 2012, 107), religious beliefs should not be advocated in Public Service Offices.

SJUT located in Dodoma, the capital of Tanzania, was started by the Anglican Church of Tanzania in 2007 and has the vision “to be a centre of excellence for developing humankind holistically to learn to serve”. In the increasingly important field of science and religion (McGrath 2010, 1-5) the interaction between science, theology and culture is a growing area of interest at SJUT. This is made even more relevant by the Tanzanian government recognizing the significance of science and technology for development (Ministry of Communication, Science and Technology). Globalization, especially with the internet, and increased development through advances in science and technology make the interface between science, theology and culture an important area to be thinking about critically.

The content of this paper is the outcome of a survey of Tanzanian staff and students at SJUT developed in order to better understand current beliefs regarding the relationship between science and religious faith. The purpose of this preliminary study was to lay the groundwork for potential future research and education in the area of science, theology and culture and for an optional course “Science, Faith and Culture” within the Faculty of Natural and Applied Science at SJUT. This paper is written from the perspective of a committed Christian who is lecturing within the Science Faculty at SJUT.
The Survey
The survey had two components: a written questionnaire (there was no compulsion to return) and interviews with a small subset of the respondents. The questionnaire comprised five multiple choice questions with a space for a comment or to give an example if desired. There were just over one hundred who gave feedback (not all questions were answered in each case, but there were at least one hundred responses to each question). In the interview component twelve staff and students were asked some follow-up questions which opened up discussion. Table 1 gives details of the survey respondents.

The surveyed group consists of a diverse set of educated people (educated being broadly defined as ‘completed secondary school’) in Tanzania. In the results listed below, for each multiple-choice question, the percentage of respondents who chose each answer is given, together with a selection of comments connected with the question. The opinions in the discussion that follows come from considering the general agreement of those interviewed and also comments on the returned questionnaires. Within the discussion the harmony between science and religious faith is taught.

Table 1: Survey Respondents

<table>
<thead>
<tr>
<th>Questionnaire</th>
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<tbody>
<tr>
<td>Discipline</td>
</tr>
<tr>
<td>- 50% Science staff and students</td>
</tr>
<tr>
<td>- 50% Theology, Humanities, Nursing, Business staff and students</td>
</tr>
<tr>
<td>Religion</td>
</tr>
<tr>
<td>- 93% Christian (1/3rd Roman Catholic, closely followed by Anglicans and Lutherans and smaller numbers of Pentecostals, Moravians, Menonites and Seventh Day Adventists)</td>
</tr>
<tr>
<td>- 7% Muslim</td>
</tr>
<tr>
<td>Tribes</td>
</tr>
<tr>
<td>- At least 32 tribal groups out of the more than 120 tribes in Tanzania were represented</td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>- 90% Male</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Interview</th>
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<tbody>
<tr>
<td>Disciplines</td>
</tr>
<tr>
<td>- 4 Theology (3 Staff and 1 MA student)</td>
</tr>
<tr>
<td>- 7 Science (4 Staff and 3 BSc Ed students)</td>
</tr>
<tr>
<td>- 1 Humanities staff</td>
</tr>
<tr>
<td>Religion</td>
</tr>
<tr>
<td>- 9 Christian</td>
</tr>
<tr>
<td>- 3 Muslim</td>
</tr>
</tbody>
</table>

Results and Discussion

*God’s Interaction with the Natural World*

1) Questionnaire
Question 1: Which of the following statements most closely states your belief for how God interacts with the natural world?
Table 2: Answers to Question 1

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  God is Creator, but He is distant, and events in the world are determined entirely by the interaction of supernatural forces (spirits, divinities)</td>
<td>22</td>
</tr>
<tr>
<td>B  God is constantly active in the world as Creator and Sustainer</td>
<td>77</td>
</tr>
<tr>
<td>C  There is no God or any spiritual dimension to life and in time science will explain everything</td>
<td>0</td>
</tr>
<tr>
<td>D  God is Creator, but He is distant and not active in the world</td>
<td>1</td>
</tr>
</tbody>
</table>

2) Sample Comments

(a) Comments by respondents choosing answer A
   • People believe in divinities and spirits
   • About 3/4 of events we daily come across are influenced by supernatural forces and about 1/4 are under God’s influence
   • The world can be seen and touched, but God is far away and can’t be touched
   • Based on ATR it is believed that for people to interact with God there must be mediators (spirits, divinities) for them to have influence and there is no direct relationship to God
   • All events in the world are determined by the Holy Spirit
   • God brought the Holy Spirit to assist us

(b) Comments by respondents choosing answer B
   • God is everything in the world
   • We all depend on God’s power to be sustained
   • God is almighty, He is above all things
   • God is omnipotent
   • How do living things operate so systematically throughout life? Who coordinates their systems? Who coordinates living and non-living things?
   • I believe that God is Creator and omnipresent, this means he is present everywhere in the world because without God nothing could be in this world

3) Discussion

Christians affirm that God is the first cause of the universe as Creator, the first cause that introduces novelty into the world, and the first cause of the sustaining of the world (Day 2009). God is the agent that makes these events possible and so is constantly active in the world as Creator and Sustainer. Creator: Gen 1:1 – In the beginning God created the heavens and the earth; Col 1:16 – For by him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things were created by him and for him. Sustainer: Job 12:10 – In his hand is the life of every creature and the breath of all mankind; Heb 1:3 – The Son is the radiance of God’s glory and the exact representation of his being, sustaining all things by his powerful word.

God may choose to achieve his creating and sustaining activities supernaturally (“directly”), or through secondary causes which we might call natural processes. To distinguish between “natural” and “supernatural” events is not easy, but the distinction is not important as God works continuously in the world; whether he does so by natural “seeming” or supernatural “seeming” processes is a secondary issue. Therefore, it is best to acknowledge that God is Creator and Sustainer of all things, regardless of whatever mechanisms may or may not be identified for that action.

In the well-known book by Professor John Mbiti “African Religions and Philosophy” (Mbiti 1989, 39-43) it is understood that traditionally all over Africa God is acknowledged as Creator and Sustainer. Thus, God is involved in the affairs of mankind and people experience this in his continuing to create and sustain. However, the work of creating and sustaining is generally thought to be performed by divinities (personifications of God’s activities)
(Mbiti 1989, 74-89). Rev. Moses Matonya in his book “Real Power: Jesus Christ’s Authority over the Spirits”, informs us of the beliefs of several Bantu ethnic groups in Tanzania (Matonya 2008, 1-3). These tribes believe that God is in the remote places in the heavens and he has granted power to certain spirits so they can direct and control human life on God’s behalf. Followers of African Traditional Religions regard God as distant from people because he is morally good and does not want to live near immoral human beings and so many Africans believe they can only approach God through the mediation of spirits. Furthermore, followers of ATR do not see spiritism as an evil and primitive practice, but rather as a search for power to meet goals in life.

The people interviewed supported the result in Table 1 emphasizing that the majority of Christians and Muslims in Tanzania would select ‘B’ for question 1, believing that God is constantly active in the world as Creator and Sustainer. Furthermore, it was said that this statistic could be extended to include the uneducated people (uneducated being broadly defined as ‘no or incomplete school education’) of Tanzania. However, in villages where there are no schools/churches/mosques and so no religious education an increasing number answering ‘A’ would be expected. The answer ‘A’ was expected from those who follow African Traditional Religions (ATR): God is far off and has assigned divinities for day to day matters and there is respect for the ancestor spirits. Further, God is far off in that he does not respond. Interestingly a few people who selected ‘A’ commented that God sent his Holy Spirit to assist us. This could be the Tanzanian tendency to spiritism or it could be a lack of understanding of the Trinity or a mixture of both (i.e. separation of God and the Holy Spirit). Significantly nobody put ‘C’: “there is no God or any spiritual dimension to life and in time science will explain everything”.

From discussions with the people interviewed in this survey it is apparent that the number of Christians and Muslims with at least a nominal profession (of their own faith) is increasing and there may now be only about 10% or less of the population who openly follow African Traditional Religions. However, some villages still completely follow traditional beliefs, for example the Hadzabe tribal group living around Lake Eyasi to the south of the Ngorongoro Conservation Area in north-central Tanzania (Marlowe 2004, 366-367). Although the number of African traditional believers is gradually decreasing with people converting to Islam or Christianity, spiritism is still very much part of the Tanzanian culture. (Similarly Christians in the West are very much affected by secularism). Therefore, there is syncretism to different extents with Islam and Christianity (people still dabble in spiritism). One Tanzanian theologian interviewed maintained “Christianity and Islam is only skin deep”, while others interviewed suggested that the struggle with spiritism is more an issue for the older generation who were brought up in ATR surroundings.

Many Tanzanian Muslims and Christians fall back on traditional beliefs when difficulties arrive e.g. illness, drought, difficulty conceiving. Something is causing these difficulties so they go back to the traditional healer: witchdoctor, mediator. With difficulties Jesus Christ is not enough and God far away. Another reason for returning to traditional beliefs is for good fortune e.g. job promotion, good exam results, wealth, status. Church leaders, those in government, teachers have all been known to return to traditional beliefs and practices. African theology needs to address Christianity in the context of the people and needs to be made relevant and address issues of the people.

Even with immoral behaviour Tanzanian people still keep their religious beliefs. This immoral behaviour is not helped by the internet, with an increase in pornography, prostitution and drugs. Young people are drawn away from the church by the television and internet. There is also a greater drive to get wealthy and an increase in lack of respect and listening to elders. However, virtually no Tanzanian would say “there is no God”. On the other hand there are also many positive effects of the internet. One of these is that young people have a lot sharper and questioning minds.

**Relationship between Science and Religious Faith**

1) Questionnaire
Question 2: Which of the following statements most closely states your position on the relationship between science and religious faith?
Table 3: Answers to Question 2

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  Science and religious faith are incompatible</td>
<td>17</td>
</tr>
<tr>
<td>B  Science and religious faith are compatible, but there appears to be conflict because some modern scientific findings conflict with a literal interpretation of the Bible</td>
<td>73</td>
</tr>
<tr>
<td>C  Science is both irrelevant and dangerous to religious faith</td>
<td>3</td>
</tr>
<tr>
<td>D  Science and religious faith are compatible. There is no conflict between them.</td>
<td>7</td>
</tr>
<tr>
<td>E  Both science and religious faith should be rejected</td>
<td>0</td>
</tr>
</tbody>
</table>

2) Sample Comments
(a) Comments by respondents choosing answer A
   • Religious faith is seriously undermined by scientific arguments, especially from biological sciences.
   • Scientific explanations on biological evolution and the big bang theory are totally incompatible with religious faith
   • Scientists believe humans are created biologically while the Bible believes humans have been created by God
(b) Comments by respondents choosing answer B
   • Different views to some issues bring conflict: creation and evolution
   • Modern science is ethically wrong - abortion, test tube babies
   • Some events (miracles) by God cannot be explained scientifically
   • Because findings in science tend to provide doubt and questions to people. Scientific research tries to keep away from God as Creator
   • They are compatible though sometimes conflicting e.g. human embryo cloning is against religious faith
   • For example the theory of evolution and the origin of life
   • Scientists do not believe God. Scientists believe that the new born organism is the results of the fusion of female and male gametes, while Theologians do not believe this
(c) Comments by respondents choosing answer C
   • Science is dangerous to religious faith because most scientific findings are considered to be opposite to religious faith hence it challenges religious faith
(d) Comments by respondents choosing answer D
   • God himself is the great scientist
   • If there are some differences it is due to human mistakes

3) Discussion
Science and religious faith are compatible; they are just two complementary views of reality (Day 2009). Knowledge can be obtained from the scientific method and religious experience and the two complement each other. Knowledge is not just obtained from what we can observe (i.e. the scientific method). Science is concerned with “how” and “when” questions (by observation and experiment) and faith asks “why” and “who” questions – different, but complementary approaches to reality. Science generates “why” questions, but cannot answer them – science needs theology for a full explanation. Conflict is brought about by using a wrong interpretation/understanding by either a scientist or theologian (e.g. Scientism and Biblical literalism) or by blaming science for the unethical and immoral use of science by man. There are cases where we do not understand fully God’s mechanism of action and this brings seeming conflict (e.g. gaps in evolution record). God created the universe which includes science so there can be no incompatibility between science and religious faith or any ‘real’ conflict.
Again the interviews supported the result of the questionnaire, interviewees agreeing with a 73% choice of answer of science and religious faith, but there is apparent conflict. However, the areas of apparent conflict that were brought out in this answer were not only the failure to harmonize science and theology e.g. in the creation/evolution debate (especially the origin of man) and miracles. There were also comments referring to the ethical conflict, like abortion, test tube babies, anonymous sperm and egg donors and the views of atheist scientists who don’t acknowledge a Creator God. Clearly, as already stated, there has been much conflict by either considering a wrong interpretation/understanding by a scientist or theologian or the unethical and immoral use of science by man. Science is part of God’s creation and reveals the glory of God and is compatible with religious faith and there is no ‘real’ conflict between them. Only 7% chose answer ‘D’ “Science and religious faith are compatible. There is no conflict between them.”

It appears that in Tanzania there is very little discussion of the interaction between science and theology. Many schools, especially government schools (remember the Tanzanian government has “no religion”), treat science and religion as separate topics and not related (teachers stick to the syllabus set by the government). Also in church when it is relevant the preacher would rarely link theology with science. Many questions are left unanswered. There are a few enthusiastic teachers and preachers who have some knowledge in the area of science and religious belief who try and relate the two, but in general there is a lack of education in this area. It is not unusal for some school teachers to say “don’t let your science education interfere with your religion”. This results in most people completely separating science and theology as different entities. Furthermore, in Tanzania there are no centres like “The Faraday Institute for Science and Religion” in England, which as well as conducting research also engages in the public understanding of science and religion by means of courses, conferences, lectures, seminars and the media.

An undergraduate science student commented “people may believe they are compatible, but when it comes to conflicting issues they will believe religion over science - at these points of conflict science is going against God”. There is a concern that many church preachers do not connect with everyday life (how does science relate to faith in everyday life?). This leads young people in particular to searching the internet for answers and often being misled. At most schools the science subject is only taught as a discipline with no Christian foundation. Clearly there is a niche for education on the interaction between science and theology.

The uneducated obviously have little or no knowledge of science and will not think about connecting science and religious faith. Many uneducated people will relate good things from science: tractors, radios, cars, medicine, development, and often relate science to the ‘clever white person’, however, there will be others who regard scientists as against God (opposing religious views). Thus, relative to educated people it is expected that the uneducated would choose more of answers ‘A’ and ‘C’.

It is important to be mindful of the material poverty in Tanzania; most Tanzanians (including university staff) have foremost on their minds ‘finances’, how they will support their family and where their next meal will come from. So being engaged in the interaction between science and theology could be seen to many as abstract and not important to their real needs.

Can Science Prove God?

1) Questionnaire

Question 3: Do you agree with the statement “Science can prove God”?

<table>
<thead>
<tr>
<th>Table 4: Answers to Question 3</th>
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</thead>
<tbody>
<tr>
<td><strong>Answer</strong></td>
</tr>
<tr>
<td>A Yes</td>
</tr>
<tr>
<td>B No</td>
</tr>
</tbody>
</table>

2) Sample Comments
(a) Comments by respondents choosing answer A
• Where science ends God starts, science proves God in Creation
• Science can prove God, because there are some events/results which scientists have failed to account their origin
• How do living things operate so systematically throughout life? Who coordinates their systems? Who coordinates living and non-living things?
• Science proves God when scientists appreciate the creation of human beings by God
• It is true that science can prove God for example all medicines which we use for treatment are made from the trees and the trees are the consequences of creation
• Science can make many things, but not man, which God can. This proves God
(b) Comments by respondents choosing answer B
• God is the source of everything, including science, therefore it is impossible for science to prove almighty God
• Science reaches a point where it cannot explain some phenomena
• Science cannot prove God because it is mostly against the presence of God
• There is no critical evidence that science can prove God
• Science cannot prove God because all science has been created by God himself
• This is because science deals with facts, hence it cannot prove spiritual ideas like the existence of God
• The presence of God can’t be proved by scientific procedures
• God is creator who is not seen by the naked eye, hence cannot be proved scientifically, it is a spiritual matter
• Science cannot prove God since science needs observation, testing hypothesis, and making generalization after testing hypothesis
• Science deals with natural things, thus you can observe, hypothesis, test and touch, while religions deal with faith
• God is not a mathematical quantity or empirical which can be proven in the laboratory

3) Discussion
Science only deals with the natural world and God is supernatural, you cannot use science to study anything other than the natural world (Poole 2007, 90-91). Thus, science cannot prove God. Science is knowledge of the world obtained by the scientific method. Science is limited by the methods it uses, the questions it can answer and the types of explanation it gives. Science can deal with spectral wavelengths, but not the beauty of a sunset. Also science cannot tell us whether courses of action are right or wrong, their likely consequences. From those who gave a “no” answer and supplied comments it appears they generally have this understanding.

From those who gave ‘yes’ answers and gave comments it seems they are following either a ‘Design’ argument or ‘God of the gaps’ argument. The intricate design of the universe does not prove God. God cannot be discovered by human reason and observation alone - Natural Theology (Day 2009). Ps 19:1 “The heavens declare the glory of God; the skies proclaim the work of his hands.” This is seen by the “worshipper” and does not prove God. Humanity is sinful and can “know” nothing of God except that which is revealed to him. The “God of the gaps” argument attributes anything that science cannot (yet) explain to God (i.e. God fills the gaps for the incompleteness in our knowledge). “God of the gaps” represents a mistaken concept of God, an inadequate view of God and reduces God to an ever-shrinking role in our understanding of the world. This is not the God of the Bible. God is ultimately responsible for all of nature and his actions are usually, though not always (miracles still exist), described by scientific laws discoverable by science.

Science raises many questions, but it cannot prove or disprove God. As Christians we acknowledge God “by faith”: Heb 11:3 “By faith we understand that the universe was formed at God’s command, so that what is seen was not made out of what was visible.”

Truth

1) Questionnaire
Question 4: Which of the following statements most closely states your position on “TRUTH”?

Table 5: Answers to Question 4

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Science is ‘all truth’</td>
<td>3</td>
</tr>
<tr>
<td>B. Theology is ‘all truth’</td>
<td>13</td>
</tr>
<tr>
<td>C. The interaction of science and theology reveals ‘one truth’</td>
<td>35</td>
</tr>
<tr>
<td>D. Science and theology give different views of reality – ‘different truths’ (in hindsight this answer would have been better put “Science and theology give ‘different truths’”)</td>
<td>49</td>
</tr>
</tbody>
</table>

2) Sample Comments
(a) Comments by respondents choosing answer A
   • Science is “all truth” because scientists prove by experiment in a laboratory, but in theology there is no proof, just supernatural forces, spirits and divinities
   • Science is all truth because it is well researched and deals with experiment, observation
(b) Comments by respondents choosing answer B
   • Because theology is the study of God and the universe
   • Because theology deals with religious beliefs
(c) Comments by respondents choosing answer C
   • Science is the continuation of God’s creativity
   • If you combine science and theology you have one truth
   • People need to be critical thinkers about science and theology
(d) Comments by respondents choosing answer D
   • The area of difference is about how the world and man came into reality (creation v evolution)
   • Truth from theology is quite different from the truth found in science
   • Because what is done and proven by science is quite different from what is done by faith (God)
   • They always contradict

3) Discussion
Truth finds its origins in God. American physicist Carl Sagan made the following statement “Cosmos is a Greek word for the order of the universe. It is, in a way, the opposite of chaos. It implies the deep interconnectedness of all things” (Sproul 2009). This is the grand presupposition of scientific inquiry, namely, that the universe we are seeking to know is coherent and there is rational order. There is an implied deep and profound interconnectedness of all things. If there is chaos, the opposite of cosmos, then science collapses and no scientific knowledge is possible. Thomas Aquinas said that there are certain truths that can be known through special revelation that are not discerned from investigation of the natural world, while at the same time there are certain truths learned from the study of nature that are not found, for example, in the Bible (Sproul 2009). One does not find the circulatory system of the human body clearly set forth in Scripture. Aquinas like Augustine made the fundamental point that “all truth is God’s truth, and that all truth meets at the top”.

There is seen to be one truth (Day 2009). Science and Faith are seen to present consistent answers to complementary questions - they are seen to be in dialogue. There have been times in history where the scientific community has corrected, not the Bible, but poor interpretations of the Bible, e.g. in the Galileo scandal (Sproul 2009). On the other hand, biblical revelation can act as intellectual brakes upon scientific theories that are groundless (e.g. misinterpretations of Darwinism). Science and religious faith do not give different truths (Day 2009). There is not a separate truth about nature and another unrelated truth about God. Both form a complete view of reality, different views of the same universal truth.
Therefore, science is not ‘all truth’ (answer A) and theology is not ‘all truth’ (answer B). They ask different questions. Scientific and theological explanations are not alternatives, but complementary forming ‘one truth’ (answer C). Those who chose answer D have the misunderstanding that science and theology give ‘different truths’ (creation and evolution was given as an example). How can there be conflicting truths in a cosmos?

Purpose of the Bible

1) Questionnaire

Question 5: If you are a Christian which of the following statements is your understanding for the purpose of the Bible?

Table 6: Answers to Question 5

<table>
<thead>
<tr>
<th>Answer</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A The Bible is concerned with who God is and who we are, and is not a scientific text</td>
<td>60</td>
</tr>
<tr>
<td>B The Bible is concerned with who God is and who we are, but can also be regarded as a scientific text</td>
<td>40</td>
</tr>
</tbody>
</table>

2) Sample Comments

(a) Comments by respondents choosing answer A

- The Bible explains about the history of God
- The Bible is a Holy book of Christian religion consisting of the Old Testament and New Testament, without being a scientific document
- This is because the Bible is a Holy Book which was written by the prophets with the help of the Holy Spirit. It does not express about science
- The Bible is where God’s revelation comes from and so the Bible is purposely mainly for spiritual matters and is not a scientific text
- The Bible was never intended to be a scientific text

(b) Comments by respondents choosing answer B

- The Bible has well stated scientific information
- It can be regarded as a scientific text because it is concerned with the creation of the world, human beings and the universe, as well as how human beings interact with the environment
- The Bible is a Holy book which is compiled of a list of things, including science
- Evidence like the operation of Adams rib to get his wife Eve, also the tower of Babel and Noah’s Ark prove the Bible as a scientific text

3) Discussion

Long before evidence of an ancient Earth was available early church Fathers such as Augustine (354-430 CE) and Origen (184/185-253/254 CE) interpreted the ‘days’ of Genesis differently and considered Gen 1-3 to be non-literal or allegorical (Poole 2007, 101-102). Galileo recognised the problem of geocentrism and maintained that Scripture does not teach science (Poole 2007, 71-85). The Bible refers to the created order, for example, in Ps 8, 19 and 136, but Galileo was upset about people who tried to force science, in this case astronomy, out of the Bible. Galileo quoted “The intention of the Holy Ghost is to teach us how one goes to heaven, not how heaven goes” (Galilei 1615).

The Bible is not a scientific textbook, but presents eternal truths in the language of the contemporary culture, cosmology (Day 2009). The Bible speaks of ultimate causes, not immediate (scientific) causes. Different questions are being raised and there is no conflict. Proper interpretation on the basis of good exegetic principles taking into account the literary genre, historical context and what the words and sentences mean in the language of the time, including cultural idioms, is an appropriate approach to the meaning of a passage. When this is done there is no need to assert that the Bible
is in conflict with modern scientific findings like the age of the earth or the origin of humanity. According to Galileo the Bible is written for the primary purpose of the service of God and the salvation of souls (Galilei 1615).

From the present survey most people appear to have understood in line with orthodox Christian teaching the purpose of the Bible (60%), however, a significant number (40%) also think it is a scientific text and this is emphasized clearly in their comments. They have taken a literal interpretation of the Bible without grasping its primary purpose or using good exegesis.

**Conclusion**

This paper provides a guide to “Current Perspectives on Science and Faith in Tanzania”. Tanzanians are very religious people, the majority (77%) recognizing God is constantly active in the world as Creator and Sustainer. However, there clearly remains a mixing of Christianity and Islam with African Traditional Religions. Furthermore, the negative influences from the internet are affecting society and expressed by increased immorality and decreased religious faith commitment.

The majority (80%) of educated people believe science and religious faith are compatible, but most have difficulty harmonizing apparent conflict. This emphasizes a need and great opportunity in education to teach how science and theology are complementary and not in conflict. In westernized church and educational institutions, science and theology are usually compartmentalized. It is vital in contemporary Christianity to address the real issues in life not least the challenges posed in the relationship between science and religious faith (also recognizing the very real issue of material poverty in Tanzania). The Bible speaks to all of our lives: our work, relationships, finances, health, studies, what we say, where we go, what we do, etc. Our whole lives in thought, word and deed should honour God and bring praise to his name. Thus, Christians should be concerned about how science and religion interact. The truth from science and the truth from theology must be seen to coincide as “one truth”. The complementary relationship between science and religious faith needs to be explained and made relevant to ordinary people, connecting with their everyday life. This will train us towards leading transformed lives (Rom 12:2) and living life in all its fullness (Jn 10:10), which is primarily achieved through the work of Jesus Christ.

**References**


Buchanan – “Science and Faith in Tanzania”


32 Tribal Groups in Survey: Gogo, Sukuma, Bugu, Nyakyusa, Nyiramba, Ngoni, Hehe, Zanaki, Hangaza, Nyamwezi, Meru, Chaga, Malila, Pare, Sambaa, Iraqw, Rangi, Ha, Pangwa, Bondei, Bena, Luo, Ndali, Kinga, Digo, Tutsi, Shirazi, Sandawe, Kaguru, Nyiha, Kurya, Haya.


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