

In the 1980 film, "The Gods Must Be Crazy," a Andrew Steyn, a Western PhD candidate researching Kalahari Desert wildlife, is faced with the problem of informing his African bushmen guide, N!xau, when N!xau's employment will end. The interpreter bluntly interjects: "He doesn't know from weeks."<sup>1</sup> Suddenly Andrew is brought face to face with the reality that the differences between Western and indigenous African culture are far deeper than simply clothing (or lack thereof [yikes!]) and what's on the menu tonight; far deeper than the structure of family or another day at the office. The differences are so great as to lead them to divergent views of something so fundamental, we may easily assume it must have a universally common understanding: the concept of *time*.

One's definition of time cannot be separated from one's definition of God. Religious traditions tend to view time in unique ways based upon their theological suppositions. Most understandings of time fall into one of two camps: sacred versus secular. Such conceptions have a direct affect on the way adherents approach the acquisition of knowledge about the nature of the world. In particular, Christianity has firmly upheld a secular concept of time which has made a profound impact upon the birth and development of modern science.

At its core sacred time is cyclical, consisting of never-ending sequences of renewal and dissolution.<sup>2</sup> Such a view presupposes the idea that time is eternal since it has no beginning and end.<sup>3</sup> As the name implies, sacred time is viewed as the embodiment of God or in some way connected with God • even one and the same. Therefore, God himself is bound in the endless cycles.<sup>4</sup> If time is eternal, than all points are connected; past, present, and future are

<sup>&</sup>lt;sup>1</sup> (Jamie Uys, Film: The Gods Must Be Crazy, Directed by Jamie Uys. Botswana, South Africa: Jamie Uys, 1980)

<sup>&</sup>lt;sup>2</sup> (Michael Molloy, Experiencing the World's Religions: Tradition, Challenge, and Change, 5<sup>th</sup> ed. (New York: McGraw-Hill, 2010), 43)

<sup>&</sup>lt;sup>3</sup> (Vishal Mangalwadi, When the New Age Gets Old. (Westmont: Inter-Varsity Press, 1992), 23)

<sup>&</sup>lt;sup>4</sup> (Vishal Mangalwadi, Lecture: Time and Eternity. University of Oxford, Oxford, June 2002. Audio file on-line. Available from http://vishal.fruitfulbough.com/. Accessed 5 May 2010)

wrapped up in an eternal "now".<sup>5</sup> It is all set and predetermined, as if written in the stars<sup>6</sup>, and there's really nothing we or even God can do to affect it.<sup>7</sup> With no clear destination in sight, time is not seen as being crucial or "real".<sup>8</sup> This lends itself to the view that time is merely an illusion<sup>9</sup> with contemplation and meditation being the means of escape.<sup>10</sup>

Secular time, on the other hand, incorporates the idea that time is linear, from the inception of the world to its final culmination.<sup>11</sup> Therefore time is not eternal but is limited and released from endless repetition. With a clear distinguishing of past, present and future, history becomes important.<sup>12</sup> While the past is gone, we can learn from it to create an entirely new future. Central to this view is the idea that time is headed towards some final point of significance making time real and important.<sup>13</sup>

While in ancient times the Greek, Chinese, Indian, and Islamic cultures seemed to have a technological jumpstart on the rest of the world, it is remarkable that it was Christianized Europe that gave birth to the systematic, self-correcting, and self sustaining discipline of modern science.<sup>14</sup> Why is this? Kenneth L. Woodward notes in the 08/05/1999 *Newsweek* article, "2000 years of Jesus": "Time itself was transformed: where the Greeks and Romans thought of the universe as fixed and eternal, Christianity ... injected into Western consciousness the notion of the future as the work of God himself."<sup>15</sup> In the Christian worldview we find a uniquely nuanced

<sup>&</sup>lt;sup>5</sup> (Mangalwadi, When the New Age Gets Old 1992, 23)

<sup>&</sup>lt;sup>6</sup> (Vincent Carroll and David Shiflett. Christianity on Trial: Arguments Against Anti-Religious Bigotry (San Francisco: Encounter Books, 2002), 59)

<sup>&</sup>lt;sup>7</sup> (Mangalwadi, Time and Eternity 2002)

<sup>&</sup>lt;sup>8</sup> (Molloy 2010, 15)

<sup>&</sup>lt;sup>9</sup> (Eric V. Snow, Christianity: A Cause of Modern Science?, http://www.rae.org/jaki.html. Accessed 27 June 1999)

<sup>&</sup>lt;sup>10</sup> (Mangalwadi, When the New Age Gets Old 1992, 23)

<sup>&</sup>lt;sup>11</sup> (Molloy 2010, 15)

<sup>&</sup>lt;sup>12</sup> (Snow 1999)

<sup>&</sup>lt;sup>13</sup> (Molloy 2010, 15)

<sup>&</sup>lt;sup>14</sup> (Carroll and Shiflett 2002, 63)

<sup>&</sup>lt;sup>15</sup> (Kenneth L. Woodward, "2000 Years Of Jesus," Newsweek, 29 March 1999. Magazine on-line. Available from http://www.newsweek.com/id/87767. Accessed 4 March 2010)

understanding of secular time that set the stage for a scientific and technological revolution that would take flight during the Middle Ages and not look back.

Based upon the first chapter in the Bible (Genesis 1 - NKJV) Christians believe that time, like all of nature, is not only real, but is a good creation of God.<sup>16</sup> Yet it is definitely not God, nor is it the body, mind, or soul of God. Since it is no longer a valid object of worship there is no sacrilege in its study. In fact it is a worthy and worthwhile object of study. As Kepler, one of history's foremost students of nature, wrote: "I give you thanks, Creator and God, that you have given me this joy in thy creation, and I rejoice in the works of your hands. See I have now completed the work to which I was called...."<sup>17</sup>

Christianity avoided an organismic understanding of time and nature, as if it were alive and subject to the whims of a multitude of eminent gods.<sup>18</sup> Created by a monotheistic, trustworthy God of order and rationality, scientists had every reason to expect nature to exhibit regularity, dependability, and precision with time itself being no exception.<sup>19</sup> "Without this belief, the incredible labors of scientists would be without hope... it must come from the medieval insistence on the rationality of God, and seized as with the personal energy of Jehovah and with the rationality of a great philosopher," are the sentiments of the great mathematician Alfred North Whitehead.<sup>20</sup> Consider Kepler, for example, who struggled for years with a slight difference of eight minutes between the observation and calculation of the orbit of the planet Mars. It was Kepler's conviction that nature must be precise that allowed him to abandon the

<sup>&</sup>lt;sup>16</sup> (Nancy R. Pearcey and Charles B. Thaxton, The Soul of Science: Christian Faith and Natural Philosophy (Wheaton: Crossway books, 1994), 22-23)

<sup>&</sup>lt;sup>17</sup> (Pearcey and Thaxton 1994, 23-24)

<sup>&</sup>lt;sup>18</sup> (Snow 1999)

<sup>&</sup>lt;sup>19</sup> (Pearcey and Thaxton 1994, 25-27) <sup>20</sup> (Carroll and Shiflett 2002, 73)

traditional belief in circular orbits and propose the idea of elliptical orbits. Kepler considered these eight minutes to be a "gift of God."<sup>21</sup>

A Christian should be "redeeming the time" (Ephesians 5:16 - NKJV) with, according to sociologist R.K. Merton, "an obligation to make sure that he serve the twin ends of glorifying God and benefiting fellow men."<sup>22</sup> In line with this, Roman Catholic journalist Paul Johnson notes that "Robert Boyle and Isaac Newton agreed that nature showed God's order and beauty; and John Ray argued in the same manner from the evidence he found in the structure of plants and animals."<sup>23</sup> While the doctrine of the Fall of Man demonstrates how the benefits of Eden were lost to sin and toil, Francis Bacon responds that "these losses can, even in this life, be in some part repaired."<sup>24</sup> A. C. Crombie also notes that the Christian appreciation for the eternal worth of human beings "placed a value on the care of each immortal soul and therefore upon the charitable relief of physical suffering, and gave dignity to labor and a motive for innovation."<sup>25</sup> Hence alleviating poverty, sickness, toil, and tedium were of central concern to biblically minded scientists.

The paradigm shattering idea that we may somehow remediate the miseries of life is given further impetus by the biblical mandate to "fill the earth and subdue it" (Genesis 1:28 -NKJV.) While this concept of dominion involves the responsibility of good stewardship (Luke 12:41-48 - NKJV), Puritan divine John Cotton asserts that "to study the nature and course and use of all God's works is a duty imposed by God."<sup>26</sup> Thus Christians are not merely to conform to the dictates of time but have an obligation to use time for our advantage.<sup>27</sup> Such endeavor

<sup>&</sup>lt;sup>21</sup> (Pearcey and Thaxton 1994, 28)

 <sup>&</sup>lt;sup>22</sup> (Pearcey and Thaxton 1994, 36)
 <sup>23</sup> (Carroll and Shiflett 2002, 77)

<sup>&</sup>lt;sup>24</sup> (Pearcey and Thaxton 1994, 36)

<sup>&</sup>lt;sup>25</sup> (Carroll and Shiflett 2002, 68)

<sup>&</sup>lt;sup>26</sup> (Pearcey and Thaxton 1994, 35)

<sup>&</sup>lt;sup>27</sup> (Pearcev and Thaxton 1994, 35)

becomes understandable with the Christian view that man, as created in God's image (Genesis 1:27 - NKJV), shares in God's eternity (Ecclesiastes 3:11 - NKJV) while time does not.<sup>28</sup> Therefore we are over time. Indian Christian philosopher Vishal Mangalwadi puts it well: "The sun, moon, stars and planets do not rule our times.<sup>29</sup> ... the sun decides when we will go to bed. But we are free to say no. We can use electricity to lengthen the day inside our homes, offices or factories....We are the rulers, we do not have to flow with nature."<sup>30</sup> Hence, the clock and stopwatch, over and above the stars, may be enlisted as allies in managing our world.<sup>31</sup>

Of course this vision of redemption and progress is entirely inconsistent with a cyclical view of time. In other words, why attempt to improve the human condition when, according to the philosopher Seneca (c. 3 BC-A.D. 65), "All will be mixed up which nature has now arranged in its several parts....a single day will see the burial of all mankind. ... all will descend into the one abyss, will be overthrown in one hour." At that point, Seneca believed, the cycle would begin anew. "Every living creature will be created afresh" only to repeat the cycle again.<sup>32</sup> Such a view is indicative of other prominent understandings of cyclical time such as in Buddhism, <sup>33</sup> Hinduism, <sup>34</sup> and the New Age.<sup>35</sup> Even Islam, though inconsistent with its tenants of orthodoxy, had a wide acceptance of eternal cycles in practical theology.<sup>36</sup>

On the contrary, Christianity firmly embraced a linear conception of time that clearly distinguished past, present and future. From a rationalistic standpoint, such an understanding is crucial to support the idea of cause-affect relationships, an integral part of scientific

<sup>&</sup>lt;sup>28</sup> (Mangalwadi, Time and Eternity 2002)

<sup>&</sup>lt;sup>29</sup> (Mangalwadi, When the New Age Gets Old 1992, 21)

<sup>&</sup>lt;sup>30</sup> (Mangalwadi, When the New Age Gets Old 1992, 39)

<sup>&</sup>lt;sup>31</sup> (Carroll and Shiflett 2002, 66-67)

<sup>&</sup>lt;sup>32</sup> (Carroll and Shiflett 2002, 60)

<sup>&</sup>lt;sup>33</sup> (Snow 1999)

<sup>&</sup>lt;sup>34</sup> (Mangalwadi, Time and Eternity 2002)

<sup>&</sup>lt;sup>35</sup> (Mangalwadi, When the New Age Gets Old 1992, 21-24)

<sup>&</sup>lt;sup>36</sup> (Snow 1999)

investigation.<sup>37</sup> In addition, with the past released from fated repetition, we are allowed a future that can be shaped by our present efforts.<sup>38</sup> Yet the course of history *is* important as it revolves around the drama of redemption in Christ.<sup>39</sup> As Kenneth L. Woodward notes: "For Christians, Jesus is the hinge on which the door of history swings, the point at which eternity intersects with time, the Savior who redeems time by drawing all things to himself."<sup>40</sup> In short, Christ motivated the intellectual mind by investing time with meaning, purpose and hope.

With this in view, is it any wonder that scientific breakthrough and technological innovation flourished, like nowhere else, in the European countries saturated with the Christian understanding of secular time?<sup>41</sup> In the Middle Ages the monks led the way with laborsaving innovations such as the heavy plow, iron making, and water powered mills.<sup>42</sup> In subsequent centuries other European thinkers followed up with an array of improvements to existing technology such as the blast furnace (brought from China), the spinning wheel (brought from Asia), and pavement (brought from Rome). In time, steam power would be harnessed and crankshafts invented for rotary motion machinery. In the artistic realm incredibly complex pipe organs were built and the musical notation we still use today was developed. Eyeglasses were improved to read the music, among other things. It should also be noted that many of the now famous contributions from the 1400s on came from scientists with a Christian worldview such as Roger Bacon, Copernicus, Kepler, Galileo, René Descartes, Robert Boyle, and Isaac Newton, just to name a few.<sup>43</sup> (Whew!)

- <sup>38</sup> (Mangalwadi, Time and Eternity 2002)
  <sup>39</sup> (Carroll and Shiflett 2002, 61)

<sup>41</sup> (Pearcey and Thaxton 1994, 21)

<sup>&</sup>lt;sup>37</sup> (Snow 1999)

<sup>&</sup>lt;sup>40</sup> (Woodward 1999)

<sup>&</sup>lt;sup>42</sup> (Carroll and Shiflett 2002, 65-66)

<sup>&</sup>lt;sup>43</sup> (Carroll and Shiflett 2002, 65-78)

So, is time on our side? From a Christian perspective, in terms of scientific progress and innovation: definitely. However, in the opening segment of *The Gods Must Be Crazy*, the primitive Kalahari way of adapting themselves to their environment is contrasted with the modern way of adapting our environment to suit us. In so doing Western civilization has replaced sand with concrete, plains with roads, footsteps with tires tracks, animal fangs with automobile grills, bows and arrows with charge cards, and grass huts with skyscrapers.<sup>44</sup> But have we really made life easier and less hazardous, or have we merely created a new, more complicated world that we must now adapt ourselves to and defend ourselves from? In our effort to emerge from the thorns and thistles have we buried ourselves in domains and deadlines? Have we freed ourselves from a destiny in the stars only to enslave ourselves to the demands of the clock? Perhaps it is not God who is crazy, but us.



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