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Christian Astronomy vs. Secular Astronomy

by Richard Hodgson
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In Luke 16 the Lord Jesus Christ tells of the "great gulf fixed" between a believing beggar named Lazarus and an unbelieving rich man in the life which is to come. This great gulf not only separates the believer from the unbeliever at death; it also begins to separate their mental outlook in this world as well. The born-again Christian, tutored by the Scriptures, has a distinctly different world-life view than that of his unbelieving acquaintances, and we find this to be true in the various academic disciplines.

Let us consider how this applies in the physical sciences, and in the field of astronomy in particular, a field in which I am actively engaged in teaching, research, and writing.

We live in an exciting age: the age of the great discoveries—the Distance Explosion, the Stellar Population Explosion, the Atomic Age, the Space Age. So many fields in astronomy and astrophysics have opened up in the last fifty or sixty years that the creation as we know it is a vastly different place than our forefathers knew.

It was only a few years ago that astronomers had serious doubts about whether other galaxies outside our own Milky Way Galaxy existed. The famous "Shapley-Curtis Debate" held before the National Academy of Sciences on April 26, 1920, illustrated this. That debate itself was indecisive, Shapley arguing against other galaxies, and Curtis holding the possibility open. There were wrong arguments on both sides, but the matter was resolved on New Year's Day, 1924, when Edwin Hubble made public several photographic plates he had taken of the Andromeda Nebula (as it was then called) with the aid of the then new 100-inch telescope at Mount Wilson Observatory, the largest in the world at that time. These photographs showed clearly the vast arm structure, differentiating the Nebula into individual stars. The argument was over. There were other galaxies indeed! The Andromeda Nebula was renamed the Andromeda Galaxy.

Today we know that the Andromeda Galaxy contains approximately 400 billion stars. We have found giant elliptical galaxies which probably contain over 1 trillion stars, and dwarf galaxies containing "only" a few billion stars. In all, it is estimated that about 1 billion galaxies are visible with the 200-inch telescope at Mt. Palomar. This is the Stellar Population Explosion.

At the same time, our knowledge of the extent of space has increased greatly. The estimated volume of the creation today is at least 100 trillion times larger than that known to be the case as recently as 1920. These findings have enormous implications for any world-life view.

In the face of these many discoveries, the Christian has a tendency to recoil. It is such a different world than that which our forefathers thought they knew. As Chris-
tians we want to affirm that this is our Father's world, and we want to witness to the fact that it all was made by and belongs to the True God. We are sometimes annoyed, too, that the unbelieving, secular scientist seems to have done far more than the Christian in terms of exploring and discovering the Creation and interpreting it to modern man. For example, Christians of reformed persuasion have stayed almost completely out of the fields of astronomy, astrophysics, and geology. Often we have given heed to the science quacks who have traded on our ignorance in these areas, and filled our minds with dogmatic interpretations concerning what the Bible does or does not teach concerning these areas.

In view of this inadequate background in many of the physical sciences, many Christians have yielded to oversimplifications, and have adopted a belittling attitude toward science and scientists in general. Sometimes even Christians working in science have this attitude. They spend much of their time denouncing the worship of science in the modern world. Some of this needs to be done, to be sure, and many voices, both Christian and non-Christian have been raised against scientism in recent years. Our main effort cannot, however, merely be sowing doubt about most of the basic accomplishments of science. Oversimplified negativism (usually by persons who have never had a formal education in the field they are attacking) has often been allowed to pass uncontested by Christian audiences. Sometimes it is even the preachers who have indulged in belittling negativism, thinking themselves champions of the faith as they string up science on the gallows. And the more their audiences seem to relish this performance, the more it seems to pass for the truth.

I think particularly of astronomy in this regard. The recent investigations and discoveries in lunar and planetary astronomy they do not know. The means by which stellar distances, and the distances to galaxies are determined, the equations pertaining to stellar energy production, the Hertz-sprung-Russell diagram in all its beauty, the role of star clusters in the study of stellar aging, the Cepheid period-luminosity relation (the calibration of which is the most important thing yet done at Mt. Palomar)—the significance of these and many other discoveries is lost on scientifically uninformed zealots of Christianity. Their astronomy involves a whiff of Ptolemy, and ends with Galileo or Newton.

Some of the belittlers of science tell us that it is all a matter of presuppositions. (Presuppositions are important, but one must deal with observational data as well). To hear some tell it, any conclusion reached by a secular, unbelieving scientist is a pack of lies, the fruit of a mentality which leads to building Towers of Babel.

It seems to me that denunciations of "Secular Science" and "Secular Scientists" made in such oversimplified terms constitute dangerous falsehood. While such speakers might win applause from emotional
Christians who enjoy hearing the unbelieving secularist condemned, it can involve a breach of the ninth commandment: "Thou shalt not bear false witness against thy neighbor." God is not glorified with lies and exaggerations.

False accusations and sweeping denunciations of scientific work involve a denial of God's works of common grace in the lives of secular scientists. In the field of astronomy, there are many unbelieving scientists with whom I am very well acquainted, and with whom I have been working closely. I find that they make every effort to be rigorously honest in their work. They may not always be right, but then that is true of the Christian too. Science rests on the foundation of observational honesty. Any distortion of observations, any framing of the facts to fit a theory rather than contrariwise is bad science, and is repugnant to the "true Christian and to the true scientist alike. If, however, we engage in belittling the accomplishments of the secular scientist (which are a work of God's common grace), we rob God of the glory and praise He deserves from His works of common grace—a violation of the eighth commandment.

Having said all of this in defense of the many true accomplishments of unbelieving scientists in order that they may secure a fair hearing in the Christian community, it is nevertheless true that there are some significant areas of difference between the Christian and the secular approach to science. The area of difference does not so much concern observational data, but the interpretation of those data. As a Christian, I prefer to talk about a "creation" rather than a "universe," since the term creation implies the existence of a Creator; the term "universe" does not carry that implication. The areas of greatest difference come when we talk about cosmogony (i.e., theories of origins) and exobiology (i.e., the possibility of life elsewhere in the cosmos). These are the very areas in which mankind has asked questions, and speculative answers have been rampant, but the observational data is weak. Yet man's presumption makes matters worse, man often wants to give answers in spite of the weakness of the observational data. Time does not permit us to explore these areas today. To do so adequately each of us needs a year or more of study in astronomy. We may, however, be able to consider briefly a major question that separates the Christian and the secularist in astronomy—the question of the place of man.

What is man? Secular astronomers, especially in the twentieth century, talk about how big everything is. This is almost the inevitable and invariable point made in the modern planetarium as we view it. There is, indeed, good reason to speak that way, because our common world view tends to be unthinkingly geocentric and geochauvinistic. But we need to go beyond this emphasis on bigness to set forth the place of man in the vast, newly-discovered universe in which we find ourselves.

It is not enough to say (as some secularists do) that man's importance lies merely in the fact that he is the scientist able to discover the universe. We are living in an age of cultural shock. Consciously or unconsciously, the man on the street wants to know where he is, who he is, and why the meaning and value of his life are. While he may know little astronomy, he is faintly aware that the universe is all very big. It has been getting out of hand since the days of Copernicus when the geocentric model was laid aside; but in the age of galaxies, he finds himself a helpless citizen of a third-rate planet going around a third-rate star (the Sun), which in turn is revolving around one of a billion galaxies. In reaction to this...
immensity, consciously or unconsciously, the man on the street concludes that no one notices him, no one cares about him. His life has no meaning or purpose in the overall scheme of things. As a result, he may become a hedonist: “Let us eat, drink, and be merry, for tomorrow we die.....” Or, bored with life, he may try to escape from life by the use of drugs, or alcohol, or by becoming preoccupied with sports and recreation, and “getting away from it all....” This situation arises in part from the astronomical discoveries of the recent decades, as the various cultural shock waves penetrate through to various levels of society.

The Christian scholar in astronomy cannot stop with a mere description of how big everything is. He must be concerned for the implications and the impact of learning upon society. The Christian is provided with a view of man and of man’s relationship to the Creator God and to the rest of the creation in Genesis 1-2 and in Psalm 8, for example. These passages (and others which might be mentioned) give a clear answer to the cultural shock situation in which we find presently ourselves:

1. Man is not important because he is physically central in the creation. The Bible does not teach a geocentric, Ptolemaic universe.

2. Nor is man important because he is so wise or clever, for we see his sin and folly in every hour of history, in every field of activity. It is almost enough to make one wonder if there is “intelligent life” on Earth.

3. Man’s importance rather lies in the fact that he is a creature specially created by God from the dust of the ground (i.e., created out of inorganic, non-living materials, and not by biological evolution). Man is created in the image of God, and is the only creature on Earth that has an awareness of the invisible Creator-God.

4. Man’s importance, further, is to be understood in the light of the work that God has given him to do in tilling the ground, and in caring for the creatures of the Earth. As overseers and stewards answerable to God, our lives are filled with meaning and purpose only to the extent that we seek to carry out the tasks He has appointed for us. As we labor for Him, seeking His glory, we find purpose and joy in our work, and we are not seeking to evade our responsibilities. The tragedy of the secular world today is that few find joy in their labors; many grumble and live for the weekends. They have no clear purpose in living, and they have no enduring joy.

5. Even though sin has entered the world due to man’s rebellion, God calls us in Jesus Christ to take up the work anew of glorifying Him through labor in His creation, and in proclaiming the way of salvation to those who now walk in darkness.

6. The importance of man is seen, finally, in the momentous fact that, small and seemingly insignificant as we are physically in a vast cosmos, dim-witted and repulsively sinful though we be, our covenant-keeping God has proclaimed us precious in His sight, and given evidence of the same: for Christ the Creator Himself came to our little planet, and suffered and died in human flesh to save us sinners! Think of it! And even today, with steadfast love, as our King in Heaven, Christ intercedes for us!

In the light of all this, we must reach the culturally shocked, the disillusioned and confused of this world with a new awareness not only of the greatness of God’s vast creation, but also of the place and purpose which they have in that creation through Jesus Christ our Lord. We must claim the discipline of astronomy, too, for Jesus Christ. We need more Christian workers going into this field, both to labor in research and observation, and as Christian teachers and Christian planetarium educators who are prepared to set forth an integrated world-life view that will tell the whole truth to the glory of the Triune God.