

The development and use of the intellect is the one characteristic which sets mankind apart from all other living creatures. Astronomy is probably the first intellectual endeavour of mankind. It is one of the fruits of the more abundant life as practiced by our neolithic ancestors over ten millenia ago.

They watched the sun rise in the east after dawn, and set in the west before dusk. They observed the stars wheel overhead at night, and noted the movements of the wanderers or planets. The reoccurring phases of the moon and the never ending cyclic change of the seasons with increase and decrease of the altitude of the sun provided both a sense of awe and a feeling of well being. These phenomena plus the small part of the earth, with which they were familiar was their sample of the Universe. We now know that sample to be something less than trivial.

They dedicated parts of the sky to people, animals and things. These regions have been demarkated and are now known as constellations. While some vague similarities can be observed between the subject of a constellation and the orientation of the stars, there is no general reason for this to be true; any more than the map of Tasmania should bear a resemblance to the profile of Jan Abel Tasman. Various stories were invented about the celestial creatures and things. These myths come down to us today as delightful folk tales which give us some insight to the life and thinking of our early ancestors. By these means they attempted to explain the Universe surrounding them; and most important, to set themselves at ease with the unknown. Of all the fears which beset mankind, the fear of the unknown is the greatest. This particular fear is certainly at the bottom of the reaction to science which we find in some people during our time.

The practical applications of astronomy are meager, being limited to determinations of time and place. However, astronomy is still primarily an appeal to the intellect; and as such, needs no utilitarian trapings to justify its existence today. The purpose is still the same, namely to explain the nature of the Universe and to set ourselves as ease with the unknown.

The effort to survey the grandeur of the Universe and to comprehend its nature is one of the most magnificent examples of the operation of the human intellect. Man is no mean creature when he can effectively place this vast realm into the palm of his hand and examine its operation. Contrary to our anthropologists, I submit that "man is the darling of the Gods".

Our sample of the Universe is immensely larger than that of our neolithic ancestors and we hope ours may be of a significant size. However, when I survey some modern myths like the dogma of the expanding universe, my fear of the unknown mounts, and I doubt that we are really much better off than the Babylonians. We have pushed back the curtain of darkness to a very great distance and back to a very remote time in the past. Unfortunately, at the limit of our instrumental prowess, the curtain rests, just as dark and uncertain as ever. From this humble approach we may take comfort in the knowledge that progress is possible. Speculation is uneconomical. We must get on with the work.

Tonight I will survey the field of astronomy very briefly and explain where the new technique of radio astronomy fits into the picture.