have to be interpreted literally.

Chapter 4

Are Jews permitted to create a planetarium?

RESPONSE

Yes. Although Jews are not permitted to create images of the sun moon planets stars nevertheless for educational purposes one can create images of the planets and stars. That applies to actually create a model with three surfaces length heigh width . Certainly it is permitted an image of one surface. Ibid 141

Background

Rambam Yesodei Hatorah beginning lists the roles of the various stars planets moons and their guardian angels. According to Rambam these spheres have no free will but are mandated to follow the paths out lined for them controlled by the laws of physics chemistry biology mathematics and other inter related scientific disciplines. However these spheres each have a guardian angel assigned to them.

The Rambam in the Laws of Avodo Zara Idol worship records the origin of idol worship. People were aware that each of the stars planets moons have a guardian angel. They reasoned that it would be wise to offer supplication to the guardian angels, in addition, to God. They reasoned, mistakenly, that god would be pleased that people also offer supplications to the guardian angels since they live for ever, as well as, the stars planets and moons. Thus was the genesis of idol worship. Laws Avodo Zoro 1:1

As time went by the people started to believe that the guardian angels were not controlled by God at all. Thus the people worshiped only the guardian angels Laws Avodo Zoro 1:2

When the Torah was given people worshiped only the guardian angels. Thus the Ten Commandments stipulate the prohibition of worshiping the sun and the moon. The Torah ,likewise, forbade creating any image resembling the sun and the moon.

However as time passed the sun and moon worshipers did not have an idol that was the image of the sun and moon. They instead represented the idol as a man in a cart with a staff.. Missing these requirements the ceremony of worship could not proceed. Therefore, the prohibition was not to create a man in a cart carrying a staff. Creating an image of the sun itself was not per se prohibited The prohibition likewise, was not to create an image of the moon but what ever the moon worshipers elected as the symbol.

Therefore, the prohibition depended on the symbol the worshipers in any era elected. The Commentators on Yoreh Dayoh 141 when discussing the subject of the prohibition of creating an image of the sun and moon question, if today -that is at the time they were writing -there existed any people in the world who still worshiped the sun and moon and what were the symbols they used.

They cite the case of Rav Gamliel in the Talmud who created models of the old moon vanishing and new moon appearing in th sky. In Ancient Judea a new moon was declared only by the testimony of two witnesses siting the emergence of the new moon. The two witnesses were mandated to travel to Jerusalem to the Temple and inform the Sanehdrin the highest Rabbinical authority that they had sighted the emergence of the new moon. The Sanehdrin would first question the witnesses to determine if what they claimed was accurate and borne out with scientific knowledge that the Sanehdrin possessed .

Thus Rav Gamliel, in effect, created models of the moon that he used for

educational purposes. Shulchan Arch Yoreh Dayoh 141:1,2 That is the basis of what we reported earlier that there exists a dispensation for a planetarium to create models of the stars planets and moons. The reason is since the purpose is not to worship these heavenly bodies ; but for educational purposes.

Further more, the presentation for the audience is in the form of a movie. Thus the presentation does not have three dimensions but two. The screen obviously has no more than the length and width; not the thickness. In three dimensional movies it is only an optical illusion.

The same is true with viewing the solar

system on TV. All one sees is two dimensions.

However, even if a model is created with three dimensions, no prohibition exists. Thus it is perfectly ok to take courses in astronomy at school college or graduate school