SPACE EXPLORATION AND JEWISH RELIGIOUS TRADITION

reactions by

Prof. David Flusser and Chief Rabbi Shlomo Goren*

One of the purposes of "Immanuel" is to give an insight into the way Jews in Israel react on certain contemporary problems from a religious point of view. Among these problems is the question to what extent the recent exploration of outer space affects religious belief and practice. A special issue of the periodical Machanayim, which is published by the Israel Defence Forces by the Chief Rabbinate of the Army to give information about Jewish subjects. has been devoted to this subject. We present here summaries of two reactions by religious Jews; one is by Prof. David Flusser, professor of Judaism of the Second Temple period at the Hebrew University of Jerusalem; the other is by Rabbi Shlomo Goren, who is presently Ashkenazi Chief Rabbi of Israel.

DAVID FLUSSER: SPACE FLIGHT AND THE JEWISH WAY OF THOUGHT

On the Day of Atonement, the day on which the Russians launched the first space satellite, we were of course unaware of the progress which had been made in God's world. During the intermission in the synagogue service I read the wonderful poem by Solomon Ibn Gvirol, "Crown of the Kingdom". The poet's description of the heavenly bodies led me to consider the greatness of the Torah of Israel which allows such wide range to the thoughts of man; for the astronomic descriptions in this poem are based not on the biblical conception of the universe but on medieval astronomic views. This led me to consider the very essence of Judaism. I recalled that when daring astronomers challenged the concept that the earth revolves around the sun, the Church, using passages from our Bible, rejected the scientific findings, burning one of the astronomers alive, forcing another to recant, and banning their books.

Such was not the case with the Jewish people from whom these very biblical passages had sprung; there was no thought of persecuting those who expounded the new astronomy. Was this only because the Jewish religion does not persecute people for their beliefs, or does the Jewish attitude have deeper roots in the internal spirit of the Torah?

^{*} Machanayim, no, 125 (5732 - 1971/72) pp. 10-13 and pp. 22-25.

Upon returning home from the synagogue and hearing of the Russian satellite we rejoiced in the progress made by man in understanding the Lord's world. For me, this news was a continuation of the train of thought which had begun earlier with the reading of the poem by Rabbi Ibn Gvirol.

Since the onset of the space explorations I have been asked if I view these explorations as a threat to religion. My answer is that space flight, as with all technological advances, has shaken nothing in the religious sphere. If modern astronomy has proved anything, it is that, as the sages of Israel have known since the Tower of Babel, technology does not hold the key to the heavens. This is the difference between Nimrod and Abraham; Nimrod wanted to reach the heavens while Abraham sought to understand the power behind them.

To understand the ability of the Jewish religion to accept new astronomic discoveries we must realize that the Torah is revolutionary in its moral outlook; among its aims is the freeing of man from idolatry and superstition. The wise men of Athens, who were certainly enlightened, sentenced a man to death for daring to claim that the moon is not a deity. I have already spoken of the Church in this respect. But Israel reacts differently for at its very foundation is the fight against superstition. Thus evolved Judaism's contribution to the world of a true theology, a search for God unencumbered by worship of the heavenly bodies or the need to regard the Bible as a textbook of astronomy. On the contrary, acceptance of too literal an interpretation of the Bible, such as the story of the Lord fashioning man with His hands, would be an idolatrous conception of God and therefore repulsive to believing Jews. I ask in all seriousness if a Jew can believe that God is sitting in the heavens. Would this not be forbidden as attributing to Him material qualities?

The Bible is written in the language of man so that man will be able to grasp the message. But the true object of the Bible is to instil a faith based on comprehension and not a blind acceptance, a faith that is not bounded but can embrace the entire universe, a belief in our Father in heaven and not a belief in the heavens themselves. Therefore the space flights present no real problem to the believing Jew. Our faith gives us the courage to learn, teach and explore His world, unfettered by superstition.

I have been asked if the development of the computer does not cast doubts on our belief that man is a superior creature. My reply is that if man can create the complex computer, how much greater is God's creature whom He endowed with the intelligence to produce computers. If man is great as a creator, how much greater is the Creator of man!

This is our answer to those who are confused by and fearful of man's presence on the moon. Space flight does not contradict the Torah, it reaffirms the Torah and its optimistic belief in man. "Blessed is the Giver of knowledge."

Question. The landing of a man on the moon has brought uncertainty in its wake, for it is clear to all that long-accepted ideas have been challenged and the foundations laid for new ways of thinking. One of the questions asked by the observant Jewish community concerns the prayer on the appearance of the new moon. How can we recite the present version of this prayer, which includes the verse, "As we attempt to leap towards thee, but cannot touch thee, so may those who attempt to injure us be unable to reach us"? This prayer creates a mystical atmosphere between man and the moon, a mysticism which has been dispelled by the Apollo 11 astronauts. Has not this prayer now lost some of its meaning for us?

Answer. I do not believe that this is the main question which we must deal with as a result of the moon landing, but since it has been asked by many I shall reply. The prayer, "As we attempt to leap towards thee" is an ancient one, but it is not included in the version of the prayer for the new moon which appears in the Babylonian Talmud where only the blessing for the new moon appears, the blessing which ends, "Blessed art thou ... who renewest the months". This is considered by traditional law to be sufficient, and the prayers and psalms which follow, including the prayer "As we attempt to leap towards thee", are not obligatory. Another Talmudic version of this prayer says not, "I cannot touch thee" but, "I do not touch thee". This early version does not deny the possibility of touching the moon but simply states the fact that while we are blessing the moon we are not touching it, and therefore is not in contradiction to the recent moon landing or future moon explorations. Perhaps this version should be adopted by us. It should be emphasised that our sages greatly valued the blessing for the new moon, for the moon is the basis of the Jewish month and determines the times of our festivals. In reality the blessing does not accord special importance to the moon itself, but to the unit of time which it represents.

- Q. Since we are discussing the prayer for the new moon, how can we reconcile the passage "a decree and appointed time he gave them, that they should not deviate from their charge" (change their function) with the possibility that the moon may indeed change its function and become a habitat for man?
- A. We must realise that even if man succeeds in establishing a moon settlement, the inhabitants will not actually be living on the moon; conditions on the moon cannot support human life. Therefore the function of the moon will not be altered by the fact that man can reach it. It will remain as it is with its particular atmospheric, physical and astronomic conditions

¹ Extracts from an interview in the broadcast "At the Close of the Day of Rest" produced by the Chief Rabbinate of the Armed Forces.

and will continue to fulfil its function of representing the time unit of the month.

- Q. We believe that our Torah is a living law. The space flight raises the question if man can maintain the Jewish law and commandments in outer space.
- A. We must understand that the Torah can be kept only on earth and only under the atmospheric, astronomic and physical conditions which exist on earth. On the moon, the laws of the Torah are meaningless, for our lives are dependent on a framework of time and space which does not exist on the moon. Our day, our seven-day week, our Sabbath and festivals do not exist there. Our units of time are based on two heavenly bodies, the sun and the moon, as they are seen from the earth. Since on the moon and stars our units of time do not exist, the Torah cannot be kept there except, as I mentioned earlier, if man on the moon is living under the astronomic and atmospheric conditions of the earth, in which case he is subject to the laws of nature and all the other laws of the earth including the divisions of time.
 - Q. The question then arises of when to observe the Sabbath.
- A. I believe we would go according to Sabbath at Jerusalem which is traditionally considered to be the centre point of the earth from which the days and the Sabbaths commence. It is also possible to refer to the place from which the astronauts were launched. The problem is a secondary one, which can be solved in accordance with traditional law.
- Q. What can we say to the fact that man has crossed the boundary from earth to the heavens of the Lord?
- A. It is true that we feel man is invading a territory which was not allotted to him by God. Maimonides, in his analysis of the relationship between earth and the heavens, classified the heavenly bodies as eternal bodies composed of matter and form which do not change, as opposed to the earth, man's body, animals, vegetation and the metals which are constantly being formed and decomposed. The astronauts have succeeded in bringing rocks from the moon to earth, and that simple fact is in contradiction to the system set forth by Maimonides. Maimonides also set up an order based on importance in the creation, in which he placed man below the heavenly bodies which he believed to possess soul and intelligence. It is now clear that the heavenly bodies are not physically superior to the earth and man. I do not think that it is possible to reconcile this new insight with Maimonides's views. His conclusions were based on the astronomic system which was accepted in his time, not on modern knowledge.
 - Q. What conclusions can we reach in the light of Apollo 11?
- A. Apollo 11 has verified the Torah in one most important point the superiority of man. For man was created in God's image. He alone has a soul, intelligence and knowledge. We must now include in our physical

world outer space and the planets, even if space should prove to be infinite. Space belongs to the physical world and not to the metaphysical, and in this infinite space the superior creature is man. He possesses the Divine spark, and the achievement which proves it more than any other of man's actions and creations is Apollo 11 and the events which are likely to follow it. Man's ability to control infinite expanses is an immense achievement, but it harbours political danger to mankind and the entire universe. The danger is twofold: 1) lest we gain control over the infinite vastness of space and lose control of ourselves; 2) the subjection of the entire cosmos to the whims of a few men who will have the power to wreak universal destruction.

- Q. In your view, space flight has brought man closer to his Creator. However, there are those who feel that after man succeeded in touching the heavens he lost his reverence for them.
- A. The further we explore the more we are made aware of the harmony of creation; and where there is harmony and order there must be planning and a planner in other words there is God in the universe. We have spoken of man crossing the boundary between the earth which is man's and the heavens which are the Lord's. But in fact this is not so. The prophets differentiated between the physical heaven, subject to the laws of nature, and the metaphysical, spiritual heavens to which we turn in our prayers, and which are infused with holiness and purity. It is of these new eternal heavens, to which concepts of space and time are irrelevant, that the prophet spoke, saying, "For as the new heavens and the new earth, which I will make, shall remain before me, saith the Lord, so shall your seed and your name remain" (Is. 66:22).

Summary by Nechamah Hillman