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What is the universe? It is the greatest mystery of all time and it is a mystery that will never be solved.

Every year, newer and finer astronomical instruments are being perfected, yet each of these instruments will have a limit to its efficiency. Since the universe is limitless it will be, without a doubt, a losing struggle. It is true that every year new and greater discoveries will be made in the universe, but it is too much to hope for miracles.

The untiring efforts of our astronomers are rewarding. The study of astronomy today is vastly different than it was ages ago. At that time it was looked upon as foolishness and astronomers were called fools, but today it is looked upon as necessary and astronomers are respected.

Space travel willlbe the first stepping stone and the moon will be the most logical step. Although more is known about the moon than any other heavenly body it is the actual physical exploration that will give us the knowledge we are seeking.

After the moon has been reached, possession will belong to the first ones setting foot upon it. It will be vastly different than staking a small claim on earth, consisting of a number of acres, since it will be a complete earth claimed as a whole.

After the exploration comes colonization and interplanetary travel between the earth and its satellite. When we have spanned the 238,857 miles to the moon it will be a tremendous step forward into space.

Years will roll by before the next problem will arise. This problem will be the reaching of new frontiers, either the planet VENUS or MARS. Which shall it be?

Will they attempt a trip to Venus, the next nearest body, which is shrouded in mystery, since one can only speculate on what lies beneath its dense, warm clouds, or would they make Mars their goal, a planet about which more is known.

When astronomers reach the moon, they will no doubt set up an observatory to study these two bodies. The atmosphere on the moon will be much more favorable for clearer observation. It is then they will determine which of the two they will visit first.

Most of our generation will see the reaching of the moon, but that is as far as they will get in our generation, and maybe for some generations to come unless a miracle occurs.

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Recently Drew Pearson mentioned in his column that the Air Force will scan Mars when the planet nears earth this spring. He went on to say that ".....the Air Force will send high-flying observation planes and guided missiles into the upper atmosphere for a clearer look.....when Mars will approach nearer to the earth than at any time in the last thirteen years. In addition a scientific expedition will journey to Bloemfontein, South Africa, which will be the closest point on earth from which to observe our neighbor planet". This, in our opinion, is a great step forward and we are certain that much new information will be obtained.

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As all astronomers know, the earth and the planets making up our solar system revolve about the central body, the sun. However, scientists and astronomers both claim that there are millions of such solar systems in the universe. If this be true, then can we speculate that all of these solar systems revolve about a central pivot or body such as our sun? Perhaps each solar system has its own orbit to follow. Considering the aspects of this statement we would like the opinions of others, and would be pleased to hear from anyone.

MARS IS THE PLANET TO WATCH IN 1954

Mars will be visible some time during the hours of darkness every night throughout the year 1954.

It will start the year as a none-too-conspicuous object, increase to great brilliancy until June and then gradually decrease, but still remain very bright until the end of the year.

In June it will be in "opposition" to the sun. That means that the earth, constantly gaining on Mars in their race around the sun, will catch up with the planet on June 24 and the two objects will then be in a straight line from the sun, with Mars on the night side of the earth and the sun on the daylight side.

If Mars and the earth went around the sun in perfect circles, the two would always be at the same distance from each other at the times of opposition, but they travel in ellipses of different forms.

This year, the opposition will be the closest we have had since 1941, but in 1956, the opposition will be almost the closest possible. These distances can vary from more than sixty million miles to less than 35 million miles. This year, the distance will be a little over forty million miles.

Oppositions of Mars always occur when it is going through its "retrograde" (apparently backward) motion-----an illusion which we get on the earth because we are passing Mars in space.

This year the retrograde loop of Mars will be particularly interesting to watch because it will carry the brilliant planet through the stars of the conspicuous and well-known formation in Sagittarius which we call the Teapot.

From mid April to May 23, we will see the planet pass above the lid of the Teapot. Then it will seem to reverse direction and move backward through the lid, reaching opposition June 24 when it is beginning to move across the Teapot's spout.

This illusion of backward motion will end July 30 and Mars will resume its normal course eastward, to pass again through the lid during the first half of September and leave the Teapot behind after the middle of that month.

(Courtesy Hayden Planetarium "The Sky Reporter")

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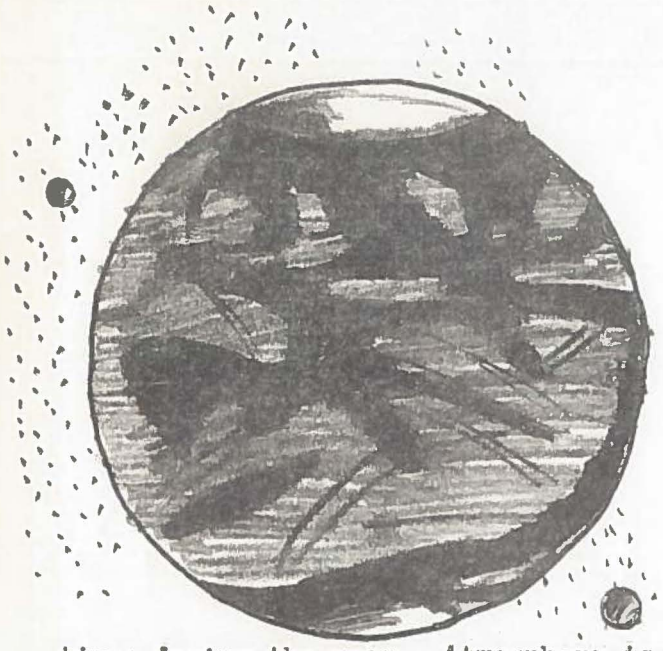
THE RED PLANET-----In astronomy, Mars is the fourth of the planets revolving about the sun. Its orbit is completely outside that of our earth and its mean distance from the sun is 141,500,000 miles. The year of Mars is 687 earth days making the Martian seasons twice as long as ours in duration.

An Italian astronomer, Giovanni Virginio Schiaparelli, observed strange markings on the planet in 1872 which he called "canali" which meant channels in his language. This has been twisted through the years to the present word "canals". His name was given to one of the canals. The canals were also observed by Percival Lowell who expressed the belief that they were built by an intelligent race of beings who constructed them to bring water from the poles. Some observers report seeing vegetation along the sides of these canals. It is believed that the polar caps melt at a certain time of the year. The existance of vegetation, which changes color from green to brown, like our earth's summer and autumn, has led many to believe that life could exist there



"LET'S GET ACQUAINTED WITH THE PLANET MARS"

Fourth of the planets in the solar system.
Distance from the Sun in miles---141,600,000.
Distance from the Earth in miles---
At furthest point------62,900,000
At nearest point-------34,600,000
Diameter--------4220 miles.
Color of Planet through telescopes----reddish.
Mass of weight compared to earth---0.11.
Volume compared to earth----------0.15.
Number of moons-------2 (two) Deimos and Phobos.
Length of Day----------687 days.
Temperatures-----Reach 50 degrees F. near the equator.
Diameter of Mars Moons------10 miles.
Physical Description--Has white polar caps. Greenish blue areas, reddish brown areas at differen times during the year. Atmosphere is mostly carbon dioxide with traces of oxygen. Has peculiar markings resembling canals. (See page two). Revolutions--24 hrs., 37 min.,22.58 seconds. Clouds on Mars----vary from red, white, and blue in color.

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ODD STORIES ABOUT MARS

On January 16, 1950, a Japanese astronomer in Osaka, Japan claims to have seen a mushroom shaped cloud or explosion on Mars, similar to our atomic explosions. Many said it might have been a race of people testing a bomb like ours, or it might have been the result of a space ship taking off from the planet. However, scientists say it was a volcanic explosion, and the case rests at that.

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Some believe that Mars may have intelligent life living in lid covered cities.

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Starting from the furthest planet from the Sun, Pluto, and working in toward the Sun, it is believed that all of the planets may have been inhabited at one time or another and that as the sun began to burn out of its full strength, life either died or migrated to another world when life became unbearable.

Mars may now be in its final stages, water supply diminishing and the atmosphere becoming thin. Its people are either dead or so intelligent that they are building space craft to find a new world to live.

Earth is as Mars was at one time, but will some day suffer the same conditions. Venus is now in the prehistoric stage similar to earth's earlier stages, and that no doubt accoun for the fog and heavy mist that shrouds the planet in mystery. It is a steaming jungle. Mercury is too hot for life and may cool off as Venus is doing now, and support life in the final days of the sun's existence.

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The inner moon of Mars revolves so fast that it rises and sets three times during the Martian Day.

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Large dust storms on the desert portions of Mars have led scientists to believe that a large movement of some sort was being made over the desert region since the storm or dust moved off at a great distance rather than localize its force.

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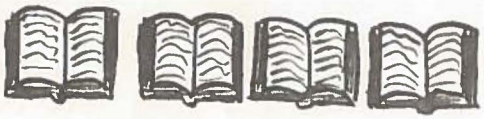
"NOT UNTIL MAN HAS PROBED TO THE END OF SPACE WILL HIS KNOWLEDGE HAVE REACHED ITS EXTREMITY

"SPACE REVIEW REVIEWS RECENT BOOKS"

OUR NEIGHBOUR WORLDS----V.A.Firsoff, M.A.

Philosophical Library, 15 E. 40th Street, New York 16, New York. Price--$6.00. Illustrated profusely.



****EXCELLENT***

Academic books on astronomy written in a manner to kill even the most enthusiastic interest are common enough; so are accounts of inter-planetary travel in which the author's enthusiasm outruns his judgment and knowledge, both of which are sometimes scanty. In OUR NEIGHBOUR WORLDS a fully qualified and practical astronomer writes graphically and readably on things he knows or has good reason for believing, and there is never any possible confusion between definite knowledge and personal opinion.

"OUR NEIGHBOUR WORLDS is a visit to outer space that enthralls the reader".

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SPACE TRAVEL---(An Illustrated Survey of its Problems and Prospects)
Kenneth W. Gatland and Anthony M. Kunesch

Philosophical Library, 15 E. 40th Street, New York 16, New York. Price--$4.75.

****EXCELLENT***

Are you interested in visiting Mars? The answers to this question might be various, but in the minds of the authors there is no possible doubt. They are; and they know exactly how to get there. Both Mr. Junesch and Mr. Gatland are technical experts in their own fields, and the latter is also secretary of the once derided British Interplanetary Society.

The illustration, as may be imagined, form an integral part of the book. There are nearly 100 of them.

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DEVELOPMENT OF THE GUIDED MISSILE-----Kenneth W. Gatland

Philosophical Library, 15 E. 40th Street, New York 16, New York. Price--$3.75. Illustrated.

GOOD

The substance of this book was originally published as a series of articles in FLIGHT during the summer of 1951, and the decision to reprint the material in more permanent form is an indication of the interest which the subject now commands among technical people.

This is more of a book for technical-minded people and those seriously interested in the study and history of space missiles. "An Evening Well Spent With This Book".

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