

AN ESSAY BY SGI PRESIDENT IKEDA ASTRONOMY MAKES US AWARE

Remembering his studies of astronomy at ‘Toda University,’ SGI President Ikeda says that ‘astronomy makes us aware that we are all living together on one tiny, tiny planet. Astronomy stirs in us the cry for peace and the spirit of love.’

“Ninety-eight percent of what I am today I learned from my mentor.” This was the forthright declaration I made in my speech “Thoughts on Education for Global Citizenship,” which I delivered at Columbia University’s Teachers College in New York, in June 1996. I wanted to convey the profound significance of what I refer to as “Toda University,” which was grounded on the principle that people foster people, and that the very heart of humanistic education is the relationship between teacher and student.

It is no exaggeration to say that the teachings impressed upon my youthful mind at Toda University were precious drops of the wonderful medicine of wisdom. I decided, as I studied by my mentor’s side, that my challenge and my mission as a disciple would be to see how far I could expand these precious drops I received from Mr. Toda into a vast sea of infinite value.



At Toda University, we used leading texts by famous scholars, the same texts generally in use at Japanese universities. For example, Mr. Toda had me read *Introduction to Economics* by Kanae Hatano, published in 1950 by Nihon Hyoronsha; *Basic Studies in Law* by Kojiro Wada, published by Keibundo Shoten in 1948; *Chemistry, The Earth and the Planets and Life*, all by F. Sherwood Taylor and part of his comprehensive book *The World of Science*, translated by Toshiaki Shirai and Raikichi Kuwaki and published by Kawade Shobo in 1953; *Sources in Japanese History* by Eiichi Ozawa, Hiroshi Takai and Yasumasa Oda, published in 1952 by Shimizu Shoin; *World History* by Toshitaka Yada, published by Yuseido in 1954; and *Political Science* by Yasuzo Suzuki, published by Seirin Shoin in 1955. All of these books, of which I have fond memories, are now in the Ikeda Collection of the Soka University Main Library in Tokyo.



When I opened one of those texts, *The Earth and the Planets*, these words seemed to jump off the page at me: “The number of stars exceeds 10¹⁵, so if these figures are correct we might expect there to be ten million stars with planets within the range of our telescopes. Only a small proportion of planets have air, water and a temperature at which complicated molecules can both exist and execute the elaborate changes characteristic of living matter. But if only one in a hundred planets fulfilled these conditions there may be a hundred thousand earths capable of supporting life.”

This passage played an important part in Mr. Toda’s astronomy class. Pleased that the view expressed in it perfectly coincided with his own ideas, Mr. Toda said: “There are many, many planets similar to the Earth in the universe. This is what the Buddhist scriptures are referring to when they talk of ‘lands in other directions.’” My youthful heart danced at the dynamic, unfettered way in which Mr. Toda linked Buddhism and modern astronomy.



Nichiren Daishonin declares, “The Buddhas of the ten directions will all assemble in throngs and fill in the lands to the east, west, north and south, in the eight directions, the major world system, and all the four hundred ten thousand million nayutas of lands” (*The Writings of Nichiren Daishonin*, p. 1074). One ancient text defines a *nayuta* as 1060—in other words, a 1 followed by sixty 0’s. Isn’t this a clear assertion that an infinite number of Buddha lands exist beyond our solar system and galaxy?

Buddhism teaches that the heavens and the earth, the sun and the moon, and the infinite number of stars are all subject to the two phases of birth and death. The birth and death of stars, and the formation, continuance, decline and disintegration of galaxies unfold on a grand scale.

This, too, was a major topic of study at Toda University. Mr. Toda often spoke of the interrelationship of the universe and life. “Human activity,” he said, “can never escape the rhythmic law of the universe. The Daishonin’s Buddhism teaches that law at the most fundamental level, as an actual reality from the perspective of life. If you understand that human activity is governed by the law of the universe, you will realize that you are one with the universe. And the universe is one with you.”



Sixteen years ago, on Nov. 26, 1983, I met Dr. Gerald Carr, the commander of Skylab 4. He said that his experience in space taught him that there is a strict order to the universe. Many things happen in the universe, but there is order to their activity; that order is the universality that all humanity shares, he said. I will never forget his penetrating, confident observation.

When I asked whether he thought intelligent life existed elsewhere in the universe, he responded that there was a strong possibility it does. Then, with a touch of humor, he added that if life forms more advanced than us did exist, they were no doubt already watching us, because the Earth “makes so much noise.”

The adventure of space exploration opens our minds and imaginations to possibilities as limitless as the vast sky above. It also brings us a sense of unity, leading to cooperation and coexistence.

On Nov. 29, 1999, the discovery of six new planets outside the solar system attracted a great deal of attention. We are living in an age when the possibility of civilizations beyond Earth will be a source of ever wider excitement and inspiration. We are finally entering the time when we will attain harmony and unity as global citizens with a shared destiny, just as Mr. Toda said.



Mr. Toda strongly urged that greater energy be put into the teaching of astronomy. Why? Astronomy makes us aware that we are all living together on one tiny, tiny planet. Astronomy stirs in us the cry for peace and the spirit of love.

In 1993, I met with Dr. Robert Jastrow, director of the Mount Wilson Institute and Observatory in California. As a result of our discussion, the Soka junior and senior high schools in both Tokyo and Kansai are now linked to the observatory by computer, allowing our students to observe the planets through the observatory’s telescope.

In addition, the Kansai Soka Junior and Senior High School has been chosen as one of the first two Japanese schools to participate in an educational program developed by

NASA, using photographs taken of the Earth during space shuttle missions.

When Japanese astronaut Mamoru Mori goes back into outer space next month on the space shuttle Endeavor, the Soka students will begin their observations and experiments. The Endeavor, scheduled to lift off on Jan. 13, will be the first space flight of the new millennium, carrying aloft with it the hopes and dreams of our bright young leaders of the 21st century.