Maya Sun

Sun, Corn, and the Calendar

NARRATION:

Cycles have always been important to my people. In the world of the Maya, the land and the sky provide natural connections between the cycles of the Sun and the cycles of corn.

My ancestors were expert astronomers and skilled farmers, and they designed a complex calendar system to give order to our lives. The Sun, corn, and the Maya Calendar are all interconnected.

In our land, the Sun passes directly overhead twice a year, at midday. This astronomical event, known as the zenith passage of the Sun, occurs only within the tropics. When the Sun passes through its zenith, the shadows of vertical objects disappear.

Every year at the ancient Maya city of Chichén Itzá, on May twenty-second and July nineteenth, the Sun passes through the zenith, and all the shadows disappear from vertical objects. This effect can be easily seen by observing the columns located near the Temple of the Warriors.

Ancient Maya architects were astronomers as well, and constructed their buildings and temples in alignment with the zenith passage of the Sun. In Palenque, buildings align with the Sun at sunrise or sunset to mark the zenith passage.

In addition to the Maya, other Mesoamerican cultures tracked the Sun during its zenith passage. In the ancient city of Monte Albán, Oaxaca, Zapotec astronomers used “zenith tubes” and carved stone columns to record this important astronomical event.

Observations of the zenith passage allowed the ancient Maya to accurately measure the length of the solar year.

At the latitude of one of the oldest Maya cities from the past, Copán, the first zenith passage in late April marks the beginning of the corn planting period.

The second zenith passage in mid-August marks the time to harvest the corn.

There are one hundred and five days between these two zenith passages. If we take the number of whole days in the solar year, three hundred and sixty-five, and subtract one hundred and five, the result is two hundred and sixty, which is the number of days in our Maya sacred calendar.
Our sacred calendar is called Tzolk’in in the Yucatec Mayan language or Chol Q’ij in the K’iche’ Mayan language. The length of our sacred calendar also encompasses nine cycles of the Moon and the gestational period of humans.

Our creation story tells how humans were created from corn. So it is fitting that the cycles of corn and the gestational cycle of humans are connected to our sacred calendar, and fit within the yearly cycle of the Sun.

Thus, the Sun, corn, and our Maya calendar system are all interconnected.