## **Techno Files**



## The Rosetta Project

RESEARCHERS HOPE THE NEW ROSETTA PROJECT WILL SIMPLIFY LANGUAGE DISSEMINATION FOR THOUSANDS OF YEARS TO COME

Lost for 2,000 years, it was recovered in 1799 by soldiers of Napoleon Bonaparte while demolishing an ancient wall in the Egyptian town of Rosetta. The stone bore an inscription in three languages: hieroglyphics, demotic (a more modern form of Egyptian writing), and Greek. The vast importance of the fine white writing on the one-metre high black basalt stone was immediately recognized. It was sent to Cairo for study, and later, to the British Museum in London. This three-quarter ton stone-"The Rosetta Stone," as it came to be known-provided scholars with a key to deciphering the hieroglyphs found throughout Egypt, and provided a remarkable tool for unlocking thousands of years of history.

Every year, history is lost as languages vanish. Between 50 and 90 percent of the world's more than 6,000 languages are predicted to become extinct within this century. Of these languages, many have little or no documentation. In Canada alone over twenty languages have disappeared throughout the last century, and many more are bordering on extinction.

Languages provide far more than just a means of communication between people. The study of language allows scientists to reconstruct ancient patterns of human migration. Other researchers examine the nature of languages to determine if grammar and vocabulary-the structural elements of language-are universal. If they are, it would suggest that language is hard-wired into the human brain. The loss of a language represents a largely irrecoverable loss of knowledge.

The Long Now Foundation of San Francisco, CA is fighting to preserve this knowledge. The Foundation has taken on an ambitious task: To provide a permanent record of 1000 languages. Named "The Rosetta Project," engineers and scientists are microscopically etching translated versions of Chapters 1-3 of Genesis onto disks. This text was chosen as it has been one of the most widely and accurately translated writings throughout history.

Carefully designed, the three inch disk has a map of the Earth in the center, with numbers on the map representing the locations of each of the languages. Spokes radiating outward from the map contain the 27,000 microscopic pages of language. Containing the text in eight major languages, an outer ring of naked-eye-readable text spirals inward, shrinking to microscopic scale. The shrinking message suggests to the reader to "obtain a magnifier and read on."

By luck, the original Rosetta Stone survived the millennia, however modern science and engineering will enable this 21st-century Rosetta Stone to carry its message through time. With a targeted life in excess of 2,000 years, the disk is made of nickel and encased in a four inch spherical container. The transparent upper half of the container is optical glass that acts as a 6X magnifier to provide a closer view of the disk's contents. To fully read the disk however, a 1000X microscope will be needed. The lower half of the container is stainless steel and includes a stainless steel ribbon and stylus so that caretakers can record their names and dates thought the ages.

With the archivists' premise that "Lots of Copies Keep Stuff Safe," in the fall of 2002, the Foundation began mass producing thousands of copies of the new Rosetta Disk. These copies will be distributed through the world with the hope that some time in the distant future they may aid researchers in understanding the languages of today. ★