A shocking diet: Researchers describe microbe that 'eats' electricity

There have been plenty of fad diets that captured the public's imagination over the years, but Harvard scientists have identified what may be the strangest of them all – sunlight and electricity.

Led by Peter Girguis, the John L. Loeb Associate Professor of the Natural Sciences, and Arpita Bose, a post-doctoral fellow in Organismic and Evolutionary Biology, a team of researchers showed that the commonly found bacterium *Rhodopseudomonas palustris* can use natural conductivity to pull electrons from minerals located deep in soil and sediment while remaining at the surface, where they absorb the sunlight needed to produce energy. The study is described in a February 26 paper in *Nature Communications*.

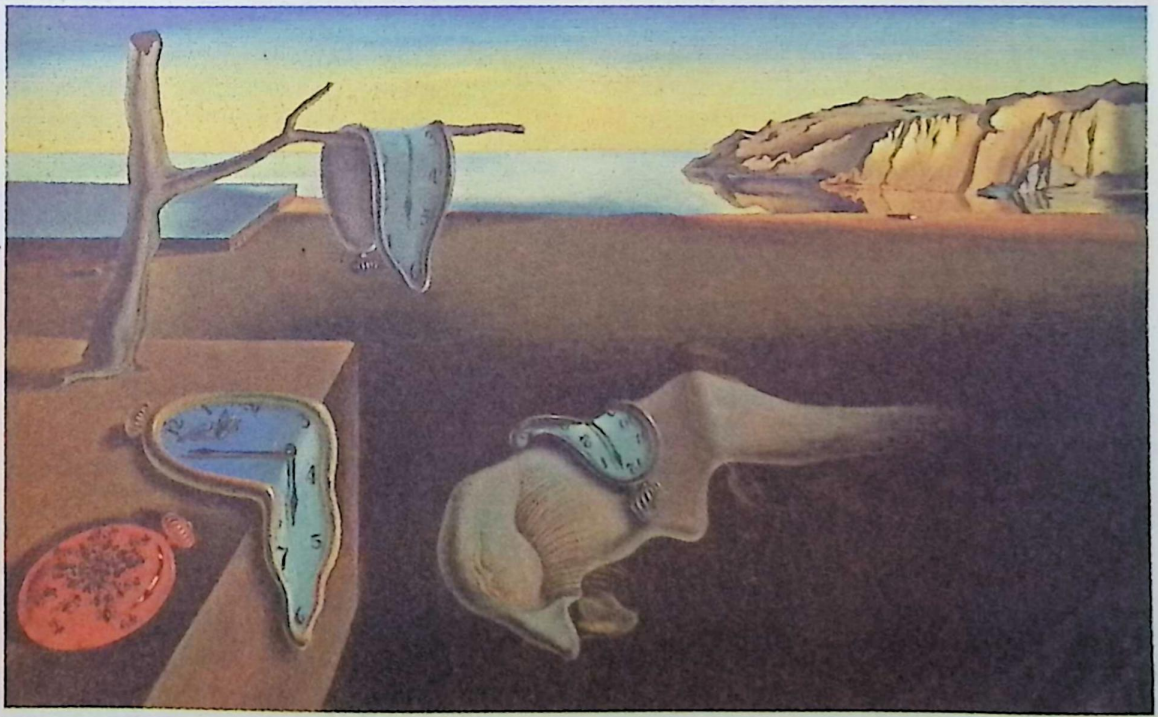
Outside the body our memories fail us

New research from Karolinska Institutet and Umeå University of Sweden demonstrates for the first time that there is a close relationship between body perception and the ability to remember. For us to be able to store new memories from our lives, we need to feel that we are in our own body. According to researchers, the results could be of major importance in understanding the memory problems that psychiatric patients often exhibit.

The memories of what happened on the first day of school are an example of an episodic memory. How these memories are created and how the role that the perception of one's own body has when storing memories has long been inconclusive. Swedish researchers can now demonstrate that volunteers who experience an exciting event whilst perceiving an illusion of being outside their own body exhibit a form of memory loss.

"It is already evident that people who have suffered psychiatric conditions in which they felt that they were not in their own body have fragmentary memories of what actually occurred," writes Loretxu Bergouignan, principal author of the current study. "We wanted to see how this manifests itself in healthy subjects."

The study, which is published in the *Proceedings of the National Academy of Sciences*, involved a total of 84 students reading about and undergoing four oral questioning sessions.



Salvador Dali, *The Persistence of Memory*, oil on canvas, 24x33cm, 1931.