CULTURA & SAÚDE

ISSN 2595-7546
Vol. 4 · No. 3 · August 2004
São Paulo, Brasil

ARTICLE · CULTURA & SAÚDE

Einstein and the Atomic Bomb

The famous tongue photo and Einstein's campaign against the atomic bomb

André Krell

Received for publication in August 2004 · Section: Article · Language: English

ABSTRACT

The author revisits the famous photograph of Albert Einstein sticking out his tongue, placing it in the period when the scientist was involved in nuclear energy research. The text explains that Einstein was aware of the military purposes of the research funded by the American Ministry of Defense in the Manhattan Project, but did not foresee the outbreak of the Second World War nor the use of that energy for mass destruction. It recounts his correspondence with President Roosevelt and his remorse after the bomb was dropped on Hiroshima in 1945, when he came to regard that study as one of the greatest mistakes of his life. According to the narrative, the photo was taken during an interview for his campaign against the military use of nuclear energy, when, provoked by a reporter, he answered with irony by offering his tongue so they could 'lick their stamps.'

KEYWORDS: *einstein; atomic bomb; nuclear energy; manhattan project; hiroshima; history of science*

Reproduced, with the author's permission, from http://members.tripod.com/alkimia/

The photograph beside this text is famous. One of the most renowned scientists of the 20th century sticking out a considerable tongue at a photographer, with an expression seemingly quite untroubled by the consequences this act would certainly bring. Einstein is better known for his tongue than for the Theory of Relativity or for his conception of the laser!

But was this genius of science really going mad, as some suspected? Had he been abducted, and had the aliens experimented on his tongue, and did he want to show us that we had truly already made contact?

At the time this photograph was taken, Einstein was involved in the study of nuclear energy. He was right about the amount of energy that could be generated by the fusion or fission of atomic nuclei.

Contrary to what some say, Einstein was fully aware that there was an intention to use nuclear energy for military purposes, since it was the American Ministry of Defense that bore the costs of the research — in the then Manhattan Project. He simply did not foresee two things: the first, that a Second World War would break out, and the second, that this energy would one day actually be used for the purpose of mass destruction. He also knew well the effects of the uranium bomb.

Einstein frequently sent letters to President Roosevelt, informing him of the project's progress and requesting human or instrumental resources when necessary. He also requested radioactive materials and informed the government about their effects.

But the first atomic bomb was dropped on the Japanese enemy in 1945, over the city of Hiroshima. From then on, Einstein came to regard the study of nuclear energy for military purposes as one of the greatest mistakes of his life.

Feeling guilty, Einstein sent a letter to the president requesting that the nuclear attacks be suspended immediately, since their effects were "greater than predicted." But Japan was cornered and the president's popularity was rising with the prospect of the end of the war and with the retaliation for Pearl Harbor. So Einstein turned to the media and the American people, asking the population to send letters to the president requesting an end to the nuclear attacks.

But the American public and media were caught up in the military's speeches about the end of the war, and in the

way credit was attributed to the powerful new weapon developed by the great scientist Albert Einstein and his team.

The photograph was taken during an interview Einstein was giving to the press in order to promote his campaign against the use of nuclear energy for military purposes. It was at the moment when he was answering the following question from one of the reporters: "The President of the United States offers us peace in exchange for the use of the bomb; what do you have to offer the American people in exchange for peace?" It was then that Einstein, sticking out his tongue at the reporter and the photographer, replied: "I offer my tongue, so they can lick their stamps!"

© Cultura & Saúde · ISSN 2595-7546 · culturaesaude.med.br · English edition