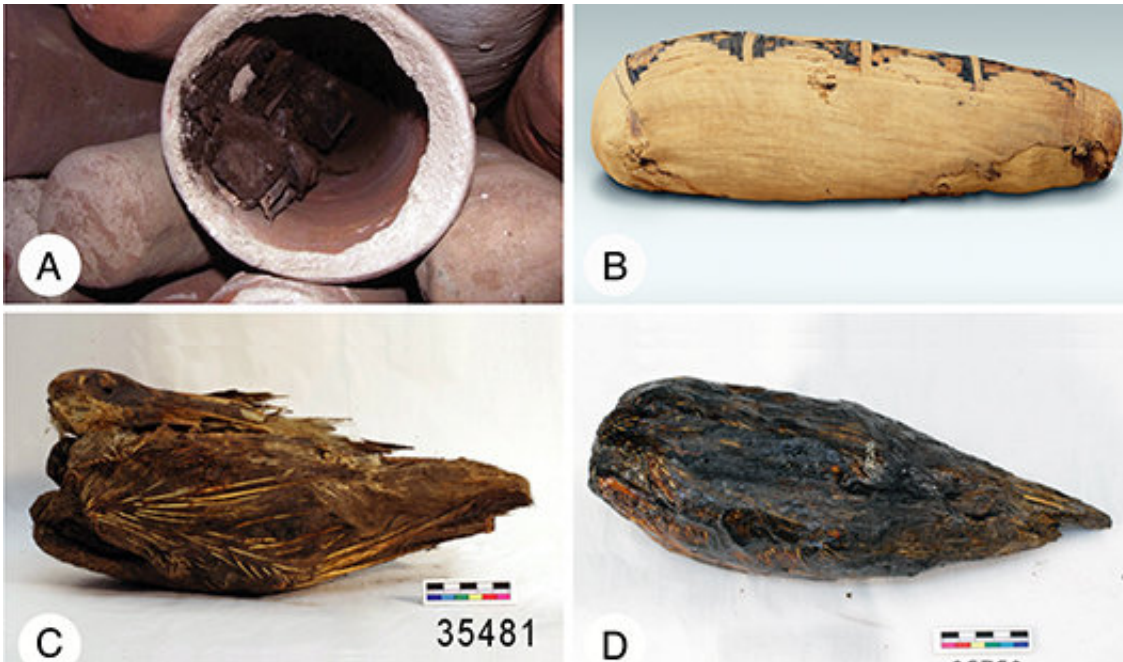


'Bin chicken' plays unique role in story of evolution

September 28 2018



(A) Empty and full pottery vessels from catacombs from Saqqara, Egypt (photo credit Sally Wasef), (B) mummified Sacred Ibis wrapped in cloth (photo credit Metropolitan Museum of Art, New York), (C) a well-preserved example of an unwrapped Sacred Ibis mummy (the head and wings of the bird are clearly visible), and (D) a mummified Sacred Ibis dipped in resin. Credit: University of Queensland

A University of Queensland researcher has uncovered how a French scientist and ibis researcher conducted the first test of evolution more than 50 years before Charles Darwin's Origin of the Species.

UQ Centre for Policy Futures researcher Dr. Caitlin Curtis has found that the sacred ibis – a cousin of the Australian 'bin chicken' – became central to the history of [evolution](#) when several mummified birds were taken from Egypt to France in 1798.

"The ibis mummies were taken by Napoleon's army to Paris, and played a surprising role in an early debate about evolution," Dr. Curtis said.

"Two naturalists, Georges Cuvier and Jean-Baptist Lamarck, disagreed about the significance of the mummified Egyptian sacred ibises.

"Cuvier took careful measurements and determined that no changes had happened when comparing the mummified birds against modern specimens.

"He went on to conclude that this was proof that species could not change over time, opposing the emerging evolutionary ideas of Lamarck."

But Lamarck disagreed, arguing not enough time had passed to see any differences, and that environmental conditions would also have had to change.

"This was significant at a time when evolution was not yet an idea," Dr. Curtis said.

"Cuvier was a prominent scientist who had a lot of voice and power within society, and he continued the debate through to Lamarck's death—even criticising Lamarck's belief in evolution at his eulogy – setting back the idea for decades."

Dr. Curtis said it was a striking example of a powerful – but incorrect—scientist controlling the debate.

"This story and the lessons from the sacred ibis are as relevant today as they were 200 years ago," she said.

"Confirmation bias, where researchers' work is negatively affected by pre-existing biases and ideas, is still an issue within the scientific community.

"This is a reminder that now, as much as ever, we need to be aware of confirmation bias, and the detrimental impact that dominant personalities can have on science."

More information: Caitlin Curtis et al. The Sacred Ibis debate: The first test of evolution, *PLOS Biology* (2018). [DOI: 10.1371/journal.pbio.2005558](https://doi.org/10.1371/journal.pbio.2005558)

Provided by University of Queensland

Citation: 'Bin chicken' plays unique role in story of evolution (2018, September 28) retrieved 14 July 2024 from <https://phys.org/news/2018-09-bin-chicken-unique-role-story.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.