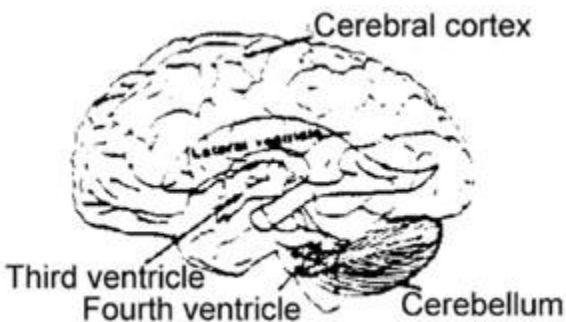


Is your brain really necessary?

John Lorber, a British neurologist, has studied many cases of hydrocephalus (water on the brain) and concluded that the loss of nearly all of the cerebral cortex (the brain's convoluted outer layer) does not necessarily lead to mental impairment. He cites the case of a student at Sheffield University, who has an IQ of 126 and won first-class honors in mathematics. Yet, this boy has virtually no brain; his cortex measures only a millimeter or so thick compared to the normal 4.5 centimeters.

Although the deeper brain structures may carry on much of the body's work, the cortex is supposed to be a late evolutionary development that gave humans their vaunted mental powers and superiority over the other animals. If the cortex can be removed with little mental impairment, what is it for in the first place?

(Lewin, Roger; "Is Your Brain Really Necessary?" *Science*, 210:1232, 1980.) Comment. Brain size, then, may mean nothing in comparing ancient and modern human skulls or human brain capacity with those of animals! Where is the seat of intelligence?



In some cases of hydrocephalus, the cortex is only paper-thin, but little mental impairments is apparent.

Science Frontiers Sourcebook Project Reviewed in:

- Booklist: December 15, 1977
- New York Times: April 3, 1979
- Icarus: Volume 41, Issue 3, p. 470-470 1980, Vol.56:3, P.615 1983, Vol.58:3 June 1984, Vol.60:3 Dec 1984, Vol.72:3 Dec 1987
- Library Journal: June 1, 1981
- The Science Teacher: March 1983
- Choice: June 1982; September 1983
- Science Books and Films, Sept/Oct 1983
- Journal of the Royal Astronomical Society of Canada, Vol. 81, no. 1 1987
- American Journal of Physics, Volume 52, Issue 8, p. 764 August 1984

Quotes

"A sourcebook of unexplained phenomena is therefore a valuable addition to a collection of scientific literature. William R. Corliss has provided this in the past with his source books of scientific anomalies in several subjects, and now he has provided it for astronomy. He has done an excellent job of collecting and editing a large amount of material, taken in part from scientific

journals and in part from scientific reporting in the popular or semi-scientific press." -- "The Mysterious Universe: A Handbook of Astronomical Anomalies", reviewed by Thomas Gold, Cornell University, in *Icarus*, vol.41, 1980

"An interesting, systematic presentation of unusual weather [...] This book is recommended for a general audience" -- "Corliss, William R., Tornadoes, Dark Days, Anomalous Precipitation, and Related Weather Phenomena, Sourcebook Project, 1983.", reviewed in *Choice*, September 1983

"..the science is necessarily somewhat speculative, but Corliss's synthesis is based on reputable sources." -- "Corliss, William R. (Compiler). *Lightning, Auroras, Nocturnal Lights, and Related Luminous Phenomena*" reviewed by Joseph M. Moran, Univ. of Wisconsin in *Science Books and Films*, Sep/Oct 1983

"Before opening the book, I set certain standards that a volume which treads into dangerous grounds like this must meet. The author scrupulously met, or even exceeded those standards. Each phenomenon is exhaustively documented, with references to scientific journals [...] and extensive quotations" -- "Book Review: The moon and planets: a catalog of astronomical anomalies", *The Sourcebook Project*, 1985., Corliss, W. R., *Journal of the Royal Astronomical Society of Canada*, Vol. 81, no. 1 (1987), p. 24., 02/1987