

Roger W. Sperry: How Many Split-Brain Patients It Took To Be Awarded Psychology's First Nobel Prize UNGU Caroline J. Smelik, Kevin M. Collie, Brijinder S. Soni, Jazmin Rios, David J. Giordano, Rachel Kantor, Antonio E. Puente

Method

Introduction

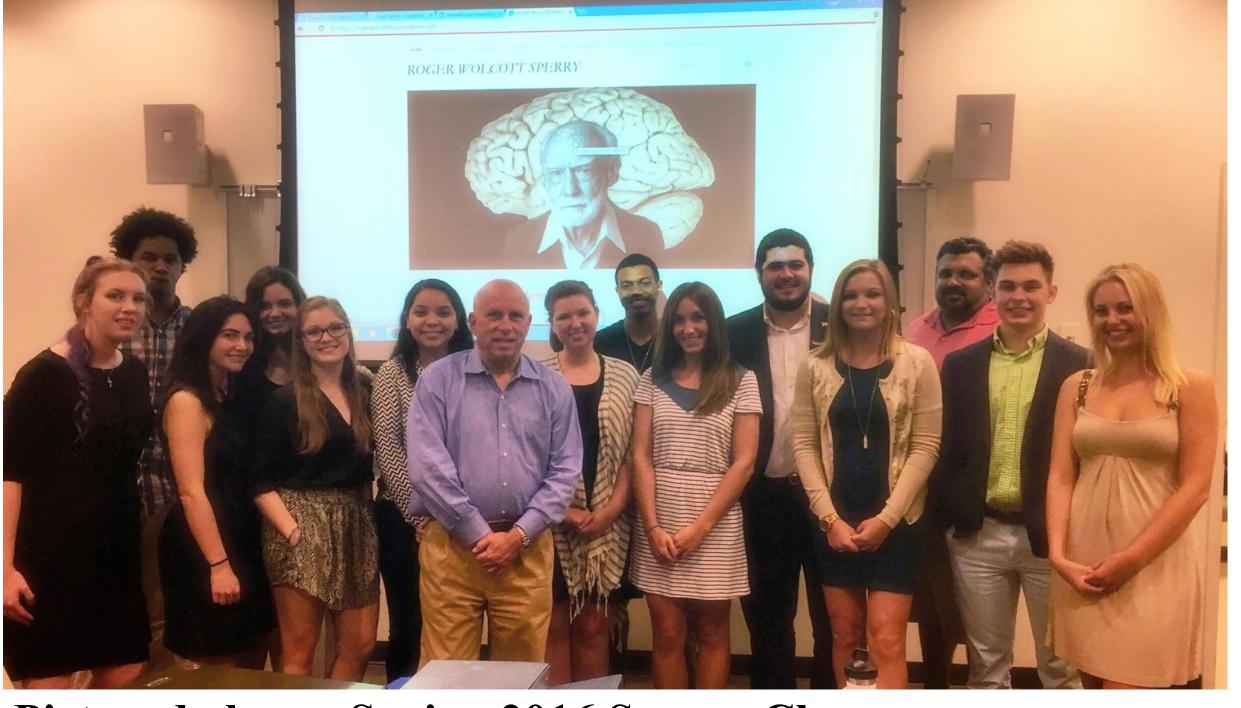
Roger W. Sperry was the first psychologist awarded a Nobel Prize. Sperry received the award in Physiology or Medicine in 1981 as a result of his work in split-brain research, which was the culmination of his other endeavors in neurospecificity, equipotentiality, and consciousness.

Projects pertaining to Sperry's lifetime achievements have been completed by students from the past 30 years of History of Psychology courses at UNCW. In the spring of 2016, a Sperry seminar was established through which students had access to Sperry's personal materials, such as recordings, correspondences, neuropsychological testing and surgery notes, videos and publications.

Prior to the current study, the general consensus was that approximately a dozen total split-brain patients were involved in the research that led to his Nobel.

Objective

- Despite Sperry's notable achievements, systematic documentation of Sperry's work is limited.
- The initial objective was to cull through the vast array of personal and research related effects related to Roger Sperry in order to organize it efficiently as well as to make his life's work readily available in the most permanent way possible.
- The current study came about after the realization that there had never been a definitive record of the number of patients that participated in Sperry's split-brain research, including the number of patients whose cerebral commissures had been severed.



Pictured above: Spring 2016 Sperry Class

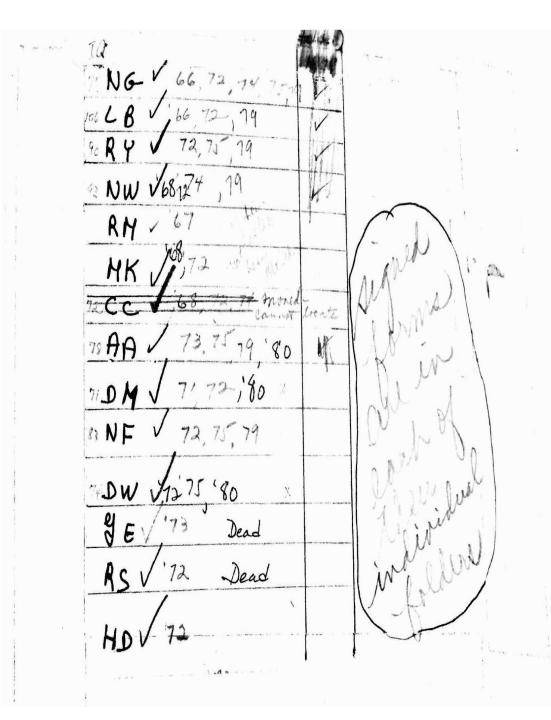
University of North Carolina Wilmington

MATERIALS:

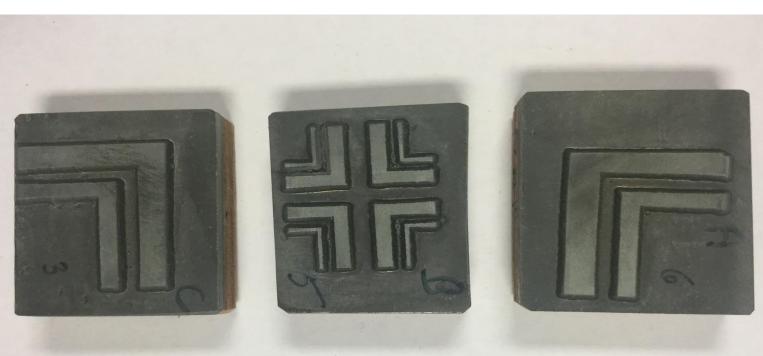
- 140 Gb from Antonio E. Puente's personal archives ■ Found online at www.RogerSperry.org
- 12 file cabinets obtained from the late Mrs. Norma Dupree Sperry

PROCEDURE:

- Through thorough investigation of Sperry's materials, a spreadsheet was compiled including every set of patients' initials involved in the split brain research.
 - Original copies of Sperry's 280 publications
 - Films (8mm and VHS) taken from Sperry's research lab were converted to a multimedia format, analyzed, and patient initials were noted.
 - Surgical notes and other research related documents were then analyzed for further clarification of the patient initials to help separate any patients possessing the same initials.
 - Voice recordings from conversations between Roger Sperry and Antonio E Puente were transcribed by hand.
 - Sperry's original handwritten notebooks, sketches and notecards were also analyzed.

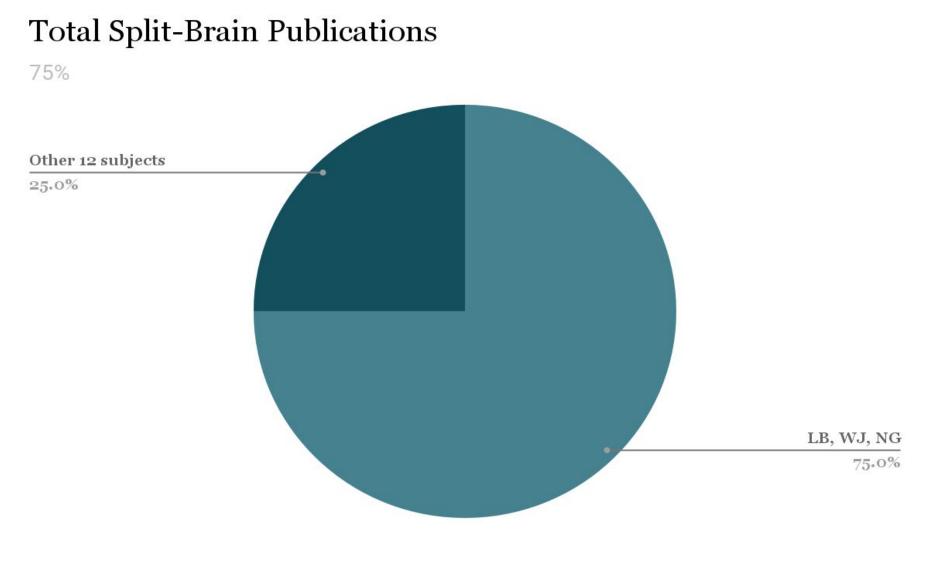






Review of available records indicated:

- 42 subjects were commissurotomized
- research at Caltech.
- the bulk of the research.



Roger Sperry's published research contains data from only three patients, and primarily focuses on just one patient - L.B. However, 42 patients were involved in the split-brain research overseen by Sperry in his lab at Caltech.

Prior to this investigation, it was believed that Sperry's split-brain research consisted of only 12 patients.

The file cabinets received from the late Mrs. Norma Dupree Sperry are in process of being archived, as there is potential for finding new, unseen notes and surgical records within these files.

Analysis of the remaining documents could also result in a greater number of patients who underwent a cerebral commissurotomy. In addition, further investigation could aid in clarification on patients that have already been noted.



Results

• Only 15 of 42 individuals regularly participated in Sperry's

• Furthermore, 3 patients constitute 75% of all split-brain publications, with only one patient, L.B., solely representing

Discussion

Future Work

References