Mathematician Raymond L. Johnson was born on June 25, 1943 in Alice, Texas, a small town near Corpus Christi. He was raised by his mother Johnnie Johnson, his maternal grandmother Ethel Pleasant Johnson, and her second husband Benjamin Thompson. Growing up, it was Benjamin Thompson who taught Johnson how to read and do some arithmetic. This sparked an early interest in mathematics and allowed Johnson to skip the first two grades. Johnson attended a two room schoolhouse because the nearby grade school was segregated. With the help of his mentors, Larry O’Rear and Stan Brooks, Johnson excelled in high school
mathematics. He went on to major in mathematics and received his B.A. degree from the University of Texas in 1963.

Once again, with the help and encouragement of a great mentor, Dr. Howard Curtis, Johnson applied and became one of the first African Americans to be admitted to Rice University. Two alumni sued the university to stop Johnson’s entrance, but within the year, Rice University won the case. Johnson became a regular student, graduating with his Ph.D. degree in mathematics in 1969. After college, Johnson started his forty year career at the University of Maryland in College Park, becoming the first African American faculty member in the mathematics department. He began as an assistant professor in 1968 and became a full professor in 1980.

Johnson served as chair of the graduate studies department at the University of Maryland from 1987 to 1990. As chair, he founded several programs to eliminate barriers for minority students and to help increase the number of minorities and women in the Ph.D. program in mathematics. He received a Distinguished Minority Faculty Award for his work. Johnson was promoted to chair of the mathematics department in 1991, a position he held for five years. Johnson’s mathematical work has focused in the area of harmonic analysis, the study of overlapping waves, which has roots in functions related to trigonometry. He has contributed to over twenty-five publications on mathematics research. Johnson’s current research focuses on applying harmonic analysis to study spectral synthesis. In 2007, Johnson was honored with the Mentor Award for Lifetime Achievement from the American Association for the Advancement of Science. In 2009, Johnson returned to Rice University to serve as a visiting professor. He has one son, Malcolm P. Johnson.

Raymond L. Johnson was interviewed by The HistoryMakers on August 17, 2012.

Scope and Content

This life oral history interview with Raymond L. Johnson was conducted by Larry Crowe on August 17, 2012, in Houston, Texas, and was recorded on 5 uncompressed MOV digital video files. Mathematician and math professor Raymond L. Johnson (1943 - ) led the way for minority scientists by breaking through barriers and serving as a mentor. He is known for his research on harmonic analysis and spectral synthesis.
Restrictions

Restrictions on Access

Restrictions may be applied on a case-by-case basis at the discretion of The HistoryMakers®.

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Related Material

Information about the administrative functions involved in scheduling, researching, and producing the interview, as well as correspondence with the interview subject is stored electronically both on The HistoryMakers® server and in two databases maintained by The HistoryMakers®, though this information is not included in this finding aid.

Controlled Access Terms

This interview collection is indexed under the following controlled access subject terms.

Persons:

Johnson, Raymond L.
Crowe, Larry (Interviewer)
Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews
African Americans--Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

University of Maryland, College Park

Rice University

Occupations:

Mathematician

Math Professor

HistoryMakers® Category:

ScienceMakers|EducationMakers

Administrative Information

Custodial History

Interview footage was recorded by The HistoryMakers®. All rights to the interview have been transferred to The HistoryMakers® by the interview subject through a signed interview release form. Signed interview release forms have been deposited with Jenner & Block, LLP, Chicago.

Preferred Citation

Processing Information

This interview collection was processed and encoded on 2/5/2020 by The HistoryMakers® staff. The finding aid was created adhering to the following standards: DACS, AACR2, and the Oral History Cataloging Manual (Matters 1995).

Other Finding Aid

A Microsoft Access contact database and a FileMaker Pro tracking database, both maintained by The HistoryMakers®, keep track of the administrative functions involved in scheduling, researching, and producing the interview.

Detailed Description of the Collection

Series I: Original Interview Footage

Video Oral History Interview with Raymond L. Johnson, Section A2012_193_001_001, TRT: 1:29:35 2012/08/17

Raymond Johnson begins by describing his professional capacities, his list of favorites, and his family background. Johnson was born in June of 1943, in Alice, Texas, where he spent his entire childhood. He and his younger sister were raised by their mother, Johnnie Virginia Johnson, in a close-knit family. His upbringing was influenced by his grandmother, Ethel Belle Pleasant, his Aunt Ruby, and his uncle, R.J. Johnson. During his pre-school years, Johnson spent a lot of time at his grandmother’s home, while his mother worked to support the family. He was taught to read even before starting school, by his step-father, Reverend Benjamin Thompson, who was a pastor at the local Baptist church. Johnson describes his experience in school, particularly his fondness for the time spent in eighth grade.

Affirmative action programs.
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Raymond Johnson describes his experience in high school in Alice, Texas. By the time Johnson started his junior year of high school, the school system in Alice had integrated, as a result of the Brown versus Board of Education Supreme Court ruling in 1954. Johnson received guidance from two members of the faculty at his school, influencing his decision to apply for a merit-based scholarship to attend college. After graduating from high school in 1960, Johnson joined the University of Texas, in Austin, under the mentorship of Dr. Howard B. Curtis, in the mathematics department. Johnson received a well-rounded education during his time in Austin, both socially, through his experience with the American Civil Rights Movement, as well as professionally, in the applied mathematics department. He graduated from the University of Texas in 1963, and went on to pursue his Ph.D. in mathematics at Rice University, in Houston, Texas.

Raymond Johnson describes the years that he spent as a doctoral student at Rice University in Houston, Texas, under the mentorship of his graduate advisor, Dr. Jim Douglas, in the mathematics department. Johnson was a graduate student from 1963 to 1969, and performed his dissertation research in the area of partial differential equations. While studying at Rice University, Johnson met and married his wife, Claudette Smith, who was then a student at Texas Southern University, in Houston. Johnson completed his dissertation research at the University of
Chicago, in Chicago, Illinois, when Douglas accepted a position on the mathematics faculty there. After graduating from Rice, Johnson joined the mathematics faculty at the University of Maryland, in College Park, Maryland, and began his research in the area of harmonic analysis.

Raymond Johnson describes his career at the University of Maryland in College Park, Maryland. Johnson spent forty years on the mathematics faculty at Maryland, where he rose quickly through the tenure process. During his service as graduate director for recruitment, and as chairman of the department, Johnson became a spokesperson for the recruitment and specifically, the retention of qualified African American students. Johnson’s legacy lies in these initiatives that paved the way for a steady flow of African American Ph.D.s. In 2007, he received the Mentor Award for Lifetime Achievement from the American Association for the Advancement of Science. After retiring from the University of Maryland in 2009, he accepted a non-tenure-track position at his alma mater, Rice University, in Houston, Texas, where he again hopes to be able to promote African American students in the field of mathematics.

Raymond Johnson describes his successes and failures as
a mentor to African American students in mathematics. Johnson describes his legacy in terms of his students’ success. Johnson hopes to be remembered alongside African American mathematicians who have excelled in their fields of expertise, and also hopes to become a role model for current and future generations of aspiring mathematicians.

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