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"NEVER A DULL MOMENT"—A HISTORY OF CARL GOTTFRIED HARTMAN, UT'S FIRST PHD, PART I

by Nicole Elmer, January 26, 2016

On a thin piece of paper with faded ink, Carl G. Hartman typed fourteen suggested book titles for his intriguing autobiography in the archives at the Dolph Briscoe Center for American History. Amongst these were: "Multiple Careers," "The Life Story of a Life Scientist," and "Never a Dull Moment." The last might serve best to summarize the varied paths of this first PhD recipient at UT Austin.

Hartman, who said he became a research scientist "by accident," is primarily known as an outstanding biologist in the biology of reproduction, and he made many discoveries in reproductive physiology. His doctorate level research while at UT was on the embryology of the opossum, North America's only marsupial. Much of his work helped to establish basic principles in birth control. He authored more than 200 articles, and at age 84, just four years before his death, he published his eighth book, "Science and the Safe Period." Despite these accolades, Hartman's early life was an array of diverse paths that brought him to such prominence and recognition.

THE EARLY YEARS

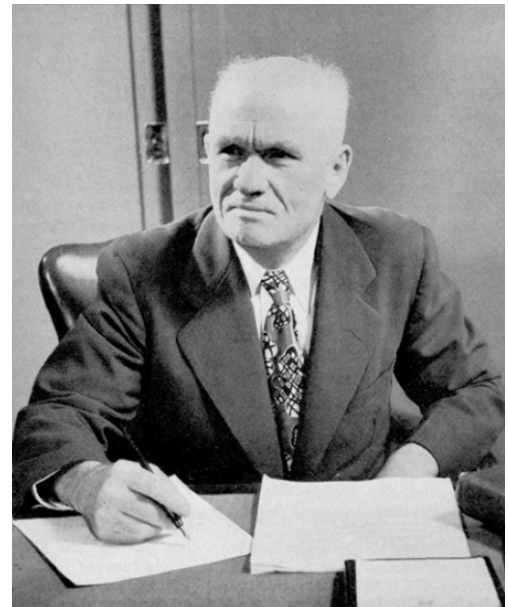
Carl Gottfried Hartman was born on June 3, 1879, in Reinbeck, Iowa, to Ossian W. Hartmann* D.D., M.S., and Sophie Hartmann*, both who hailed from Neuendettelsau, Germany. Carl Hartman was one of seven children. His father was part of the Lutheran missionaries coming to North America to organize churches and parochial schools in the Midwest. Ossian Hartmann was a Greek and Latin scholar, who also served in the capacity of parson and doctor, not an uncommon practice back then. His mother was of Danish birth, but was also fluent in German, French, and English, and Carl Hartman's young exposure and interest in multiple languages would follow him into adulthood. Speaking about his father, Hartman said he "made it understood that we children would go to college, which the seven of us did completely on our own."

Hartman attended Wartburg College, a preparatory school, in 1895 at the age of 16, when the rest of his family moved to Texas to try to improve his mother's health. He considered this time at Wartburg to be a period of growth and awakening, where he acknowledged the professors were "tough hombres." He also delighted in having his roommate's father be a skilled sausage maker, keeping him and his roommate well-stocked in sausages. Hartman also studied briefly at the State University of Iowa, before joining his family in Pflugerville, Texas in 1897.

During his years living in Pflugerville, Hartman worked as a farmer, when he suffered from some eyesight problems and was diagnosed with "imbalance of recti muscles." This ailment delayed the continuing of his education as reading became a problem for him, and he wore corrective glasses to help improve his vision.

Soon, some old botany textbooks spurred his interest in revisiting his education. He was invited to attend UT when he asked botany faculty if he could buy a compound microscope. However, he lacked the funds needed to enroll. To solve the problem, he convinced parents of a small German community to pay him to teach their children to read and write German. This summer school he established allowed the young Hartman to add to a small savings. With \$250 saved, Hartman entered the University of Texas at Austin in 1900.

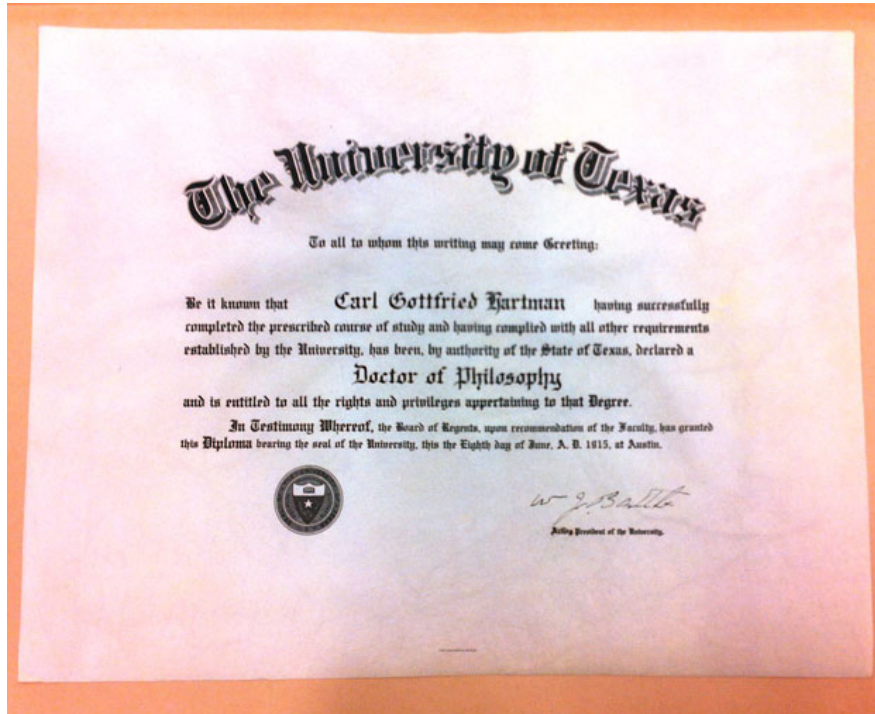
EARLY YEARS AT UT



Dr. Carl G. Hartman, from an *Experientia in Memoriam* article by R. F. Vollman

"I do not, though, believe that scientists are 'born.' In my case, I think I could have been content in any field of endeavor." – Carl Hartman, from his untitled autobiography in the Dolph Briscoe Center for American History archives.

Carl Hartman received all three of his degrees at UT Austin. His B.A. was awarded in 1902, and his Masters in 1904, for his thesis titled: "Observations on the habits of some solitary wasps of Texas: illustrated with original photographs." His PhD, the first ever conferred at UT, was awarded in 1915**, for his thesis titled: "Studies in the Development of the Opossum (*Didelphys virginiana*): I. The History of the Early Cleavage. II. The Formation of the Blastocyst."



Hartman's 1915 PhD, housed in the Dolph Briscoe Center for American History

Hartman matriculated to UT Austin as an undergraduate student during a time of great economic change and expansion for the university, due in no small part to the oil findings on university land. Hartman calls this a "rags to riches Cinderella story," as he started at the university when classes were held in wood-frame army barracks, before oil money had started to change the landscape of the university.

Early on in his education, Hartman had a deep interest in the Humanities, specifically languages, and convinced the Latin professor to arrange a credit for his own self-imposed Latin lessons. He also studied Greek, Old and Middle English, and Old and Middle German. His interest in German from authors like Goethe, Heine, and Schiller would follow him into old age.

Hartman's enthusiasm for Old and Middle German was such that he almost considered Germanic philology as a career. Even after he received his Masters degree in 1904 for his work on solitary wasps, he applied to the faculty of Columbia University for a fellowship in languages. His application was rejected. "Providence was with me," Hartman said later about this change in destiny.

Hartman's extra curricular activities were less focused on athletics, to which he admitted he had little enthusiasm. "I never became an ardent devotee at the shrine of the Longhorn," he stated. He also shunned fraternities, claiming he could never see himself as fraternity brother, instead running with the "Barbarians" (independents).

Hartman's extra curricular hours instead were occupied with various paying odd jobs, to meet his expenses as a student. He served as janitor at a church where he was elevated to "Superintendent" of the Sunday School, in addition to being a substitute preacher. He was a photographer of the university's athletics groups, a bread deliveryman, and assisted in labs on campus washing glassware and other lab chores. "I was probably more interested in the 25 cents an hour I was paid for cutting sections of insect testes than I was in the significance of the basic studies," Hartman said.

It was his work with entomologist, philosopher, and world authority on ants, William Morton Wheeler, that altered much of his life's direction. Hartman found Wheeler to be a professor whose enthusiasm and field-oriented research methods had a profound effect on him. During his second year as an undergraduate, Hartman took Wheeler's course on entomology. They often tramped over the Austin landscape, Wheeler with his vasculum, eating chocolate, as the two dug up extensive nests of the leaf cutter ant (*Atta ferrens*), and observed the stinging agricultural ant (*Pogonomyrex barbatus*).

In 1902, after earning his B.A., Wheeler called on Hartman to find insects for the coming fall semester entomology class. He was to gather hellgrammites from the various natural water



bodies in Austin, in addition to cockroaches from the Congress Avenue bakery in which Hartman worked for one summer, delivering stale bread to the county jail.

However, Wheeler became too busy to conduct the lab work for the entomology course, passing the responsibility to Hartman, and eventually, the entire course to him as well. "This suddenly made an entomologist of me," Hartman states.

Hartman's interest in insects would continue after Wheeler left the university in 1903, to shape Hartman's work as a UT graduate student, as he decided to focus his research on solitary wasps. In later adulthood, Hartman's interest in insects remained, as he would continue to observe solitary bee and wasp behavior during his summer vacations in Connecticut with his family. Two species of fungus-growing ants are named after Hartman: *Mycetosoritis hartmanni* Wheeler 1907 and *Gnamptogenys hartmani* Wheeler 1915.



Mycetosoritis hartmanni alate queen in a laboratory nest. Photographer: Alex Wild, www.alexanderwild.com

WORKING IN ADMINISTRATION AND EDUCATION

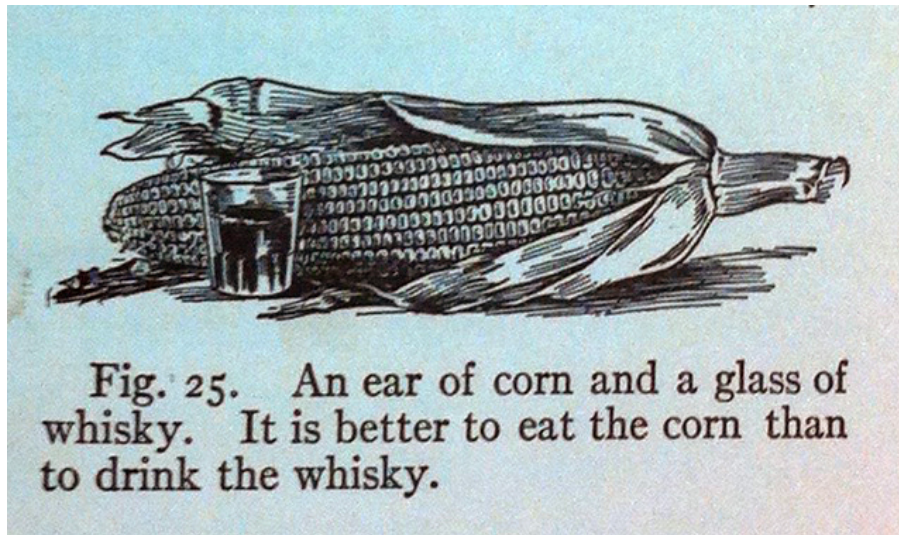
After receiving his masters degree, Hartman wanted a break from the academic life and served as Superintendent of the schools of Travis County. Hartman states much of his desire to run for Superintendent was motivated for his vocal dislike of the current incumbent at the time.

One of his priorities was bringing in better-qualified teachers, and he launched a five-year campaign to establish a local school tax. The job required him to visit schools in Travis County. At the time, these visits involved long travel on horseback. The travel often meant he was away from home for two weeks at a time, and he would sleep in the homes of the parents of school children. He usually opted for sleeping on bags of cottonseed in the barns, to avoid the problems with bedbugs rampant during this time.

Hartman visited all 115 schools in the county, and he was the first Superintendent to visit what was called back then the "colored" schools and "colored" teachers' associations. On these trips he would observe classes in progress and attend recess with the students. The result of his work was to elongate the school year to nine months from three, begin consolidation of the smaller schoolhouses, and establishing a local school tax.

In 1909, after five strenuous years of travel in his role as Superintendent, Hartman moved to Hunstville, TX where he taught biology at Sam Houston Normal Institute. He found the environment very enjoyable and encouraged active field research for his students. Hartman himself would gather algae, mosses, and ferns every weekend, in addition to maintaining a small farm that brought in some additional income.

Hartman also had a little time for research and writing, and managed to publish some of his findings on wasps and woody plants. His degrees at UT also meant he was often called upon by his small community to assist with such things such as teaching physicians how to recognize hookworm, and give tips on sex education and STDs.



An illustration from the 1913 "First Book of Health" by Hartman and Lewis Bradley Bibb

In 1911, as Hartman puts it, "I received two offers of jobs: the one I accepted fixed my career for life." He denied an offer to move ahead in school administration and become Assistant Superintendent of the state, and instead accepted the offer of an instructorship in Zoology at UT, as extended to him by Dr. J.T. Patterson. By this time, Hartman wanted to return to research and an association with a first class university, despite the loss of his beloved small farm and his cut in pay, from \$2500 to \$1200 for nine months of teaching.

In a last move before returning to academia for the rest of his years, Hartman and a former UT classmate wrote some health books for the use in grade schools in the state. Hartman made over 300 pen and ink

drawings for them, and in return received a nice royalty check for \$7000. This sum would help Hartman make the transition to Austin and UT in 1912, where he would begin the trajectory of his research on reproduction, starting with the opossum.

End of Part I

[Continue to Part II](#)

* - *During his years as a Superintendent of Travis County Schools, Carl Hartman would stop signing his name with the final second "n" that his parents used in their own last name, stating "Nobody would miss that last superfluous scratch of the pen."*

** - *Curiously, Hartman states in his autobiography contrary information about the 1915 PhD date: "With the credits I earned at the University of Chicago, by the spring of 1916, I filled classroom requirements for the PhD degree and had ready for publication a paper on the early development of the opossum that could serve as a doctoral thesis....This was 12 years after I had received my MA degree."*

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