Women of Computing:

How Vassar's Computer Science Department Championed the Role of Women in Programming and Computer Systems

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"The most dangerous phrase in the language is, 'We've always done it this way."

– Rear Admiral Grace Murray Hopper '28

When Vassar College obtained its first computer in 1967, Professor Winifred Asprey, a faculty member of the Mathematics Department and later the founder of Vassar's Computer Science program, made a far-reaching declaration about the pivotal role of computers in the coming future: "[W]e are living in a computerized world. The initial revolution, begun only a dozen years ago, is over... [Computers] are here to stay and here to enter into almost every phase of our lives...One can predict with certainty that an awareness of the kinds of things computers do—perhaps even direct contact with computers—will soon be regarded as an essential part of a liberal arts education." Over fifty years later, computers would become a familiar instrument to everyone in modern society and launch the world into a high-tech digital era.

Like Asprey, the history of Vassar's Computer Science Department exemplifies the type of forward-thinking mindset that challenges the conventions of the past. For decades, the subtle yet insidious belief that women, on average, perform less competently than men in the hard sciences has long persisted. Among those studies, the lucrative field of computer science and programming continues to show signs of cynicism and contempt for women who attempt to break into the industry, quietly enforcing the notion that women are just not as capable as their male counterparts. But even before its inception, the Computer Science Department at Vassar College stood in opposition to that belief. Throughout its history, the department has demonstrated how women possess the capacity to excel in computer science and fought to give women the opportunity to pursue a discipline known for technological innovation and complex ideas. Thanks to the prowess and dedication of three prominent Vassar women, Vassar's Computer Science Department represents a sweeping challenge against the presumptuous idea of computer science as strictly a male discipline.

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¹ Winifred Asprey, "Vassar's Newest Jewel: the 360," *Vassar, the Alumnae/i Quarterly* 52, no. 4 (April 1, 1967): 2, accessed November 24, 2016, http://newspaperarchives.vassar.edu/cgi-bin/vassar?a=d&d=vq19670401-01.2.3.

The roots of Vassar's Computer Science Department can be traced all the way back to the life and achievements of U.S. Navy Rear Admiral Grace Murray Hopper, one of Vassar's most distinguished and influential alumnae. Famously known as "Amazing Grace," Admiral Hopper was a pioneer in computing as well as a strong-willed woman with exceptional talents in mathematics.² She graduated Vassar in 1928 with honors in physics and mathematics and then became the first woman to obtain a doctorate in mathematics from Yale University.³ After the Japanese attack on Pearl Harbor during World War II, she served her country by working with Lieutenant Commander Howard Aiken and his team at Harvard University, where she became the third person in history to program the world's first computer, the Mark I.⁴ Following the war, Hopper served in the Navy as a programmer for another 40 years, moving up from Lieutenant junior grade to Captain in 1973 and then Rear Admiral in 1985, a year before she retired at the age of 80.5 During this time, she invented the compiler, a crucial master program that translated mathematical source into a language humans can easily understand and vice versa. 6 She believed that compilers would "democratize" computers and allow anyone to communicate with them. Following this mindset, Hopper developed the concept of FLOW-MATIC, the design behind a programming language suitable for businesses instead of the military that substituted mathematic terminology with data names and commands like INVENTORY, COUNT, and REPLACE, which would ultimately contribute to the development of a widely-used computer language known as COBOL.⁷

² Kurt Beyer, Grace Hopper and the Invention of the Information Age (Cambridge, MA: The MIT Press, 2009), 1.

³ Ibid., 25-26.

⁴ Ibid., 37.

⁵ Jean Sammet, "Farewell to Grace Hopper—end of an era!," *Communications of the ACM* 35, no. 4 (April 1992): 129, accessed in folder titled "Grace Murray Hopper" under file labeled "Grace Murray Hopper," Room 302, Vassar Computer Science Department, Sanders Physics.

⁶ Beyer, *Grace Hopper*, 314.

⁷ Sammet, "Farewell to Grace Hopper," 130.

However, Grace Hopper sparked the creation of Vassar's Computer Science Department as a teacher. Before she became the woman who worked on the world's first computer, Hopper was a professor of Mathematics at the all-female Vassar College. Throughout her thirteen years of teaching at Vassar, Hopper found ways to incorporate practical applications as well as the latest breakthroughs in science into her lectures, attracting as many as 75 students for her math courses. Among her most devoted students was an equally confident and headstrong girl named Winifred Asprey.

Born in Sioux City, Iowa, Winifred "Tim" Asprey was a girl who always wanted to attend Vassar just as her mother and her grandmother had.¹⁰ After she was accepted in 1934 and arrived on campus with her bags, all her nervousness disappeared once the upperclassmen welcomed her so warmly that she "felt at home from the beginning." In the spring of her sophomore year, she declared mathematics as her major and met Professor Hopper, whom she called "the most inspirational [person] you could possibly imagine."

"[S]he was the youngest person in the Math Department," Asprey recalled in a 2007 interview.¹³ "I took Grace Hopper's Probability and Statistics and fell in love with that subject...Gosh, I enjoyed that course." According to Asprey, she audited every class Hopper taught, and the two soon became close friends.¹⁴

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¹⁴ Ringel, "Vassar's Computing Pioneer," 22.

⁸ Colton Johnson, "Grace Murray Hopper," *Vassar Encyclopedia*, 2013, https://vcencyclopedia.vassar.edu/alumni/grace-murray-hopper.html.

⁹ Beyer, *Grace Hopper*, 28.

¹⁰ Lance Ringel, "Vassar's Computing Pioneer," *Vassar, the Alumnae/i Quarterly* 101, no. 4 (Sept. 1, 2005): 22, accessed in folder titled "WA – Vassar's Computing Pioneer" under file labeled "W. Asprey," Room 302, Vassar Computer Science Department, Sanders Physics.

¹¹ Ibid.

¹² Beyer, *Grace Hopper*, 28.

Winifred Asprey, interview by Viera Proulx, Miss Asprey's house, March 23, 2007, 12, interview transcript accessed in folder titled "WA interview 3/2007 Rough Draft" under file labeled "ACM-W interview 2007," Room 302, Vassar Computer Science Department, Sanders Physics.

After graduating in 1938, Asprey moved from school to school as a teacher during the Great Depression until she earned a master's degree and a PhD in Mathematics at the University of Iowa and returned to Vassar in 1945 to teach undergraduate mathematics. 15 By the early 1950's, Asprey, who was the department chairman by then, was thinking about bringing a computer to Vassar in order to keep the school up-to-date with the latest technological breakthroughs. After seeing the mathematical talents of her female students and urging many of them to pursue computer science, she made a call to her friend Grace Hopper one night to ask her if she should bring Vassar into the computing business. Hopper answered: "I'd been waiting for you to wake up."16 Afterwards, she invited Asprey to join her down in Philadelphia where Asprey could watch her teach a computer how to "do calculus." That moment marked the beginning of Winifred Asprey's 10-year battle to bring a computer to Vassar and the starting point of Vassar's Computer Science Department.

During this period in Vassar's history, the faculty was divided over how Vassar should respond to the sudden widespread use of computers in society. Some argued that the college should be at the forefront of this innovative and promising field, while others argued that the college should stay true to the old-fashioned values of the liberal arts. But for many others, a sense of uncertainty prevailed over exactly how much the college should focus on computers as well as the study of this new technology, which led to an impasse.

"For a long time, I was much more concerned [if I could] ever get Vassar to accept [a] computer," stated Asprey. 18 "Vassar is not mechanical, no sirree! And had it not been for the fact

¹⁵ Ibid., 23.

Asprey, interview by Viera Proulx, 31.
 Ringel, "Vassar's Computing Pioneer," 23.
 Asprey, interview by Viera Proulx, 36.

that I was so well known in the faculty I doubt we ever could have a computer, because the faculty, except for the science people, were totally opposed."

According to Asprey, there was "a fear that 'numbers would take over the world." For many members of the faculty, especially those in the humanities departments, introducing a computer to Vassar meant jeopardizing its position as a liberal arts college. Throughout this difficult battle, Asprey stressed the urgency in the need to integrate women into a field that was ripe with innovation and advancement. She argued, "[T]he notion of acquiring a computer is perfectly sound...[The] availability of this machine would undoubtedly bring more qualified young women into the mathematics field, a worthy ambition for any educational institution...."

Thankfully, the President of the College at the time, Sarah Gibson Blanding, was in support of pushing more women towards the promising computer science field.²² In addition, Asprey developed a strong relationship with the American multinational technology company IBM and became the first recipient of an IBM Post-Doctoral Industrial Research Fellowship, with which she learned about computers for an entire year at the IBM facility near Vassar.²³ Starting in 1956, Asprey effectively launched the first computer science class at Vassar, consisting of thirteen female seniors and four curious faculty members.²⁴ Titled "Mathematics 385: Numerical Analysis," the course brought in several highly-trained experts from the IBM Research Laboratory who taught the fundamental elements of computation and had the students

¹⁹ Ringel, "Vassar's Computing Pioneer," 23.

²⁰ Jenny Walter, interview by Steven E. Park, Nov. 18, 2016.

²¹ Winifred Asprey, "The Machine," Vassar, the Alumnae/i Quarterly 44, no. 2 (December 1, 1958): 12, accessed November 24, 2016, http://newspaperarchives.vassar.edu/cgi-bin/vassar?a=d&d=vq19581201-01&e=-----en-20--1--txt-txIN------

²² Asprey, interview by Viera Proulx, 36.

²³ Ringel, "Vassar's Computing Pioneer," 23.

²⁴ Winifred Asprey to President Sarah Gibson Blanding, May 31, 1957, Folder 2, Box 18, 1, Annual Report of the Department of Mathematics (1956-1957), Special Collections, Vassar College Library.

input numbers into IBM's own computer.²⁵ By 1959, the researchers at IBM were "so deeply impressed by the quality of the graduating seniors Vassar has recommended" that they hired the female applicants "without further ado." ²⁶ By 1964, the number of interested students had tripled and the Mathematics Department was urging the administration to let Vassar have its very own computer, stating how it was "disappointing to see Vassar lagging behind many colleges of less renown in the acquisition of a tool as necessary for many fields of research as an electric computer."27

Yet despite the growing student demand for the course, the administration refused to permit a computer at Vassar. By the early 1960's, countless large universities were adopting the use of multiple computers into their curriculum and several liberal arts colleges had already followed suit.²⁸ The administration remained obstinate about the issue until Alan Simpson became the president of the college in 1964.²⁹ Even before he was inaugurated as president, Simpson believed that the United States needed to encourage more women to enter high-level, professional fields, once stating that "The brains and energy of women are our most neglected national asset." Under his supervision, plans for bringing a computer to Vassar were finally in motion.

Thanks to Hopper's guidance, the generous help of IBM, and the enthusiasm of the female students, Vassar finally obtained the IBM 360 Model 30 E, a state-of-the-art computer

²⁵ "Math Department Starts New Computer Course," Miscellany News (Poughkeepsie, NY), Jan. 14, 1959, accessed November 24, 2016, http://newspaperarchives.vassar.edu/cgi-bin/vassar?a=d&d=miscellany19590114-01&e=----en-20--1--txt-txIN-----.

²⁶ Winifred Asprey to President Sarah Gibson Blanding, June 3, 1959, Folder 4, Box 18, 3, Annual Report of the Department of Mathematics (1958-1959), Special Collections, Vassar College Library.

²⁷ Janet McDonald to President Sarah Gibson Blanding, June 9, 1964, Folder 1, Box 19, 4, Annual Report of the Department of Mathematics (1963-1964), Special Collections, Vassar College Library.

²⁸ Winifred Asprey, "Computers on the Campus," *The Journal of Higher Education* 36, no. 9 (1965): 500, in file labeled "Articles written by WA," Room 302, Vassar College Computer Science Department, Sanders Physics. ²⁹ Colton Johnson, "Alan Simpson," Vassar Encyclopedia, 2005, https://vcencyclopedia.vassar.edu/presidents/alansimpson.html. ³⁰ Ibid.

that made Vassar the first women's college and the second college in the nation to possess a model of its kind.³¹ On September 29, 1967, about 8 months after the computer first arrived, a ceremony was held for the opening of the brand new Computer Center, located on the ground floor of the Old Laundry Building.³² During the event, Alan Simpson praised the efforts behind this initiative for keeping in tradition with the principles behind the college's founding: "[T]his is also a proud event in the history of a leading woman's college because it symbolizes our determination to destroy some of the stereotypes that circulate about women and their education. One of them is that women are strong in the humanities and weak in the sciences. Vassar has often given the lie to this stereotype – through its faculty, through its students, and through the achievements of alumnae.....³³ Afterwards, Asprey, who was recently named the Director of the newly opened Computer Center, was given the honor of introducing the guest speaker for the event, Grace Hopper. Dressed in a uniform sporting all her naval ribbons, Hopper stated that women possess a natural knack for computers due to their patience and that this was "only the beginning of the computer age."³⁴

Indeed, computer science would grow and flourish as time passed and the computer science faculty continue to emphasize the importance of having women in the computing field. Despite the lingering reluctance of several faculty members, numerous professors and students were already planning research projects that incorporated the IBM 360's computational abilities,

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³¹ Eleanor Gohl, Nancy Ide, & Joan Sherman, (Letter to the Vassar College community, Vassar College, Feb. 20, 2007), accessed in folder titled "WA 90th birthday" under file labeled "W. Asprey," Room 302, Vassar Computer Science Department, Sanders Physics.

³² Asprey, "Vassar's Newest Jewel," 2.

³³ Alan Simpson, "Remarks for Dedication of Computer Center" (speech, Vassar College, Sept. 29, 1967), 2, accessed under file labeled "Computer Center Opening 1967," Room 302, Vassar Computer Science Department, Sanders Physics.

³⁴ Susan Frelich, "Computer 'Baptized' in Formal Ceremony," *Miscellany News* (Poughkeepsie, NY), Oct. 4, 1967, accessed November 24, 2016, http://newspaperarchives.vassar.edu/cgi-bin/vassar?a=d&d=miscellany19671004-01&e=-----en-20--1--txt-txIN------.

such as an investigation into voting patterns and experiments on intuition.³⁵ Continuing to push forward, Asprey officially established the Computer Science Studies program in 1969, causing Vassar to become one of the first liberal arts colleges in the U.S. to institute a curriculum in computer science.³⁶ With Asprey as both the chair of the computer science program and the director of the Computer Center, the Mathematics Department offered courses on programming languages such as FORTRAN, PL/1, and APL.³⁷

However, that year also brought a radical change to Vassar that shook the college to its core. After a dispute with Yale University and witnessing a rather nasty attitude towards women in math and the sciences, Vassar decided not to merge with Yale and instead opened its doors to male students in 1969.³⁸ This introduction of men in 1969 was met with mixed reactions. Many members of the faculty were reluctant about the idea of having male students at Vassar, partly because they were concerned that the achievements of the male students would overshadow those of the female students. Among those who strongly opposed the decision was Grace Hopper, who permanently "disowned" Vassar and refused to leave any money to her undergraduate alma mater upon hearing the news.³⁹ Director Asprey treated Vassar's decision to go co-ed with hesitation, but she started to warm up to the men, even though they often "acted as if they were in seventh grade." Asprey often "cracked down" on the men when they tried to

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³⁵ Charlotte Kirk, "Computer Center to Celebrate Opening," *Miscellany News* (Poughkeepsie, NY), Sept. 27, 1967, accessed November 24, 2016, http://newspaperarchives.vassar.edu/cgi-bin/vassar?a=d&d=miscellany19670927-01&e=-----en-20-1--txt-txIN------.

³⁶ Gohl, Ide, & Sherman, Letter to the Vassar College community, Feb. 20, 2007.

³⁷ Asprey, interview by Viera Proulx, 41.

³⁸ Winifred Asprey, interview by S. Riane Harper, Vassar College, July 30, 2007, interview transcript accessed November 24, 2016, https://vcencyclopedia.vassar.edu/interviews-reflections/winifred-asprey.html.

³⁹ Nancy Ide, interview by Steven E. Park, Nov. 14, 2016.

⁴⁰ Asprey, interview by Viera Proulx, 46.

boastfully prove how they knew more about everything than the women, but she "loved the fact that the women stood up so brilliantly against them."

Throughout the rest of her career, Asprey continued to push forward with her agenda to integrate the study of computers into the liberal arts education. Fortunately, the feedback from the student body was largely positive with more and more people signing up for courses in the Computer Science program. By 1978, course enrollments had jumped to 182 elections for the semester, 97 of them by women and 85 by men, and a total of almost 400 students had participated in the program in the 1977-78 school year alone. As computers became more and more crucial to the world outside campus, just as Asprey had predicted, both male and female students who graduated with a concentration in computer science found no lack of opportunities for advancement in business companies and technology conglomerates like Bell Telephone Laboratories and IBM as well as graduate schools around the nation.

Given this momentum, Asprey believed that the next logical step was to have the school recognize computer science as a discipline and offer it as a major. Unfortunately, disdain towards computer science persisted within the administration. Despite the widespread success and popularity of the Computer Science Program, the administration dragged its feet when it came to spending money on the Computer Center, which was still located in the basement of the Old Laundry Building. As a result, students enrolled in the computer science courses had to wait in long lines to gain access to a handful of outdated computers that frequently crashed for long periods of time and erased stored assignment data.⁴³ Eventually, the shortage of working computers became so unbearable that two faculty members of the Computer Science program,

⁴¹ Asprey, interview by S. Riane Harper.

⁴² Winifred Asprey to President Alan Simpson, May 23, 1978, Folder 5, Box 12, 3-6, Annual Report of the Academic Section of the Computer Center (1977-1978), Special Collections, Vassar College Library.

⁴³ Winifred Asprey to President Virginia Smith, June 4, 1982, Folder 5, Box 13, 5, Annual Report of the Academic Section of the Vassar College Computer Center (1981-1982), Special Collections, Vassar College Library.

Prof. Prelle and Prof. Cleveland, angrily resigned during the 1980-1981 school year to protest the administration's stubborn refusal to do anything about the situation. 44 Director Asprey, who faced a wave of angry complaints from students but lacked the authoritative power to fix the problem, felt as if Vassar had left her treasured Computer Science program "in limbo." In her annual report, she stated: "I cannot understand why Vassar chooses not to exploit its very successful and envied ventures of the past 15 years in Computer Science. Except for Dartmouth, we are the acknowledged leader among liberal arts colleges in advancing the discipline of Computer Science...For the first time in my thirty-six years as a faculty member at Vassar College, my optimism has faltered. The Computer Science Program, dearest to me, is stymied; its future, dreary. Why has this happened? Answers and excuses abound, none satisfactory."

But no matter how bleak the circumstances seemed, the Computer Science program continued to stagger forward. Despite the malfunctioning equipment and the severe lack of faculty members, the program continued to show growing enrollments as almost everyone in the student body saw computers as the machine of the future. The number of students requesting independent majors in Computer Science had swelled so much that the Mathematics Department sent a proposal to the Committee on Curricular Policies for the establishment of a Mathematics/Computer Science major.⁴⁷ On March 1981, the major was officially approved by the New York State Education Department.

In the summer of 1982, Director Asprey officially announced her retirement after 37 years of service. While problems remained in the Computer Science program, she was touched by how the students, who "were amazingly patient through tears and semi-hysterics" when the

⁴⁴ Asprey to President Smith, Annual Report of the Vassar College Computer Center (1980-1981), 6.

⁴⁵ Asprey to President Virginia Smith, "Annual Report (1980-1981)," 10.

⁴⁶ Ibid. 10-11.

⁴⁷ David Merriell to President Virginia Smith, May 26, 1981, Folder 2, Box 13, 1, Annual Report of the Department of Mathematics (1980-1981), Special Collections, Vassar College Library.

computers failed to operate, remained cheerful and cooperative and how the more experienced upperclassmen helped the other students on using the terminals and supporting them through the year. 48 She was also happy to note that, despite the overwhelming presence of men in the math and science departments, women still slightly outnumbered men in the Computer Science program. As a final note, Asprey urged the faculty to hire more female professors to teach computer science. Similarly to members of the Vassar faculty today, Asprey believed that having female professors was essential in creating a welcoming environment for female students, especially in computer science courses where many women often feel isolated among the dominating male students.⁴⁹ This warning was valid given how her departure would mark the first time Vassar's Mathematics Department would not have any women faculty members. According to the chairman of the Mathematics Department at the time, this was part of a national problem where "[t]here were more than five times as many men as women receiving Ph.D.'s in Mathematics."50 However, among those hired for the upcoming fall semester was Prof. Nancy Ide, who would ultimately continue Asprey's dream to fully integrate computers into the liberal arts education.

For the next several years after Asprey had retired, the Computer Science program continued to face an overwhelming number of applicants for the computer science courses as well as the brunt of the administration's lethargy towards computers. By 1984, total enrollment had jumped to 600 students, compared to only 317 in 1977.⁵¹ That number would have exceeded 700 students if the faculty had not placed a cap on the enrollment. Unfortunately, inadequate

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⁴⁸ Winifred Asprey to President Virginia Smith, June 4, 1982, Folder 5, Box 13, 5, Annual Report of the Academic Section of the Vassar College Computer Center (1981-1982), Special Collections, Vassar College Library.

⁴⁹ Walter, interview by Steven E. Park.

⁵⁰ David Merriell to President Virginia Smith, May 26, 1982, Folder 5, Box 13, 2, Annual Report of the Department of Mathematics (1981-1982), Special Collections, Vassar College Library.

Martin Ringle to President Virginia Smith, August 14, 1984, Folder 10, Box 13, 8-9, Annual Report of the Department of Computer Science Studies (1983-1984), Special Collections, Vassar College Library.

staffing made the workload rather strenuous for the faculty, and the administration continued to deny adequate funding for the Computer Science program. In addition, as if to further slander Vassar's reputation as a leader in computer science among liberal arts colleges in the country, the administration banned students from bringing their home computers onto campus during a period in time where more and more people were using them.⁵² The justification behind this prohibition was that computers were using too much electricity in the dormitories and the faulty wiring caused circuits to overload. When asked for her reaction about the ban, Assistant Professor Ide responded by simply saying, "How bizarre."⁵³ Ide believed that, rather than making computers illegal, the administration should renovate the dormitories so that computers could be used in them. But despite their frustrating situation, the Computer Science faculty did their best to upgrade their facilities by removing almost all the obsolete equipment and replacing them with newer models. In addition, they were in the process of creating Vassar's first Laboratory for Computer Studies, which would eventually be named in honor of Director Asprey.⁵⁴

Over the next several years, the Computer Science program continued to face roadblocks and opposition from both the administration and those who still believed that computer science had no right to be considered as part of the liberal arts curriculum. But by 1989, all 15 colleges on the Liberal Arts Computer Science Consortium except Vassar and Swarthmore offered a major in computer science. Si Given the growing student demand at Vassar, Prof. Ide, who had recently become the chairman of the Computer Science program, decided that the creation of a computer science major at Vassar was long overdue. In conjunction with other members of the

⁵² Abram Feuerstein, "Computers Become A Way Of Life," *Miscellany News* (Poughkeepsie, NY), Feb. 18, 1983, accessed November 24, 2016, http://newspaperarchives.vassar.edu/cgi-bin/vassar?a=d&d=miscellany19830218-01&e=-----en-20--1--txt-txIN------.

⁵³ Feuerstein, "Computers Become A Way Of Life," Feb. 18, 1983.

⁵⁴ Ringle to President Virginia Smith, "Annual Report (1983-1984)," 15.

⁵⁵ Nancy Ide, Jean Veronis, Cherie Stevens, Ellen Gambino, Elle Gohl, & Barbara Sapio, "Departmental Review Report" (faculty report, Vassar College, January 1990), 25, accessed under file labeled "Dept. Review 89-90," Room 302, Vassar Computer Science Department, Sanders Physics.

Computer Science program and the Dean of Faculty, Ide led the effort to establish a stand-alone major and department for computer science.⁵⁶ For two years, she conducted heavy research on how to structure an effective framework for the curriculum and identified the specific courses and requirements necessary in order to provide a concrete foundation for programming in multinational technology companies and high-level graduate research. Once Ide drafted a detailed proposal and submitted the complete plans for the course of study, the Computer Science major and department was finally approved by the New York State Education Department on September 26, 1991, nearly 40 years after Asprey began her battle to bring a computer to Vassar.⁵⁷

The years following the creation of the Computer Science major saw both ups and downs in the newly formed department as the United States experienced periods of great upheaval. However, even during the worst points in the economy, Vassar's Computer Science Department managed to endure and even outperform the Computer Science departments of other colleges in the nation. While the number of women majoring in Computer Science had drastically decreased since Prof. Asprey's era, Vassar could still boast of having women make up about 30% of the major compared to 10% nationwide.⁵⁸ Today, Vassar is experiencing a new rebirth of women in computer science, largely thanks to its efforts to hire female professors like Professor Jenny Walter and its involvement in programs such as the Grace Hopper Celebration of Women in Computing conference series. Enrollment in computer science courses has been growing at astonishing rates since 2006, and the department continues its fight to give Vassar women the opportunity to enter into the discipline. However, none of this would have been possible without the hard work and dedication of Prof. Asprey and her efforts to bring women into the wondrous

⁵⁶ Ide, interview by Steven E. Park.57 Ibid.

⁵⁸ Ibid.

and cutting-edge world of computer science. Prof. Asprey may have sadly passed away in 2007 just after her 90th birthday, but her legacy persists as much as her spirit and confidence did during her time at Vassar. As Prof. Ide remarks, "Tim Asprey was an influence and a presence that kept alive the idea that this was a place where women did computer science. It was a long haul, but now we're seeing the fruits of that effort."⁵⁹

⁵⁹ Ide, interview by Steven E. Park.

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