

Bronwyn Hall (by Xinyue Yang¹)

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Growing up in the 1950s and early 1960s, Bronwyn Hall and her two sisters were positively influenced by their supportive father and the family's appreciation for music and classics. While exploring her interests in classical music, languages, especially Latin, in high school, Hall was also captivated by the integration of applied math within the world of physics.

Hall was an outstanding high school student and was invited by many colleges to apply. Princeton University – then an all-male school – invited her because they thought “Bronwyn” was a boy's name.

At the time, Princeton was all men. They invited me to apply because I had a national merit finalist award. So I would have naturally gone to an Ivy League school. But the Ivy League schools, most of them didn't have women. When they did have women, they were kind of second-class citizens... (Hall, interview with the author, p.3.)

While Hall wasn't really looking for a women's college, she ended up following her mother's example and chose Wellesley College, one of the Seven Sisters, liberal arts colleges for women that are the educational equivalent of Ivy League schools. Hall continued to pursue her interests in classics and music at Wellesley. She took classes in Greek and Latin, learned the viola da gamba, and played the recorder. Hall believes attending a women's college encouraged women to be independent. Certainly women were not challenged just to have their voices heard over the men. However, compared with today, there were far fewer courses and people supporting STEM education, such as physics, in the 1960s at a women's college.

I basically majored in physics because I thought maybe I wanted to go on in physics. But truthfully you didn't really get a very good preparation in those days at a women's college. It's just not broad enough... People there were really good, and they had good degrees... Wellesley had male professors, but in physics they were all women. But it's still not like going to MIT at that time... (Hall, interview with the author, p.3.)

Returning home to the Bay Area for summer breaks, Hall found employment at the Lawrence Radiation Laboratory, which is now the Lawrence Berkeley National Laboratory, where she learned to program and helped with data analysis. She married Robert (Bob) Hall after graduation, and they settled in Cambridge where Bob was earning his Ph.D. at MIT. Her husband's first job was in the Economics Department at Berkeley, so in 1967 Hall came back to Berkeley as a “faculty wife” and returned to work at the Berkeley lab. When in 1970 her husband moved back to MIT, Hall left the lab and embarked on a career in economics beginning with computer programming for economists.

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This is where I say you go with the flow... Again this is political history. Lyndon Johnson, when we finished the Vietnam War, poured a lot of money at the Great Society... That was a big and good change. But what that meant was that the budgets for the type of research I was doing, high energy physics, shrank. So I couldn't get a job in physics, but I knew a lot of economists because I was married to one. I got lots of different freelance programming jobs with [economists in Cambridge, Mass.]. (Hall, interview with the author, pp. 3 and 4.)

Economics departments in the early 1970s were just beginning to use big data sets, and graduate students generally had no programming experience, but Hall's experience at the Lab provided her with just those skills.

The oil price shocks in 1974 and 1979 along with low productivity among U.S. firms prompted research into the role of research and development (R&D) by firms. Hall was working as a research assistant for Zvi Griliches with a grant from the National Science Foundation to study R&D, patents, and innovation.

It turned out that I was very interested in it, probably because I had a science background. We were using firm-level data, and I found that complex but interesting... Patents have the beautiful advantage that they have to be public, which makes acquiring data easier... Research is cumulative, and once you develop a lot of expertise in an area, it's easier to work in that area than some other area... (Hall, interview with the author, p.5.)

Hall was one of the early researchers in the area of R&D, patents, and innovation. She found this field much more open to women than many other fields. However, she experienced struggles at that time as a woman researcher. Oftentimes, she gave short comments in a seminar, and men would take over and quote her ideas without crediting her. It was not until she received tenure that she developed more confidence.

I can remember going to a finance seminar where I presented a paper, probably on R&D financing. It was back in the early 1990s. This was a seminar where the guys basically decided that they would present my paper. I got one word out, and they would start giving all the explanations I would give, and I couldn't get a word in edgewise. That taught me that there are fields that you don't want to be in, and that's a field you don't want to be in. I felt the same way to some extent about macro, although that has gradually opened up to more women. Fields vary a lot. Labor is very accommodating. It probably has to do with how many women are in the field... (Hall, interview with the author, pp. 9 and 10.)

Managing work-life balance is another challenge that many women face. While initiatives such as postponing the tenure clock exist to accommodate mothers with child-care responsibilities, it's still a built-in obstacle that the best age range for having babies is also when the hardest work occurs in academia. Hall felt lucky that she had children at an early age. She decided to go back to school to pursue a PhD at Stanford University 17 years after graduating from Wellesley. By that time, Hall was

divorced, and her children were in junior high and high school. She had the time and energy to reinvent herself in her late 30s-early 40s.

Hall was hired in the Economics Department at Berkeley in 1987 as a fresh Ph.D. But being nearly 20 years older than other new assistant professors posed obstacles. She lacked mentorship support as a junior faculty member since the general perception based on her age was that she was senior. Many of the older (tenured) faculty members had known her two decades earlier as “Bob’s wife,” one of the department faculty wives. Moreover, being a single woman professor also made it more difficult to socialize with fellow economists.

You can't invite men out. In fact, even inviting men for lunch is a little bit awkward... That was a problem because I wasn't networking. I was networked in the profession like crazy. I know everybody, but not at the department because of the gap in age when I entered. But in a way it's quite a unique problem because it's really due to the fact that I came back 20 years later in a different role. (Hall, interview with the author, pp. 7 and 8.)

As a professor at Berkeley with interests in public policy as well as connections with European institutions, Hall found it difficult to manage all the work to her satisfaction. In 2005, Hall retired from Berkeley and took a part-time position as a research professor (little teaching) at the University of Maastricht in the Netherlands until 2015. She is now fully retired but retains visiting appointments as a researcher at three institutions in Europe, primarily the Max Planck Institute of Innovation and Competition in Munich.

Speaking about the reasons behind gender imbalance in the field of economics today, Hall points out the problems with STEM fields.

It's not that I don't think women can do STEM. They can. But all the way along, it just doesn't look as appealing as the other subjects. Even to me, when I was in high school, it didn't look as appealing... Somehow in early years, and particularly in high school, women get a little turned off from STEM fields. Once you've done that, it's all cumulative... I think a lot of people have this experience that they're taught mathematics without the application. Proving that $\cos^2 + \sin^2 = 1$ just did not appeal... (Hall, interview with the author, p.13.)

Therefore, it's beneficial to help nurture the interest in STEM fields for women from an earlier stage of education, and Hall shares the example of the Royal Economic Society.

I do know that the Royal Economic Society, which is the English equivalent of the American Economic Association, is mounting considerable efforts to change economics training to try to deal with this issue at the high school level (because people choose their field on entry to university in the UK, changing behavior at the high school level is important). They provide

teaching material at the high school level and try to encourage more women to enter at that level... I would say, look at what they're doing. (Hall, interview with the author, p.14.)

Hall believes that economics uniquely combines math and verbal skills, and she encourages young women to pursue a degree in economics as it opens the door for a large range of careers, including grad school, business, and public policy.

Work Cited

Hall, Bronwyn. Interview with the author. Berkeley, CA. November 12, 2021. Archived at <https://www.econ.berkeley.edu/sites/default/files/Hall%20transcript%20final%2011-12-2021.pdf>