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Initial Reference: Attribution and Institutional Memory in the Age of ARPANET

Abstract:

In this paper, I argue network technologies and automation have altered acknowledgement of labor and institutional memory, particularly for women in administrative roles. I rely on my research into the archive of Edward A. Feigenbaum, a co-founder of the computer science department at Stanford University and pioneer in artificial intelligence. Through Feigenbaum's archive, I trace the appearance—and disappearance—of the convention of reference initials in professional and personal correspondence. I argue that the presence of reference initials, a formal letter writing convention that indicates whether someone besides the credited author contributed to the creation of the document, records the division of labor in an early computer science context. Furthermore, the disappearance of reference initials once Feigenbaum starts using ARPANET, an early ancestor of the World Wide Web, implies a shift in the way labor is recognized and recorded; there is a blank where once there was a record of collaboration. These reference initials (and their absence) point to a crucial truth: much of the work that goes into innovation and technological advancement is invisible and un-credited. I attempt to excavate some of that lost labor history and to appreciate the immense institutional knowledge that was cultivated, safeguarded, and transmitted by the exclusively female administrative team supporting cutting-edge research at Stanford in the 60s and 70s.

Institutional knowledge undergoes a transformation around the same time as this shift in labor attribution. In the mid-1970s, Feigenbaum and his team developed a set of computer programs, some of which relied on the hallmarks of early AI such as heuristic modeling and predictive language. This set of programs was named Rand Intelligent Terminal Agent. RITA was, essentially, a secretary. A 1976 report on the design philosophy of RITA numbers among her many proficiencies: "filing, retrieving, and editing of data on local storage files." RITA was also expected to "retain a memory of tasks assigned, progress, schedules, and deadlines." The automation of office administration does not, in this instance, result in the loss of human jobs. Rather, it raises questions about work and institutional memory that are increasingly relevant in a contemporary context: who or what supports technological research? How is institutional knowledge stored and preserved? What is our responsibility to acknowledge and to credit the work done by human and AI support staff? In this paper, I establish the importance of these questions and begin to formulate answers to guide future decision-making.