Issue 44

Elementary Mechanics and Women's Liberation

Women's liberation has its roots in applications of elementary mechanics and electricity—notably in the invention of the sewing machine, the typewriter, and the telephone.

If you had been a schoolgirl in America a hundred and fifty years ago, clothing stores would not be a part of your world. None existed. Only wealthy people could afford professional tailors to make their family's clothes. More commonly, a farmer's or a worker's wife spent 4 to 6 hours *daily* making and mending the family's clothes. Elias Howe's invention of the sewing machine in 1846 eventually reduced that time to more-nearly half an hour a day and made it possible to create clothes so inexpensively that average-income people could afford to buy clothes in stores. Try to image the effect this one invention would have had on your daily life!

But even with a sewing machine to ease your labors, a girl's life during the Civil War would still have been limited to the home. In Dickens' last novel (around 1870), "respectable" women did not go outdoors without an escort, and only male clerks worked in offices. (Compare that with the lives of women in Moslem countries today.)

Only 25 years after Howe's sewing machine, the invention of the typewriter (about 1867) and the telephone (Alexander Bell, 1876) had changed all that, and by 1900 women were travelling alone outdoors and working and leading lives of their own outside the family circle. These changes created and led to a need for higher education, once considered a luxury. And that, together with a demand for the vote, equality before the law, and for equal access to careers, followed inevitably.

If such simple applications of science can have such profound effects on the lives of so many people, what effect is the invention of the computer having on your life and your job future? Talk to people whose jobs 25 years ago had no computers.



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Issue 44

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Issue 44

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