

# Is the Era of AI More Favorable for Women?

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Summary: In recent years, the development of artificial intelligence technology has attracted attention, and significant progress has been made in language recognition, image recognition and other fields, and it has begun to be applied to people's daily lives. However, artificial intelligence technology is not gender-neutral. It brings great convenience to people's lives, but it also poses new challenges for women. Therefore, women need life-long learning to maintain sustained competitiveness.

In recent years, the development of artificial intelligence has attracted much attention, and progress has been made in language recognition, image recognition, and other areas. It has begun to be applied to daily life, such as intelligent voice input, position navigation, and targeted collection and delivery of media information, and even in people's emotional companionship and other aspects - they have all started to realize applications.

At the same time that artificial intelligence technology has brought great conveniences into our lives, it has also brought new challenges. For women, artificial intelligence technology can help women gain opportunities in the new employment structure and escape from heavy housework. In addition, it makes some women who are engaged in simple labor to face unemployment risks, and it also replicates and reproduces gender inequality.

## In the artificial intelligence era, women will gain new opportunities for development

Looking back at the process of women's liberation, technological revolutions have played a crucial role. For example, in the era of the industrial revolution, the use of machines and the large-scale construction of factories have driven women out of the family and into the

workplace; the improvement of fertility technology enables women to gain more autonomy, etc. over their bodies. The development of artificial intelligence will further promote women's liberation and provide more opportunities for women's development while profoundly changing the employment structure.

First, in the era of artificial intelligence, the employment structure will be adjusted and the advantages of women will be further demonstrated. The process of technological development is also a process of gradually liberating humankind from heavy physical labor. This first eliminates the situation in which women are placed in "in-home" or inferior positions due to physical disadvantages. The adoption of artificial intelligence technology will put new demands on talents. Repetitive work is most susceptible to artificial intelligence. Oxford University researchers pointed out that all "work dependant on storing or reading information" are at risk of being replaced by computer systems. In addition to some highly repetitive and regular low-end jobs that are easily replaced, some related work that rely on large-scale information storage and analysis of white-collar occupations, such as mortgage consultants, financial analysts, accountants, human resources, and marketing department, are also easily replaced.

Artificial intelligence is based on information storage and analysis. It has strong shades of logic and rationality, and it can easily replace industries that require a lot of calculations and analysis. Yet work that is more personal, more sensible, more caring, and more dependent on human-to-human communication and communication skills, such as psychological consultants, tasters, etc., will be less likely to be replaced by artificial intelligence in a short period of time. The era of artificial intelligence puts higher demands on people's ability to innovate, express care, empathy, and interpersonal communication skills. Women's performance in the above indicators will be no less favourable than men's, and they will even have advantages in caring, empathizing, and interpersonal skills. Some people think that the artificial intelligence environment will be more "feminized". This mainly includes three aspects: the experience-orientation of contemporary thinking, the emotional thinking of the Internet, and the decentralized thinking of the Internet. These are new opportunities for women's development.

Second, the widespread use of artificial intelligence technology will further free women from domestic work. Although men and women should share household work more and more to reach parity, it cannot be overlooked that women in today's society still bear most of the household work, and the balance between career and family has also become a major problem for women in the workplace. In the era of artificial intelligence, most housework would be replaced by smart homes. For example, the use of smart cleaners and smart cooking machines will greatly liberate women. With the gradual development of human-machine communication technology, robots have made significant progress in achieving the emotional companionship of people. In Japan, intelligent robots can already be used to look after and accompany old people and children, which will also greatly reduce the burden of care for women. In addition, smart office equipment will change people's working environments and methods. The adoption of remote office technology will empower women and make them more flexible in dealing with the relationship between family and work.

# Artificial intelligence technology is not gender neutral

Any technology is a double-edged sword. While providing opportunities for women's development, artificial intelligence technology also brings new challenges to women's development. At the same time, because artificial intelligence technology inventors and the network environment that they rely on have their own flaws, artificial intelligence technologies also copy and reproduce sexism.

First of all, in the future society, the widespread adoption of artificial intelligence technology will replace many existing occupations, and it may cause unemployment. For women, there is no exception. According to incomplete statistics, more than half of the existing jobs will be replaced in the future. Studies by Citibank and the University of Oxford in the UK are even more predictive. In the future, 69% and 47% of jobs in India and the United States, respectively, will be replaced by robots. Although as mentioned earlier, artificial intelligence technology will also create new employment opportunities that are advantageous to women, women are currently the main force in some low-end employment areas - such as catering staff, assembly line workers, data processing and data collection staff, and retail trade salespeople - and will face the challenge of unemployment or switching jobs.

Second, because existing gender biases permeate procedures, algorithms, and design, artificial intelligence technology can replicate and reproduce gender inequality. Although there are many female leaders in the field of artificial intelligence research and development, such as the Stanford University artificial intelligence lab and vision lab director Fei-fei Li, who teaches machines "cognition." However, as a whole, artificial intelligence is still dominated by men because of the unreasonable gender division of labor. This has led to the continuation of gender bias in the field of artificial intelligence. It has been reported that among the artificial intelligence robots that have been invented, the robot models engaged in service work are mostly female figures, including Apple Siri, Google Now, Amazon Alexa, and Microsoft Cortana whose internal AI assistants are all female figures. Robots engaged in high-end complex work are mostly male. For example, an artificial intelligence lawyer is named Ross and IBM's high-end artificial intelligence system is also named Watson.

Even more worrying is that artificial intelligence robots are learning gender bias. Because the basis of artificial intelligence robots' intelligent response is to continuously learn (store and analyze) the information that humans have left on the network, human prejudices are unconsciously embodied in the analysis of language algorithms and acquired by artificial intelligence techniques.. For example, Tay, a female chat robot created by Microsoft, was placed on social networks. Microsoft's intention is to hope that Tay will become more adept at communicating with human beings on social media, but through the process of chatting and learning, some malicious netizens induced Tay into becoming a male supremacist.

# Women in the Age of Artificial Intelligence Should Maintain Lifelong Learning Capabilities

The advent of the artificial intelligence era puts forward new demands on the quality and ability of talents. Women who want to remain competitive in the era of artificial intelligence should possess the ability to continue learning, maintain creativity, and maintain and fully leverage their advantages in interpersonal communication. In view of the gender disparity in the research and development of artificial intelligence, it is necessary to have a female perspective in the new world of artificial intelligence and women (women of different backgrounds) must be involved. Therefore, continuing to encourage and promote more women into scientific research, especially in the field of artificial intelligence research is of utmost importance.

In addition, the era of artificial intelligence will place higher demands on social governance models and public policies. With the emergence of unemployment and the large-scale transfer of the labor force among different jobs, how to prevent a few people who have mastered artificial intelligence technologies from monopolizing wealth and ensuring that unemployed people who are replaced and pressed by technology can enjoy a decent life will depend on the establishment of a sound social security system, which also requires special designs for the social welfare of women.