

# Her ‘Right to Tinker’: Immaterial Innovations and Gendered Perspectives of Generative Justice in the Makerspaces of India

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## Background

While the Western techno-optimistic imaginaries of development visualise a modern society with democratized access to the tools and methods of technological innovation, the question of how far the promises of an open-source ecosystem have empowered women’s participation via the creation of innovating co-working spheres and makerspaces remains crucial to scrutinize. Studies on Indian hackerspaces and the dynamics of female participation are almost non-existent. By conducting this research, I not only intend to search answers for the classic feminist question of “where are the women” but also to study the digital technologies and social innovation outcomes of seemingly inclusive innovation spaces. Various studies of the innovation ecosystem elsewhere in China and the US reveal a hyper-feminization of work culture and labour precarity that are increasing with the magnitude of proliferated automated technologies imbibed into the system. Although a nascent space in India, the national developmental goals of innovation and digitalization make these co-working innovation spaces an important actor to study. A detailed study of the Indian case will contribute to gender-sensitive policy formulations by addressing just and labour issues of the ‘self-entrepreneurship’ promises. On that line, I propose to investigate the current policy realities of makerspaces in India and their gendered performances keeping in view of ‘generative justice’ that has often the promise of open-source innovation across cultures. My research is largely inspired from Silvia Lindtner’s ground work on Chinese makerspaces and Sophie Toupin’s study of feminist hackerspaces in the US. Furthermore, for my ruminations on ‘generative justice’ in co-working spaces, the theoretical constructs of Ron Eglash’s alternatives have been fundamental. To contest his proposition that emerging technologies in the digital ecosystem will lead to the generation of unalienated labour value, I intend to apply and test his theory on Indian hackerspaces.

## Objectives:

- (1) To study the extent of female participation and alternate forms of value creation in Indian makerspaces

- (2) To identify feminist infrastructures and technologies produced at these avenues
- (3) To bring in the discourse of justice and personal agency in the entrepreneurial practices of these emerging innovation spaces.

#### Research Questions:

1. If techno-utopian ideals aim for participatory innovation in the digital sphere, how are Indian hackerspaces (that combine the physical with the digital) in India creating enabling infrastructures for a gender-inclusive place in the innovation ecosystem?
2. Even upon the removal of mechanisms of exclusion, are these hackerspaces producing feminist technologies?
3. What sort of an alternative techno-cultural identity does a female hacker/maker hold in these open-source countercultures?
4. Have the policy initiatives supporting ‘grassroots innovation’ positively triggered the spirit of self- entrepreneurship and economic actualization among the participating women?
5. Are these innovative spaces generating ‘unalienated value of labour’?

#### Methodology:

- (1) Participant observation and interviews in the emerging makerspaces and tinkering labs of India (Targeted interviews with the female makers in the cities of Bengaluru, Chennai, New Delhi, and Pune).
  - (2) Interpretative analysis of policy documents concerning India’s digital economy and innovation mission.
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