

Sub theme 3: Women, Science and Scientific Temper: Exploring Progressive Alternatives

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The relationship between women, science and social transformation has been the site of heated contestations within and outside the feminist fold. However, the contemporary period marks a particularly acute undermining of science compounded by attacks from across the political spectrum. On the one hand is the celebration of a glorious past and the equation of mythology with the history of science. From references to the Pushpak Vimana and genetic science from mythology as historical evidence of India's scientific past, dismissing the theory of evolution as unscientific, to attempts to introduce astrology in universities and the diversion of funds to pseudo-scientific pursuits such as AAYUSH and Panchagavya, there have been concerted efforts especially in the last few years to obscure knowledge and methods of knowledge acquisition. On the other hand is science skepticism, which often collapses science with the scientific establishment, or the knowledge project of science as being similar to faith, or as serving exploitative instead of emancipatory ends. In this version of the attack on science, it is not capitalism, but the science and technology that it employs, that are held responsible for the exploitation of the labouring masses. Technology and by extension science, is caricatured as inherently anti-people, and is therefore to be criticized and opposed. Gender relations are seen as significant by both positions, with vastly different implications. The former chooses to gloss over social inequalities that mar the institutional practice of science, ignoring the inequality in access to knowledge that Indian society has historically been guilty of. In looking at science as an exploitative knowledge project, the latter deems it as patriarchal or brahmanical, and by this very definition, devoid of any potential to liberate women, or any gender.

The implications of this crisis for politics are also important. For political projects such as the creation of a theocracy, it is necessary to enforce an almost militaristic supremacy of religion over science. Religion then is not simply a matter of private belief, but a set of rules, regulations,

and directions for behavior that govern everything in the public and private lives of citizens. History cannot be studied objectively as it can potentially lead to the rejection of many ideas of long lost glory that are important for the political project of creating the motherland. Science is to be limited to technological development alone, and not seen as a method to understand the world around us. The preservation and perpetuation of the myth of a superior past also brushes under the carpet the violent and exploitative history of caste and gender hierarchies in Indian society. The claim of scientific prowess that existed in this mythical past only provides fodder for ignorance, or worse, justification of the subservience forced upon a large majority of the population, namely women and those belonging to lower castes. It is evident that the political project of creating such a nation, where religion is a requirement for citizenship itself, necessitates not only an attack on science, but on history and art as well.

On the other hand, the fact that science cannot eradicate caste and gender discrimination from among its own practitioners is seen as a reason to charge science itself with being inherently inequitable. Such a charge dismisses completely the changes (inadequate, but non-trivial) that years of struggle have brought to both the natural and social sciences. While it may still be true that a majority of those who have access to higher education in this country continue to be men from the upper castes, if one looks closely at what constitutes the typical science or engineering lab of today, a slow but sure increase in diversity can be observed. There are more women today in the sciences than there were 70 years ago. The number of women enrolled in university education in the science faculties has increased from 18.5% in 1971 to 39.8 in 2005, a jump of 113%. This increase looks even more impressive if compared with the figures for enrollment in the arts faculties for the same time period which show an increase of only 36% although in absolute terms the enrollment of women in the arts faculties has always been and continues to be higher. It is important to understand how these individuals see themselves and their pursuit of knowledge in the context of structural constraints.

Despite statutorily determined reservation, there is ample evidence to suggest that due to various barriers put up by institutions inherently opposed to the idea of positive discrimination and affirmative action, the number of Dalit students, even in publicly funded central institutions, falls well below the mandated proportion. However, students from Dalit and tribal communities are certainly not absent and have started organising openly on questions of caste based discrimination and injustice within these institutions. The Ambedkar Periyar Study Circle in IIT-

Madras or the Ambedkar Periyar Phule Study Circle in IIT-Bombay are examples of this assertion by young Dalit scholars from science and tech departments.

The issues outlined above and a range of other contemporary developments suggest ample scope for deeper and nuanced engagements on the relationship between women, science and scientific temper. This sub theme seeks to reinvigorate such discussions and interrogate notions that characterize contemporary attacks on scientific temper, while fully cognizant of institutional inequalities that exist in the practice of science. It welcomes submissions that outline the challenges to contemporary scientific practice, in the natural or social sciences, or in progressive political movements, at the level of access, infrastructure and content. It also welcomes submissions that analyse the challenges to progressive politics and transformative agendas in the context of attacks on science.
