Gender in engineering design Continuities and Transformations in the conceptions of mechanical engineering

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Abstract

My contribution is theoretically and methodologically located in feminist technology studies as well as in the sociology of knowledge and work. It focuses on the gendered categories in engineering design theories and practices of mechanical engineering.

As feminist technology studies have shown *social constructions of gender* are closely related to the field of technology, not only with respect to the presence of men and women in technology, but also regarding the concepts and guiding ideas. The approach as a critical analysis concept can particularly be applied to the examination of the (silent) *power relations and hierarchies* involved in the knowledge and practices of engineering and other fields of technology design and use (see above all Wajcman 1995 and 2002; Faulkner 2001; Cockburn/Ormrod 1993). Nonetheless, the question is virtually neglected and not explicitly examined, whether the *process, the activity of designing technology itself is gendered, and what ideas of gender are assigned to it.* Thus, I consider engineering design a gender-coded human productivity. This view of the research problem refers to the opinion that neither gender nor the conceptions of engineering design could be seen as ahistorical entities but should be considered *historical documents* themselves from a constructivist science critique angle. Taking that problem as a starting point, I will argue for a detailed examination of *the social construction of engineering design as a gendered activity.* There is some noticeable indication that the modern idea of engineering design (of the industrial age) had become subject to change by the end of the 20th century. Accordingly, further research will be focused on a critical perspective regarding possible *transformations* in the concepts of today's engineering design.