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Design and Technology: A Historical Perspective on the Mediating Role of Technology Between Industrial Design and Engineering

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The interdisciplinary relationship between industrial design and mechanical engineering is sensitive. This research focuses on understanding how one can positively mediate this relation, in order to foster innovation. In this paper, technology is considered for this role since it has, in some historical moments, served as an integrator of these two disciplines, in processes that led to innovation. By means of an extensive literature review, covering three different periods of technological development, both disciplines' positioning in society and their link with technology are analyzed and compared. The three case studies selected help to illustrate, precisely, the technology positioning between both disciplines and society. Literature assumes that industrial design is rooted in the rise of criticism against both the machine and the mechanized production. This is an opposing approach to the current paradigm, in which design plays a fundamental role in adapting technology to society. Also, the social problems caused by the mechanized and massive production triggered the mechanical engineering emergence, as a professionalized discipline. Technology was intrinsically connected with both industrial design and mechanical engineering emergence and subsequent evolution. In the technology conflict with society lays the reform and regulation for design practice, in its broadest sense.

Keywords: Design History, Technology, Innovation

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