

Fit for Purpose

Four considerations of how matter becomes material

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Computing within Limits

Fit for Purpose: Four considerations of how matter becomes material

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LIMITS

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ABSTRACT

Materials form the basis of modern technological society. The extraction and processing of raw matter and the disposal of material things is at the heart of most of the environmental and social crises, and has important implications for the design and deployment of computation systems. In this paper, we present an analysis of the way in which materials are selected during the design process: how designers determine whether a given material is fit for purpose. While originally addressing specific functional or aesthetic purpose, with increasing urgency designers have begun to select materials that also consider a broader environmental purpose (eg. CO2 footprint) or ethical purpose (eg. Fair Trade). The analysis also unveils a missing category: the need to consider the social relations that emerge in the creation of materials across their supply chains. Fit for political purpose is thus proposed to create a bridge between the nuts-and-bolts material design of technology and the socio-political impacts of its production.