

Abundance, Order, and Meaning: Reconceptualizing the Role of Technology in Global Cultures

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One of the key outcomes of ABET 2000 is to provide engineering students with "the broad education necessary to understand the impact of engineering solutions in a global and societal context." In my view, the intellectual challenge in fulfilling this outcome is to provide our students with a framework that moves beyond modern Western assumptions about technology. It is all too easy for our students to presume that people in other cultures view technology as the means for creating material wealth and military power. While wealth and military might are certainly two of the goals fulfilled by technology in many societies, people also use technology in pursuit of noneconomic goals such as social order and cultural meaning. Drawing on the research I did in writing and editing *Technology in World History* (6 volumes, Oxford University Press, 2004), I will outline in this paper a framework for thinking about how people use technology to create and sustain different cultures. This framework--centered on the idea that people use technology to create abundance, order, and meaning--may be appropriate for teaching about technology in ways that don't privilege western developments and western conceptions of technology. This framework may also permit us to treat western and non-western cultures in a balanced or symmetric fashion and thus provide our students with the framework they need to understand the impact that engineering can and will have in diverse cultures around the world.