

36th Symposium on the Search for Extraterrestrial Intelligence (SETI) – The Next Steps (A4.)  
SETI II - Interdisciplinary Aspects (2.)

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Author: Dr. Kathryn Denning  
York University, Toronto, Ontario, Canada, kdenning@yorku.ca

## BEING TECHNOLOGICAL

### Abstract

SETI's essential premises involve evolution in multiple domains: cosmology, biology, culture, and technology. Comparatively little has been written about the last of these, technology, in relation to SETI's targets, but it is a crucial variable, and well worth deep examination. This paper contributes to that effort by outlining current theoretical models of technological evolution, exploring the applicability of those models to the particular case of radio telescopes, and considering the implications for hypothetical alien civilizations and for SETI. I ask a series of questions:

What do we understand about how technology originates and develops here on Earth? In those processes, what is necessary, and what is contingent? For example, was technology using radio waves bound to emerge sometime on Earth, or was it the result of a series of historical intersections which need not have occurred? If this technology was likely to emerge in some form, are there alternative variants which were just as plausible as those we have today? If so, why did some forms dominate while others faltered? And, finally, if we refine our assumptions about how technological evolution works, how might we then expand our thinking about Search strategies?