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A FAUSTIAN EXCHANGE: WHAT IS TO BE HUMAN IN THE ERA OF UBIQUITOUS TECHNOLOGY?

## A contrarian view of postmodern society and information technologies

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Abstract In this short paper—little more than a note, even a short "contrarian" sermon for this anniversary volume-what I do is argue that even the allegedly most "revolutionary" inventions of our computer-driven age are not revolutionary in the sense that their impacts are "driving" society. Some of them are genuinely revolutionary, I admit, but in the reverse direction. The inventions don't "impact societies"; rather, particular communities within society use the technical languages that are at their core, invent them, embed them in machines, and so on. It is not inventions but particular groups within modern-and so-called postmodern-societies that have invented and use technical languages which are embedded in gadgets that are said to "drive" modern or postmodern societies. And they do so only in one sense: they were invented and are used by various communities in our kinds of societies for a variety of ends. And if this is so, and if we feel those ends are undemocratic or positively anti-democratic, I conclude that we should resist them any way we can, even politically.

## 1 Reflection

In a brilliant historical perspective on the oft-stated claim that we are in the midst of an "information revolution"—

P. T. Durbin (⊠) Philosophy Department and Center for Energy and Environmental Policy, University of Delaware, Newark, DE, USA e-mail: pdurbin@udel.edu the claim that information technologies in the twenty-first century are having a revolutionary impact on society— Goldman (2009) makes the counter-claim that the only truly revolutionary change was Claude Shannon's invention, in the late 1940s, of a "content-independent theory" that underlies all the "digital information technologies" that seem to overwhelm us today. (What Shannon [1916–2001] devised was a quantified model of information in engineering terms: to put the matter simply, entropy is a measure of information relative to noise in communications of whatever kind. This is generally agreed to be the basis of telephony, computerized information sharing, cryptology, and practically everything else related to subsequent informatics or information theory.)

In all other respects, Goldman says, changes in information technologies have been evolutionary; they have evolved—admittedly often in unexpected fashion—as modes of information sharing, from such phenomena as the invention of the modern university in the Middle Ages; or the similar invention of printing on a mass scale in the early modern period; or of developments in information sharing by way of newspapers and radio and television right through the invention of computers and widespread computer usage (for example, the Internet) in the nineteenth century and throughout the twentieth century. Our so-called postmodern society—dependent as it is in significantly new ways on information technologies—is in fact a mere evolutionary advance on earlier modes of sharing information.

What I do in this paper is argue that even the Shannon invention of a content-independent theory of communication—which came at precisely the time it was needed to undergird modern computer technologies (the late 1940s to the early 1950s)—was not revolutionary either, in terms of alleged impacts on society. It has been revolutionary,