

# Evaluating the Risks of Technological Evolutions

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## INTRODUCTION

From Chernobyl onwards academicians leveled considerable criticism on the role of technology as it impacts and benefits human life. In what was one of the best-selling books on the sociology of risk, Ulrich Beck realized that accidents under some conditions were the result of an inadequate manipulation of technology. If modern society had been based on Fordist scale production, Chernobyl marked the turning-point of a new era where risk predominated. With this backdrop, Beck considers that post-modernity needs technology and risk in order for the capital to be replicated (Beck, 2006). Although, technological advances, in forms of computers, ITC, and devices, are aimed at making of this world a safer site to be, mitigating and controlling the risk, the fact is that somehow, it contributes to creating new risks, which go beyond the control of society. This pungent point of view was widely examined by sociologists, anthropologists and psychologists in the recent decades. Is technology and technological advance a threat or a benefit for humankind? Ecological concerns are perhaps a point where more vividly may be seen the paradox of technology appreciated.

The goal of this chapter aims at exploring the connection between technology and risk. In doing so, the discussion between Sunstein and Giddens should be situated under the lens of scrutiny. While the former argues that fears are determined by cognitive shortcuts, the latter considers that risk seems to be a result of technology. Giddens is a detractor of confidence in technology, although he

praises its benefits. Sunstein is convinced that risk is a product of human ignorance and inaccuracy in the decision making process. Two views, two alternatives are juxtaposed in a debate that has not been finished to date.

The Sunstein-Giddens debate draws the boundaries of policy analysis within a world capitalist framework. That is, their debate stays safely within the ethos and assumptions of the currently prevailing political economic system that dominates the globe. Sunstein is a legal scholar and professor in the Law School the University of Chicago, He is part of the clique there that adheres to the so-called law and economics framework derived from the Chicago School of Economics. This Chicago School has been led by such world luminaries as Gary Becker, Milton Friedman, and others whose ideas owe much to the Austrian school of Frederick Hayek. They are anti-Marxist, anti-Keynesian, and avowedly neoclassical. In practice their ideas formed the basis for the neoliberalism of Western hegemony in the late twentieth century. A hallmark of their thought and its legal and public policy applications is the central figure of the rational actor. The rational actor is a heuristic to allow various econometric formulae to have some reference to the real world. The rational actor is the *homo economicus* who always acts to ensure the greatest economic advantage to him or herself as an individual. All theories flow from this assumption which is markedly individualistic and assumes a kind of cognitive functioning rarely if ever found among real people.

Anthony Giddens takes a social analytic approach that is neither individualistic nor based on the assumption of blind social forces and structures that operate without human agency. Giddens' approach combines individual agency with social structure. He does not assume a rational actor, but sees a dialectic between the effects of sociation (social structures, institutions, and the like) and the ways people act. Most relevant to the Sunstein-Giddens debate and the present essay is that Giddens that technology is both a consequence and cause of human behavior as they shape each other. Their debate comes down to one between the neoliberals and the Keynesian. It ignores the far more far reaching and radical critiques offered by a number of authors reviewed in this article.

## PRELIMINARY DEBATE

In what follows a number of analysts are reviewed. None is directly involved in the Sunstein-Giddens debate. Nonetheless, each analyst presents a different aspect of technological evolution, its consequences, and its relationship to human behavior and decision making. Technology plays a pivotal role in organizing not only behavior but also the society itself. Undoubtedly, the technical advances blurred the connection between time and space, facilitating many things for people. Among the benefits of technology applied to health for example, we have,

- Lights and electricity created a real revolution in the way of displacements.
- The life expectancy has been expanded.
- The techniques of education have been radically altered providing new resources.
- Risk, disasters and other dangers may be mitigated by means of technology.

G. Amar (2011) argues that the evolution of technology has made life safer in many senses. The current meaning of mobility seems to be something else than a technique. This exhibits a spirit a kind of social bond that connects self with

territory. Technology may be not only positive, but allows re-discovering the principle of "religance". This neologism refers to the anthropological sense of place. The principle of *religance* that circumscribes the subject to the community may create new technologies, more sustainable for ecology that improves our quality of life. From this perspective, Amar argues that innovation would play a pivotal role in the industry of mobility worldwide. In contrast to the existent French literature, Amar is strongly convinced that there are two ways of moving. If we evaluate the problem of mobility in terms of space-time criterion, we need to conclude that technology has made life faster, but not safer. Rather, Amar adds, there is surfacing a new manner of transport, where people are experiencing the "time-substance" to fabricate sentiment respecting visited spaces. This new type of mobility follows recreational goals determining long-standing and satisfactory experiences (Amar, 2011).

Even technology serves as a mechanism of mitigating, forecasting and preventing disasters. In opposition to this, P. Virilio considers that technology acquires a negative tendency because it expands not only the process of alienation but blurs the boundaries of heritage and nationhood (Virilio, 1996). On the arts of Motor, Virilio says that mass media is framing and controlling the sense of reality. Today it is in vain to question the veracity of news, what is important for audience is the hyper-reality. Human perception has been captivated to see only events that never have happened; rather, they are enrooted in the future. Showing a natural tendency to communicate with others, human beings adapt their behavior to specific environs. Events geographically dispersed, are broadcast on the same screen synchronized in seconds. The acceleration of mobility triggered an inevitable confusion between present and future. As a result of this, technology leads to a decline of trust and social bonds. Unlike Amar, Virilio thinks the technology eliminates the natural barriers that prevent risks. During the XXth century, cities were built as refuges that marked the ends and beginnings of civilization. Any event, whatever its nature may be, is controlled by the wall.

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