

Social Implications of Technology: “Il buono, il brutto, il cattivo”

Late last year, IEEE SSIT was invited to put together a paper for the centennial edition of *Proceedings of the IEEE* that was published in May 2012. The paper titled, “Social Implications of Technology: The Past, the Present, and the Future,” brought together five members of SSIT with varying backgrounds, and two intense months of collaboration and exchange of ideas. I personally felt privileged to be working with Karl D. Stephan, Emily Anesta, Laura Jacobs and M.G. Michael on this project.

While it is important to go on record as saying that while there was harmony in the final paper delivered to PIEEE, there was certainly some tug-of-war related to themes and perspectives addressed in the paper. We carefully critiqued each other’s writing and some twenty-three drafts later came out with the final product, some thirty pages in length. The paper included 29 telling photographs and about 180 references, many sourced from IEEE T&S Magazine.

Controversy, conflict, disagreement, discord, disharmony makes for a good plot joining together once disparate ideas. Without this cross-disciplinary dialogue and dichotomy there cannot be a holistic analysis of the observable facts. In the PIEEE paper, we attempted to write a balanced article, at times oscillating between positive and negative social implications of technology, externalities and advances as a result of technology, and the risks versus rewards of technology’s trajectory. IEEE SSIT is clearly not just about the adverse effects of technical change but indeed how technology can be harnessed toward optimistic ends. IEEE T&S Magazine especially has a duty to its community of engineers and practitioners to publish at both ends of the spectrum, the successes and failures of technology in terms of social implications.

But more than that to capture what is happening, has happened, will happen. We need to get away from the mentality that says “this paper” or “this author” is *for* technology or *against* technology. This is to oversimplify many of the cases that have been published thus far in T&S. In some of the strongest papers I have read, what emerges after my reading is a depiction of a phenomenon that just “is what it is”. What makes good research is usually a good story that can capture the good, the bad, and the ugly.

As editor in chief, I will make it my goal to attract papers of all kinds- on the use and misuse of technology- you simply cannot have one without the other because the human factor is prevalent in design and deployment. I would be doing the Magazine a disservice if suddenly I were to put blinkers on to claim that technique can do no wrong, independent of whose hands it is in. This is simply not the case. If the number of papers about the negative social implications of technology seem to dominate over those on positive social implications it has to do with the types of papers the Magazine receives.

We cannot print articles which demonstrate benefits of technology if they have not been written and submitted for consideration. I urge you to think about writing something we can publish. I am thinking of topics like how affective computing can help autistic kids, the use of high frequency data streams to improve outcomes for premature infants, the advantages of using wearable technologies to do remote vocational training and assessment, the benefits to the global community of data visualisation techniques for online museums, electronic methods for reducing an individual’s carbon emissions footprint, historical articles which show how indigenous communities have attempted to

preserve aspects of their culture through technology, on assistive social robots for care of the elderly and the young and so forth.

As editor, however, I will not ignore papers that demonstrate that technology can be misused. I welcome papers on technology-related addictions and health risks, on consumer resistance to new technologies, on the citizen rights to use technologies for counter-surveillance, on the complications of data custodianship and cloud computing, on the increasing pervasiveness of geomatics engineering, on the rise of cyberbullying and offences against the person committed online.

What I am most wary of is that T&S Magazine- at least in mindspace- keeps pace with the times. Let us see more papers on how engineering will advance humanity but let us also question whether or not technology will always advance humanity.