

## Chapter 5

# The Nature and Areas of Technoethical Inquiry

### INTRODUCTION

*There is nothing inherently wrong with science, engineering, or managing. But there can be much evil in the goals which either of them is made to serve, as well as in some of the side effects accompanying the best of goals. If the goals are evil—as is the case with genocide, the oppression of minorities or nations; the cheating of consumers, the deception of the public, or the corruption of culture—then of course whoever serves them engages in evildoing, even if not legally sanctioned as wrongdoing.--Bunge, 1977, p. 98.*

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As illustrated in the preceding chapters, social and ethical concerns about technology are multifaceted and cannot be resolved through methods derived from any one discipline. Instead, a multi-tiered approach that draws on an interdisciplinary knowledge base is recommended to guide a proper technoethical inquiry advanced through knowledge and insights derived from multiple disciplines and literatures. This approach is desirable for achieving a more comprehensive picture of technology at the core of human life and society. Knowledge derived from the cross-fertilization of relevant areas of inquiry represents a potentially powerful set of knowledge building tools that can be used for maximizing the positive and minimizing the negative ethical aspects of technology in society. To this end, a systems approach to technoethical inquiry (chapter 4) was highlighted as an ideal methodology for studying the multi-faceted nature of ethical aspects of technology. This, however, does not negate the use of other methods and tools available to guide technoethical inquiry. Neither does it capture the nature and scope of technoethical inquiry within the real world of technology and humans.

Regardless of the selected methodology for guiding technoethical inquiry, there is a need to have a variety of supporting tools given the complexity and depth of technological advancement in society. In other words, there is no simple recipe or model for success, but rather a set of tools that can be brought into the field and used when the context demands it. Thus, the aim of this chapter is situate technoethical inquiry within the multi-faceted context of technology and human society. This is accomplished in two ways. In the first section, the multi-faceted nature of technological inquiry is described in terms of the multiple levels (meta-technology, explicit technology, tacit technology) of technological system relations in society. This helps to address the variety of ways that technology manifests itself within society. The multi-faceted nature of technology is also described in terms of key perspectives relevant to the study of technology which warrants interdisciplinary knowledge and expertise. Key perspectives (i.e., philosophical, historical, political, economic, cultural, legalistic) are discussed in efforts to achieve an interdisciplinary focus when studying technological systems. The second section presents the main areas and issues in contemporary technoethical inquiry. This helps familiarize readers with the main topics pursued within the field of Technoethics.

## **THE MULTI-FACETED NATURE OF TECHNOLOGICAL SYSTEMS**

### **Multiple Levels of Technological System Relations**

The key to understanding technology is not about understanding what it is only in terms of technical considerations, but rather, how it connects to life and society by

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