INTRODUCTION

That computing and information systems give rise to specific ethical issues related to the appropriate uses of such technology is a viewpoint that, according to Bynum (2001a), is traceable at least as far back as Norbert Wiener’s seminal work in the 1950s (Wiener, 1954). From this important idea, a field of inquiry emerged that came to be known as “computer ethics” (Maner, 1980). As with many emerging fields, however, scholarly debate arose as to how “computer ethics” should best be defined (cf. Bynum, 2001b). While various distinct positions have been advanced in this regard (e.g., Moor, 1985; Johnson, 2001), a broad characterization of the field is that “computer ethics” deals with the personal and social impacts of information technology, along with the ethical considerations that arise from such impacts (Bynum, 2001b). More recent views localize “computer ethics” within a still broader philosophical domain of “information ethics” (Floridi & Sanders, 2002).

In this article it is not our aim to review historical or current developments in the field of information ethics, per se. Rather, our goal is to discuss an important but somewhat neglected aspect of this field: namely, its “metaethics.” In its broadest sense, metaethics can be defined as the generic name for inquiries about the source of moral judgments as well as about how such judgments are to be justified (Barger, 2001). Positioned in this way, metaethics is not about isolated individual judgments concerning whether certain actions are right or wrong. Rather, it is about how one’s particular worldview, also known as a “Weltanschauung,” is propaedeutic to the formulation of such ethical judgments. A person’s worldview is his or her own collection of beliefs about reality and existence, which can be multifaceted including beliefs relating to whether human nature is fundamentally good or evil, whether absolute standards of conduct exist, whether there is a supreme power in the universe, and so forth.

In philosophy, the study of being and existence is called “metaphysics.” This very term, derived from its Greek roots, connotes a higher or more advanced (meta) understanding of reality (physics). A personal metaphysical position is basically equivalent to someone’s worldview or fundamental beliefs about reality (Barger, 2001). Metaphysics is described here as a set of “beliefs” because it is based on ideas that cannot be proven or verified.

Aristotle called metaphysics “first principles” (McKeon, 1968) in deference to the notion that a foundation of meaning is prerequisite to the interpretation of any particular events or actions within the larger universe of that meaning. The reason more than one metaphysics exists is that different people adopt different personal explanations of reality. Once a personal metaphysical worldview is adopted, that view inevitably influences personal decisions about ethical matters (Barger, 2001). It is in this sense, then, that a person’s view of reality is propaedeutic to one’s stand on value questions.

As others have noted, several traditional philosophical positions exist that commonly influence personal metaphysics and ethical decision making (Barger, 2001; Johnson, 2001). The purpose of the next section is to review those positions along with their primary ethical implications.

BACKGROUND: MAJOR METAPHYSICAL POSITIONS AND THEIR ETHICS

Idealism

The term “idealism” applies to a collection of metaphysical positions, all of which share a common notion that the mental realm predominates over the physical (Wikipedia, 2006). Many philosophers (e.g., Socrates,
Plato, Berkeley, Kant) have emphasized the primacy of mentality because they believed the mind to be the only means by which human experience occurs. In this view, humans can have no direct experience of physical objects, only mental perceptions (i.e., “ideas”) of objects fueled by the senses. This has led some idealists to question whether or not anything other than the mental realm really exists. It is in this sense, then, that idealism elevates mentality, which it holds to be a uniquely human quality, to a position of preeminent importance. Only ideas are thought to be able to achieve a kind of perfection or “ideal” form; the physical realm, if it exists at all, is flawed, imperfect, and subject to degradation over time. Ideas, on the other hand, can achieve a kind of timeless, universal quality that physical objects cannot.

Idealism gives rise to a form of “deontological” or duty-based ethics perhaps epitomized in the work of Immanuel Kant (Johnson, 2001). Kant believed that because the essence of human nature was its rationality, a code of conduct was required befitting that essence. Accordingly, Kant proposed several forms of what he called the “Categorical Imperative” as the universal standard for human action. The first form emphasized its universality: “Act only on that maxim by which you can at the same time will that it should become a universal law” (Kant, 1993). In other words, if you wish to establish a particular ethical standard, you must be willing to agree that it would also be right for anyone else to follow it. As Barger (2001) indicates, this form is very close to what is commonly known from the New Testament as the “golden rule.”

A second form of the Categorical Imperative emphasizes the dignity of human nature that derives from its mentality: “Act so that you treat humanity, whether in your own person or in that of another, always as an end and never as a means only” (Kant, 1993). Reflected in this form is the notion that because each human is a rational being, all humans should be treated in a manner respectful of this quality (Johnson, 2001). Like the timeless perfection of ideas, idealist moral imperatives are a priori and absolute. That is, these imperatives do not admit of exceptions and are stated in terms of “always” or “never.” For example: “Always tell the truth” or “Never tell a lie.”

### Realism

This metaphysical position, also known as naturalism (Barger, 2001), holds that reality is material, natural, and physical. As such, reality is quantitative, measurable, governed by the laws of nature, and subject to the operation of cause and effect. The universe, according to the realist, is one of natural design and order in which matter takes precedence over mentality. For some realists, if the mind exists at all, it can be explained by physical mechanisms like brain functions (Searle, 2000).

The resultant ethical position that flows from a realistic metaphysics holds that conformity with nature is good. Therefore, people should strive to promote habits that would, for example, enhance personal health (by exercising, not smoking, etc.), or protect our environment and its resources (by not polluting, recycling, etc.). In a sense, realism leads to its own form of deontological ethics with a universal mandate derived from a more natural law: live in harmony with nature.

### Pragmatism

Within a pragmatic metaphysics, reality is not so easily localized in the mental or physical realms as it is for the idealist and realist. The pragmatist finds meaning neither in ideas nor things, but rather believes that reality is a process, a dynamic coming-to-be instead of a static state of being. Reality is to be found in change, activity, interaction, and experience. Since change is ubiquitous, nothing can have a permanent essence or identity. The only constant is change, and the only absolute is that there are no absolutes!

Pragmatism leads to a form of utilitarian ethics (Barger, 2001; Johnson, 2001) in that all moral values must be tested and proven in practice since nothing is intrinsically good or bad. If certain actions work to achieve a socially desirable end, then these actions are ethical and good. Consequences, therefore, define good and evil on this view. The maxim that follows from this pragmatic ethics is that “the end justifies the means.” That is, if an act is useful for achieving some laudable goal, then it becomes good. Accordingly, a means has no intrinsic absolute value, but only gains value relative to its usefulness for achieving some desired result.