times I just want to hear the song to see if I like it. If I do, I can now download it legally for less than a dollar from lots of sites. Besides, some of the new groups let you download their songs free, so they will get known. Then people will pay to go to their concerts. In fact, when I think about it, I don't even know which songs I download are copyrighted and which aren't. It's not like a book where you can check the copyright date. I may not be breaking the law after all. If I am in a few cases, the recording industry isn't going to come after me to make me an example. I'm small potatoes. They go after the big-time downloaders and sharers. I wish I hadn't taken that class in ethics, though. All it did was put a guilt trip on me when I download my songs. Maybe if I think about it enough, I'll figure out why it's ok.

We leave Hank with his indecision. He knows it is illegal to download copyrighted MP3s. Is it unethical, and if so, why?

The Apple Versus Microsoft Case

Most people would readily agree that stealing is wrong and that the misappropriation of another person's property is stealing. In the area of computer software, however, what constitutes stealing or misappropriation is not always clear.

One of the unclear areas concerns the so-called look and feel disputes, the most prominent of which is the *Apple versus Microsoft* case.[1]

Apple had produced the Macintosh computer and had developed a distinctive graphical user interface to go with it, including pull-down screens or windows, windows within windows, and a variety of icons for a variety of different tasks (e.g., a file folder represented a file and a trash can represented discarded files). When Microsoft introduced the now very popular software program Windows, which was written not for Apple computers but for IBM-compatible computers that use MS-DOS as the operating system, it included many of the features that were previously available only on Apple computers.

Apple Computer, Inc., sued Microsoft for 189 infringements of its software copyrights. Although U.S. District Judge Vaughn R. Walker of the Ninth Circuit, who heard the case, threw out many of the claimed infringements on a variety of technical grounds, the heart of the controversy lay in Apple's claim to the "look and feel" of its software. Apple maintained that although individual instances of copying might be allowed for various reasons under copyright law, Apple had a right to claim protection. Even though, for instance, the general idea of using icons could not be protected by copyright, Apple argued its distinctive display—its special look—could be protected. The "feel" at issue referred to the use of a string of keystroke sequences that people would employ in using the program, which gave it a distinctive "feel."

Apple Computer, Inc., clearly wanted to protect its originality and the market appeal that this originality provided. For its part, Microsoft wished to make its DOS system more attractive, to offer DOS users some of the advantages previously available only to Apple users, and so gain greater market share. The motives of each are clear. But what belonged to Apple, and did Microsoft inappropriately use what did not belong to it? The crucial question is this: If we consider all of the individual items that Apple claimed Microsoft copied, whether or not protected by copyright, can the *combination* of those in an artistic or creative manner be protected?

---

[1] For details of this case, see *Apple Computer, Inc., v. Microsoft Corporation*, No. C-88-20149-VRW, United States District Court, N. D. California, *Federal Supplement*, 799 (1993), pp. 1006–1047. For a summary and commentary, see "The Ups and Downs of Look and Feel," *Communications of the ACM*, 36, no. 4 (April 1993), pp. 29–35.

Our concern here is not with the technical legal aspects of the case, for those were argued by the respective lawyers and decided by Judge Walker. Our concern, rather, is with what morally belongs to whom in such a controversy. Is there any way to argue that one or the other side was morally right in its claim, even though the copyright laws did or did not grant the disputed property right? Is what is morally correct here decided by law—meaning that without a legal decision there is no right or wrong or that there is no claim to a right unless it is protected by law? On utilitarian grounds, is more good than harm done for software-producing firms, users, and society in general if the look and feel of computer software is protected by copyright? Are there ownership rights to an artistic and creative screen design that should be respected?

As business has entered the Information Age, often a corporation's most valuable asset has become not its physical plant but its information database. Computers make it possible to store, sort and analyze immensely large amounts of data. Customer lists and profiles are obvious examples. Easy access to such data facilitates advertising and direct marketing. Automation is being used more and more for tasks done by human beings. Customers now often use automated checkout machines in the supermarket and check themselves in at airports, doing without the services previously supplied them by checkout and check-in people.

Central to the Information Age is information. The information is of all types. And since it is central to business operations, information has become more and more valued and valuable. Although the promise of the Information Age is the widespread dissemination of information for the benefit of all, there has been a growing emphasis by business on information as property. But it is a special type of property—namely, intellectual property, with special characteristics requiring special types of protection.

If one company were to hijack a truckload of TV sets from another company or if an employee were to embezzle funds from his employer, we would have no hesitation in calling the acts immoral. We know what it means for a company to own TV sets or money, and what it means for someone to take these wrongfully. However, our concept of proprietorship is less clear when it comes to knowledge and information. If I take information or knowledge from you, I do not physically deprive you of it. We may both have it and have it equally. My taking it from you does not leave you without it because knowledge and information are different from physical objects. If, furthermore, we lived in a society in which all goods were shared, knowledge and information would be among those items that would be shared most freely, because each person could enjoy the benefit of the knowledge and information without depriving anyone else of their use.

Information and knowledge are vital aspects of many businesses, and special information may give one business an advantage over another. Hence, in a competitive situation, one business may not wish to share its knowledge and information, although doing so would not lessen its own knowledge and information. Information and knowledge, moreover, often represent a financial investment by a firm. Some knowledge is costly to obtain or develop. A marketing study, for instance, may represent a great deal of time and money, and a company's desire to keep such information secret is understandable.

Who owns knowledge and information that have been developed by people in a corporation? Who owns knowledge and information about a corporation?[2] From a moral point of view, what may be kept secret and what must be disclosed? Does it make any sense to talk about owning ideas?

[2] See Stanley Lieberstein, *Who Owns What Is in Your Head?: A Guide for Entrepreneurs, Inventors and Creative Employees* (Pensacola: Wildcat Publishers, 1996); and Russell B. Stevenson, Jr., *Corporations and Information: Secrecy, Access, and Disclosure* (Baltimore: Johns Hopkins University Press, 1980).