Biotechnology is no longer the stuff of sensational scientific speculation; it has become one of the most important developments on the horizons of research, health care, and business. However, while investors, researchers, and patients are eager to welcome new waves of drugs and medical treatments, biotechnology is not simply a business like any other. The industry's raw material is not silicon or steel, but life itself. E. Richard Gold argues in his insightful book, *Body Parts: Property Rights and the Ownership of Human Biological Materials*, that this difference is a fundamental one that cannot be accommodated within the current forms of property law. The rights of cell and tissue donors, researchers, and biotechnology companies must be negotiated, he claims, either through innovative approaches to property law or outside of property law entirely.

Gold is convinced that the courts are in no position to lead the way in developing the new concepts of law needed to deal properly with human biological materials. The natural inclination of a court, when hearing a matter of first impression, is to attempt to fit the situation into an existing category of established law. The California Supreme Court took this approach in the case of *Moore v. Regents of the University of California*. Moore, a leukemia patient, brought a claim of conversion against his surgeon. The surgeon had harvested Moore's abnormal pancreatic cells without his knowledge and exploited the cells' special characteristics to develop a lucrative commercial method of producing lymphokines, a normally scarce set of substances in the immune system. At issue was whether the patient had a property interest in his own cells such that the cells could be considered stolen goods, and their resulting technological development be considered wrongful. The most applicable category of existing law was that of property, although it had never before been applied to components of an individual's body. The four opinions written in this case expose a wide range of concerns about

---

1. E. Richard Gold wrote this book in partial fulfillment of the requirements of an S.J.D. at the University of Michigan Law School.
extending the discourse of property and ownership to the human body; they form the starting point of Gold’s argument.

The majority allowed the surgeon to maintain a property interest in the cells and the products that he developed from them. They denied the patient ownership rights in his own cells for fear that the establishment of such rights would inhibit the advancement of the nascent biotechnology industry, which the court saw as crucial to the future of health-care (pp. 26-27). The two dissenting opinions advocated the establishment of the patient’s property right as a check on the power of the industry over the individual.3 But it was only Justice Arabian’s concurring opinion that rejected the exclusive use of property law, with its fundamentally economic analysis, to a dispute over an individual’s body components. He was concerned about the “conflicting moral, philosophical and even religious values at stake, [and] the profound implications of the position urged,” noting that “[t]he ramifications of recognizing and enforcing a property interest in body tissues are not known, but are greatly feared.”4 Gold shares Justice Arabian’s fear of the unaccounted, unknown, and undebated effects of the application of property rights to biological materials.

Property discourse, Gold believes, is inevitably a means of negotiating a good’s economic value — other non-monetary values are invariably excluded from this calculus. Some advocates of market-based analysis,5 however, claim that the properly calculated market price of a thing reflects not only its economic value, but the full range of values that a buyer or seller may attach to it (pp. 32-35). Gold devotes the central third of his book to an analysis and ultimately a refutation of this claim.

Gold begins by examining courts’ recognition of the moral dimension of property cases, focusing on two cases in which creators of ideas for television or radio programs sought intellectual property protection for their ideas.6 The courts’ consideration of the creators’ “skill, discretion and effort,” seems to indicate concern for the creative energies expended by these writers (p. 50). But why then, Gold asks, is creativity not legally protected for such creative individuals as philosophers, who develop new ways of understanding human relations; physicists, who discover new principles of nature; or entrepreneurs, who develop new methods of marketing? (p. 50). Surely these forms of creativity are of greater creative value than the new combinations of old programming

3. See id. at 505, 517 (Broussard, J., concurring and dissenting, and Mosk, J., dissenting, respectively).
4. Id. at 498 (Arabian, J., concurring).
5. See, e.g., id. at 515-17 (Mosk, J., dissenting).
ideas at issue in the radio and television cases. The reason is clear: it is not the moral act of creativity, but rather the marketability of the result that drives the courts’ decisions (p. 50). This motivation is discernible in the fact that while these two similar cases have opposite outcomes, all of the opinions filed in these cases rely upon analysis of the marketability of the ideas. The test for whether an idea is creative enough to deserve property protection is not in fact rooted in any moral analysis, but in the extent to which it contributed to the production of a marketable program (p. 53).

The outcomes of the television and radio cases may come as no surprise; the broadcasting world peddles ideas and individuals as commodities, makes few pretensions to lofty levels of creativity, and is referred to even by its creative performers and writers as an industry rather than an artistic enterprise. But even in the arena of business, there may be some moral sentiment behind the granting of property protection. Gold illustrates this possibility with the *Associated Press v. International News Service* case, which examines the property right of one news service (Associated Press) in its war reports as against another news service (International News Service). When the complications of World War I halted International News Service’s overseas operations, it provided the Associated Press’s stories to its own member newspapers. The opinions address two moral aspects of the case: the universality of news itself and the moral quality of the investment of effort. Recognizing the universal human interest in obtaining news of the world (and particularly of a war), the court refused to grant the Associated Press a right any broader than one against International News Service, which similarly utilized news for profit. The court was offended by International News Service’s practice of appropriating the Associated Press’s work product, which it analogized poetically to reaping wheat from the field that another had sown (pp. 53-56).

Gold looks beneath the moral rhetoric, however, arguing that moral considerations were not the court’s primary motivation in granting such a property right in news reports. Rather, the court sought to maintain economic incentives to undertake the arduous and socially important task of reporting. Though this is an important insight, Gold strays from the point when he attacks the sowing-and-reaping analogy as invalid because of the incommensurability of a material good like wheat and a conceptual and social good like news (p. 57). He finds further fault in that the analogy is premised on established notions of property law, whereby it would be the owner of the field rather than the sower who would have the right to reap (pp. 57-59). This distinction is irrelevant because the

---

court is granting a right to work-product, not the "news," and thus the identity of any owner of the news is unimportant. Gold's criticism seems to fight too hard to support his preconceived conclusion, and reads too much into the court's simple invocation of a Lockean notion of property rights to goods based on the investment of effort in their production. It is unfortunate that the author devotes his energy to this critique; in a book about the universal moral quality of biological materials, it would have been more interesting to have his opinion regarding the court's treatment of news as a universal good that is at times ownable and at other times public.

Nonetheless, Gold's argument is clear enough to introduce the strongest part of his discussion. Having detected some moral aspects in certain property cases, Gold sets out to show that even where a moral aspect of property rights is acknowledged, economic analyses tend to prevail, as in Associated Press. Gold is skillful in electing to illustrate this effect through the right of publicity, whereby a celebrity may control the use of her persona. This particular right serves especially well as a model for rights pertaining to the body because it is an inherently personal matter, involving the individual's sense of identity, self-determination, and relationship to society. By focusing on these values, which are crucial in an examination of how to apply law to biological materials, this analysis is even more persuasive than the analysis of other technology and even biotechnology cases found elsewhere in the book. Additionally, the right of publicity is a relatively new right, created only in recent decades, and may therefore shed some light on the early course of development of rights in biological materials.

When it was created, the right of publicity was one of the most personal of rights, finding its origins in the right to privacy. Yet, even as the right grew to cover more specific details of a celebrity's persona—such as voice, musical style, or characteristic turns of phrase—it's application became increasingly rooted in economic considerations (pp. 88-89). Courts evaluate issues such as whether the right of publicity is descendible to a celebrity's heirs in terms of the economic incentives that will encourage celebrities to develop their public personae in a manner that promotes the greatest market activity. Ironically, even when the celebrity is as moral and non-economic a figure as Martin Luther King, courts construe the right not as a means for individual celebrities to retain their privacy and dignity, but as a structure for the maximal production and exploitation of celebrity images (p. 101).

It does seem somewhat reasonable to view a celebrity's persona in economic terms when, as is normally the case, the suit is framed by the litigants as a battle over economic returns. The most interesting and revealing of these cases, therefore, are those in which no economic interest is expressed. Such was the situation when the singer Tom Waits,
who for reasons of artistic integrity actively avoids commercial endorsements, sued a company that used an imitation of his voice in an advertisement. The court awarded Waits damages based on injury to his feelings and reputation, but only after it was determined that his voice was an economically marketable good that could be covered by the right of publicity (p. 104). Gold asserts that in the absence of marketability the courts are unable to find a path to awarding relief (p. 105). In another illustrative case the steelworkers of Local 1330 in Youngstown, Ohio were unable to win a court order to maintain operation of the steel mills on which they were dependent, despite the court's intensely expressed empathy for their predicament. The court recognized the socially beneficial value of their interest — operation of the mills was necessary for the preservation of the surrounding steel town community — but since this "community" value was not a familiar economic interest, the court was unable to raise it to the level of a defensible property right (p. 118).

With this line of reasoning, Gold concludes that the admission of any good into the discourse of property law signals the foreclosure of any means of understanding the good other than through the logic of economics. Gold’s quarrel is not with economic reasoning itself, but rather with the assumption that market forces reflect all of the different values that may be applied to a good (pp. 122-23). To demonstrate the array of values that we apply to our bodies and our health, Gold presents a survey of views from throughout Western culture, noting that even a single individual may hold different and conflicting values simultaneously. The incommensurability of these values with monetary value is Gold’s major point in this book, and his discussion is vivid and convincing.

Not only is money not an appropriate scale by which to measure all values, Gold argues, there is no fundamental scale available onto which we can faithfully translate all different values. In a memorable analogy he points out that the spiritual, communal, and personal values inhering in the body and health cannot be discussed in terms of money any more truthfully than the appearance of a color can be represented to the eye by the substitution of another color (pp. 149-52). Such values as altruism and a sense of responsibility to the human community — forces that are not often discussed as significant factors in legal reasoning — are deeply present in our decisions about bodily materials, and Gold argues seriously that they may be more compelling than economic concerns as

9. See Local 1330, United Steel Workers of Am. v. United States Steel Corp., 631 F.2d 1264 (6th Cir. 1980).
10. This survey is the topic of Chapter 7.
the basis for determining the control of such materials (p. 161). In any case, the discussion of such human concerns does not deserve to be eclipsed by the discussion of monetary concerns.

Gold arrives at his conclusion strongly, having explored the germane issues thoroughly, and having led the reader through a clear, logical exposition of his argument. Certain small pieces of the discussion, however, are handled clumsily or are left incomplete in such a way as to invite questions that cast long shadows over the argument as a whole. In several places, Gold asserts that the application of property concepts to the body and health would help to advance certain concepts of health and disease over others, leading to the selection of certain political policies over others (pp. 42-43, 139-40, 141). He fears, for instance, that establishing property rights to human genes would cause our society to conceptualize disease as purely genetic, rather than environmental or behavioral, and would shift responsibility for illness away from society to the individual (pp. 42, 136). While these outcomes are plausible, there are other possibilities that are equally plausible. Genetic research spurred by the existence of property rights could lead to an understanding that genes are only a single factor among many that contribute to disease. The individual may come to be viewed as less responsible for disease that arises from her randomly inherited genes than from other sources. Finally, genetic research that is financed through funds resulting from the trade in human research materials could free up public funds for research in other areas of medicine and health. The author's fears are stated but not explained, explored, or justified.

Where he does elaborate his views more thoroughly, Gold sometimes strains against scientific logic to make his point. Astonishingly, he trivializes the distinction between the technology involved in Chakrabarty,11 in which the first patent on a genetically engineered organism was granted, and the 1947 Funk Brothers Seed Co. case,12 in which an agricultural mixture of certain common bacteria was held to be a non-patentable phenomenon of nature. Gold characterizes both Chakrabarty and the Funk Brothers Co. case as "inventors [who] mixed together a set of genes in a manner that would not occur in nature." (p. 81). While this is true in the most general sense, it is obvious to even the casual follower of current science that the mixture of genes in the form of whole, naturally occurring organisms is radically different from Chakrabarty's recombination of native and foreign genes within a single organism. It is disturbing that Gold sees fit to sidestep this fundamental distinction.

Of similar concern is an implication flowing from his conclusion that courts always adjudicate matters according to monetary values. Based on this conclusion, Gold demonstrates that cases involving biological materials will be mishandled by the courts. While this may indeed be a genuine concern, it is a far more sweeping claim than seems intended. Are courts also unable to properly consider any matter which cannot be accurately valued solely in monetary terms? In short, have courts any business considering intellectual property cases at all?

One final criticism of this ambitious book is that while the author has exposed a problem, he has not followed through by detailing any solutions. Gold's best advice is to leave law-making on matters of human biological materials to the legislatures (p. 177), rather than the courts, which Gold believes are unlikely to alter their conceptions of property law sufficiently, or sufficiently quickly, to accommodate the current progress in biological research (pp. 174-76). What the legislative approaches might look like and why legislatures will be more responsive than the courts, we are not told. But proposing a solution has not been Gold's stated mission in this work; he has succeeded ably in advancing the discussion to a point from which other books and other authors may offer solutions.

Ron Lee Meyers