

may say, are properly his. Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his *Labour* with, and joyned to it something that is his own, and thereby makes it his *Property*.²⁴ From the natural rights perspective inventions are a form of property and all individuals are entitled to benefit from the fruits of their labors. An inventor has a right to his invention just as an artisan does to a tool he makes. Society has to recognize that it has to protect intellectual property in the same way that it is obligated to protect physical property. In other words, it should treat unlicensed imitation as if it were an actual theft of physical property. Granting authors and inventors an intellectual property right over their creations is a just extension of their natural rights, for it was their labor alone that gave their creations their value.

Natural rights arguments bridge the tension that is inherent in a patent system between capitalism's commitment to a free market and the countercompetitive nature of monopolies. Accordingly, society is obligated to reward inventors for their labor only in proportion to its value. The most appropriate rewards that take into account the social usefulness of inventions are limited monopolies. The National Assembly of revolutionary France declared in 1790 that benefiting from intellectual discoveries and innovations was the natural right of authors and inventors. The preamble to the French patent law of 1791 employed similar reasoning. Nineteenth-century international agreements on patents and copyrights sounded similar notes. Both the International Conference on Intellectual Property Rights held in Paris in 1878 and the International Convention for the Protection of Industrial Property ratified by the U.S. Senate in 1887 used natural rights reasoning to explain their commitment to the protection of intellectual property.²⁵

But natural rights association of intellectual and physical property is problematic. First, physical property is inherently a zero-sum game while knowledge is not. An owner of an ax loses his ability to

use it when it is stolen. An inventor, however, can still use his invention even when others duplicate it. The impact of technology piracy on the inventor is the loss of exclusivity that undermines his potential profit margin. The public at large, on the other hand, benefits from the dissemination of superior technologies among producers because lower prices for consumers are generally the by-product of such competition. Second, physical property does not cease to exist in law through time while intellectual property, in the form of either a patent or copyright, is always confined to a specific number of years. Finally, the natural rights perspective runs counter to the interests of the state, for it locates the value of an innovation in the creative individual and concludes that intellectual property is not confined by international boundaries. On the one hand it stipulates that each country is obligated to respect intellectual properties of all others within its own borders and must consider imitation as theft. On the other hand, since the property is embodied in the individual himself, he may carry the patent monopoly with him as he moves between locations. In the context of the persistent rivalry among European states, it is not surprising that rulers in Renaissance and early modern Europe privileged their own economic interests over abstract commitment to the principles of natural rights philosophy.

Utilitarian considerations proved a more powerful impetus to the codification of ideas as a form of property. Granting special benefits to authors and inventors supposedly encouraged innovation that ultimately benefited society as a whole. By assuring inventors and/or their assignees and licensees a time-specific monopoly in their respective field and hence offering the possibility of great financial rewards, states hoped to generate growth that would trickle down to all sectors of the economy. Governments granted patents in exchange for disclosure of the secrets of trade. The act of registration amounted to depositing the desired knowledge in the public vault to be shared with all members of society after the term of the