

Review by Paul Duguid

B. Zorina Khan

*The Democratization of Invention:*

*Patents and Copyrights in American Economic Development, 1790-1920*

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Digital technology has disturbed conventional understandings of intellectual property (IP), raising theoretical questions about what intellectual activities ought to be made property and pragmatic ones about what can be. Of late, it has been recognized that in attempting to answering such questions, insight into IP history is important. As B. Zorina Khan argues in *Democratization of Invention*, "a detailed understanding of the historical record can provide valuable information for understanding current issues and policies".

The book takes a close, analytical look at U.S. patent and copyright laws and their effects over a long nineteenth century, in many places providing intriguing comparisons with the IP regimes of Britain and France. In the stronger section on patents, a mass of U.S. data is broken down by such things as the social status of the inventor, by region, by type of invention, by assignments of patents. Data on patent litigation are broken down by region, by court, by jurisdiction, and by outcome. Further, in a couple of particularly important chapters, patenting by women is examined not only in regard to the categories noted above, but also to such things as marital status and married women's property rights.

The overall picture is one of U.S. inventiveness, spread as remarkably across class, race, gender as well as across urban and rural society. Khan concludes that "American [IP] institutions during the nineteenth century ... encouraged the participation of a broad spectrum of the population, and

succeeded in motivating relatively ordinary men and women to dramatically expand the existing stock of technical and cultural inventions". This she later calls a "virtuous circle of democracy and technology" leading to the "industrial and cultural supremacy" of the U.S. The comparative analysis suggests that the British and the French economies, by contrast, fell behind because their IP systems favoured "elites".

*The Democratizing of Invention* is an impressive work wielding economic tools adroitly on painstakingly gathered primary data to address important questions. It comes impressively endorsed by the U.S. National Bureau of Economic Research [NBER] and major economists. And it is certainly a welcome addition to the burgeoning history of IP. The tables and figures in this book will provide a mine for other researchers. Its conclusions, however, may be something more of a minefield. While many aspects of the book call for admiration, several also call for caution. *The Democratization of Innovation* reads in many ways as an old-style Whiggish history told with new economic tools. This time the U.S. is the acme of political evolution, while Britain and France, corrupt, inept, and enmeshed in their class-ridden past, are the cautionary tales. Offering no opening for doubt in the text, Khan paradoxically raises doubts in the reader's mind.

Her central argument is that the the U.S. had a distinctively democratic IP system and U.S. economic growth outstripped Britain and France, ergo the IP system was a driving factor. That argument alone raised doubts. After all, the U.S. had its own spelling system, but no one is going to argue (I hope) that that is why the U.S. economy outperformed Britain's. The argument is also problematic because, even if we accept as Khan's argument does, the conventional account of British decline, that decline followed the nineteenth-century revision of Britain's IP laws, which drew, as Khan acknowledges, "on the superior functioning of the American

system". Adopting the U.S. style IP system evidently didn't help much, which raises the question did it hinder? Moreover, in an argument about the path-dependency of IP laws and the superiority of the U.S. variety, it is perhaps a little too convenient to draw the curtain at 1920. The same path that brought us to that date has led on to a worryingly expansive IP regime, with the possibility of *de facto* perpetual copyrights and restrictive software patents. As an English judge noted recently:

The United States takes the view that anything made by man, under the sun, can be patented. And they have granted patents for business methods, mainly computer business methods. But as far as I can see, it would cover a new and improved method of stacking oranges on a barrel.

Of course, few would want to have to defend the British patenting system of the nineteenth century. Tortuous and capricious, it hardly deserves the name of system. Khan convincingly shows that the U.S. system was more efficient, more transparent, and led to more patents. Nonetheless, it is worrying that problems with the U.S. system are generally kept to footnotes or glossed over. Worrying too is Khan's underlying assumption that more patenting was inevitably better. Her movement from quantity to quality--from discussions of "patents" to conclusions about "advances" and "inventiveness"--seems too often an act of elision or ambiguity, rather than argument. Even if we accept the argument from quantity, there is some worrying sleight of hand. Figure 2.3 compares the "patents per capita issued in Britain and the United States" and convincingly shows that in the nineteenth century, the British fell significantly behind the U.S. Figure 2.2, some ten pages later, shows the per capita figures for France. No explanation is given why these are not on the same chart, and no acknowledgement is given that the French rate is significantly above that of the U.S. for much of the nineteenth century. If quantity is all, then the French system, for all its corruptions, had it.

The argument that more patents might not be better but, rather, counterproductive is given too little consideration. Khan's studies of litigation would seem to

suggest that frivolous prosecutions did not clog the court system or inhibit inventors. But the argument is based solely on "reported" cases--cases of legal significance, which are unlikely to reflect all aspects of litigation. To argue about deleterious effects of trivial patents, we would need to look beyond "reported" law.

Khan acknowledges, the British system generally kept patents for major inventions and excluded minor ones. Her chapters on women and inventions argues convincingly that such an approach would tend to favour the wealthy and discriminate against non "elite" groups such as women, who would in particular be doubly disadvantaged. First, women inventors often worked on small projects. Second, inventions that benefitted women--inventions that altered domestic arrangements for the better--tended to be small. . What Khan does not acknowledge is that at the heart of her period (and to some extent under U.S. influence), Britain's IP system changed to accommodate small inventions. In the 1830s, design copyrights were used first *de facto*, and then *de jure* to provide a low cost, cheap, and transparent system for small inventions, a shift that kept the patent system, with all its problems, for major inventions alone.

The argument about elites, by which Khan pits democratic America against class-crippled Europe, is also troubling. There is no need to deny that Britain and France were class bound (though some reason to question whether the U.S. was as blind to class as Khan assumes). Still, after Khan has made some sweeping statements about the European systems being reserved for elites, and elite classes, it would not be unreasonable to assume the English system was dominated by figures like Count Bentinck or Earl Stanhope. Thus it is surprising to find that, when we get closer to her data, the term is qualified as "relatively elite commercial and professional classes", which is something quite different. In fact, given the costs of patenting in England, the English system can seem surprisingly democratic. A quick scan of the new *Oxford Dictionary of National*

*Biography* [ODNB] turns up some 150 people born in the eighteenth century and plausibly identified as inventors. Of these, about half filed for patents (the ODNB is quite good on these identifications often giving patent numbers), and of that half, only about one-third might reasonably aspire to the status of gentleman or above. (What is noticeable is the absence of women from this group, lending support either to Khan's argument or to those who criticise the ODNB.)

A scan of the ODNB does not discount Khan's impressive data, but it does suggest that, as with the "reported" law cases, her sources may favour her predisposition. By contrast, Petra Moser's work on the nineteenth century (also sponsored by the NBER but not cited by Khan), which bravely attempted to come at the question of invention from outside the IP system, led her to the starkly opposite conclusion that there is "no evidence for the claim that the existence of strong patent laws increases levels of innovative activity".

Khan's discussion of copyright law exhibits similar strengths and weaknesses to the patent discussion. This retains the comparative argument, but lacks the comparative data. (The U.S. data, however, is once again valuable.) Indeed the comparative argument is generally anecdotal and selective. Khan quotes, for example, Joseph Whitworth on the extent of newspaper reading in the States in the mid-nineteenth century. (Dickens of course made similar observations, not necessarily to the credit of the country.) César de Sassure noted with equal astonishment the workingmen and bootblacks of London reading newspapers in 1726. This is hardly conclusive evidence. She also makes a great deal of the intent of the U.S. constitution and legislation, noting the claims in acts and bills to "promote the general welfare" or encourage "literature and genius" as if these statements of intent were dispositive. Yet when she comes to the ur-text of English copyright law it is referred to (as so often) as the "statute of Anne" and not by its actual name as "An Act for the Encouragement of Learning",

and when the French make such claims they are dismissed as "high flown rhetoric".

Given her enthusiasm for the U.S. way, Khan determinedly supports the U.S. refusal to acknowledge international copyright. The refusal, she argues, gave the country access to the world's knowledge without, her interesting data indicate, inhibiting the desire of Americans to write. European books flooded into the U.S. and everyone could enjoy them at little cost. Thus the country had the best of everything. In a book that talks happily about "cultural supremacy" but also presents old Europe as corrupt and class ridden, this is a slightly odd claim, for it assumes that the flood of European literature did no harm to U.S. society. Such an argument might seem otiose to the hard-headed who like hard numbers, but it was made with force by no less than Mark Twain, who famously talked of the "measureless harm" done to the country by Scott's novels:

Sir Walter had so large a hand in making Southern character, as it existed before the war, that he is in great measure responsible for the war. It seems a little harsh toward a dead man to say that we never should have had any war but for Sir Walter; and yet something of a plausible argument might, perhaps, be made in support of that wild proposition.

Placed together, the two sections suggest that in her enthusiasm for the U.S. IP system, Khan has the tricky task of squaring the circle. On the one hand, she argues that strong IP, in the matter of patents, is good. On the other, that weak IP, in the matter of copyrights, is good. On the one hand, the "importance of credible commitments on the part of the state" and the "transparent legal system" must be upheld. On the other, the end of copyright infringement justifies the means. Her argument is valiant and at times persuasive. But it involves switching back and forth between rule utilitarianism (where absurdities are justified in the name of upholding the general rule) and act utilitarianism (where instances and not rules are judged by expedience), which can make a philosopher's head spin. It might make an economist's spin, too. At one moment we find ourselves

applauding the U.S. system for enforcing the rights of inventors, however petty, yet at another we are asked to applaud the "cartels ... and synthetic copyrights" whereby U.S. publishers managed to protect monopolistic rights that they did not, indeed could not, own in international texts. This headspinning detracts from Khan's important point that developing countries should not necessarily be subject to the same IP regimes as developed ones. The problem is, of course, when do we declare a country developed. The U.S. waited a long time before admitting that it was no longer developing and joining international agreements. China seems to be playing the same waiting game today.

Khan argues that this book will be "of interest to economists, historians, legal scholars, and students of intellectual property, technological change, and economic development". It certainly will. Many will benefit from the extraordinary work it reveals. Nonetheless, they will need to be a little cautious about its lack of nuance. This may entice the credulous to put more weight on the conclusions than these can bear while causing the more critical to wonder what hesitations were washed away in preparing all those impressive regressions.