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Patent Law's Origins as a Proxy for Informal Reciprocity Relationships

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The Question

- Why did formal patent systems arise in 15th c. Europe?
- Traditional answers centered on incentives to innovate are unsatisfactory: so much innovation occurs before and outside patent systems



The Historical Record Gap

- Primary sources explanations from law and policymakers about *why* they established their respective monopoly grants or patent systems are scant and thin
- They tend to treat granting exclusive rights as self-evidently incentivizing innovation
- But this again begs the question about how so much innovation occurred outside patent systems



A New Take on Innovator Communities

- Outside of formal patent systems, innovation occurs *and* it is often shared (not always kept as a trade secret)
- BUT, the “zone” of sharing is often limited to formal or informal communities, e.g.,:
 - Medieval craft guilds
 - Craft beer hubs
 - Custom bicycle shops
 - Boutique guitar amp makers



A New Take on Innovator Communities

- Within these communities, when one member steps out to the “mainstream” they are often both ostracized or criticized by other community members and wind up seeking patents more aggressively or drive the other members to do so
 - See Zahr Said’s work on craft beer communities
 - See unpopular aggressive patenting by Mesa Engineering (Mesa/Boogie) in boutique amps community
 - Similar occurrences in custom mountain bike shop community



A New Take on Innovator Communities

- Eric von Hippel espouses these “user innovation” communities and tends to see formal producers as less innovative and potential suppressors of innovation
- BUT, “mainstream” users/consumers often seem to require mass produced goods or services—“good enough” solutions at cheaper price points that are “professionally” produced and widely distributed/available (a variant on Clayton Christensen’s “Innovators Dilemma”)



A New Take on Innovator Communities

- *The key dynamic seems to be reciprocity relationships*
- In user or SME innovation communities, sharing is rewarded with reciprocal sharing and other value exchange
- *But when a member begins to produce for the broader heterogeneous “public” they lose these reciprocal exchanges and pure economic compensation becomes the necessary base of the business model*
- However, unknown members of the public (outside of the informal reciprocity-based innovation community) can then “free ride” off the innovation of the broad-based producer



Early Modern Innovation Hubs

- Venice, Florence, and some other city-states in the 14th and 15th century were innovation hubs, with strong guilds
- The guilds were essentially user innovation communities but with legal monopolies on their art and innovations in it
- Two major developments
 1. Innovation was increasingly occurring across and outside guild subject matter lines (e.g., cathedral design and consequent punishment of Brunelleschi for design and work on Duomo in areas he was not a member of the relevant guilds)
 2. These city-states had grown large enough that they had become impersonal urban places where individuals could not know all their fellow citizens nor have satisfactory informal reciprocity relationships with them



Brunelleschi's "Patent"

- Brunelleschi's petition for exclusive rights to his new boat—nicknamed *Badalone*—in 1421 Florence shows his concern that members of the public will be able to freely copy his invention once the boat is set loose on the Arno river
- While he petitions from a trade secrecy type basis (with an exclusive rights grant he will “open up what is hidden”) he seems most concerned that he will get insufficient reciprocal benefits from the public
- The petition is granted, as were many other exclusive rights grants for innovations to other similar inventors operating across and outside the guilds in Venice well before the 1474 Venetian Patent Statute



Formal Patent Systems as a Proxy for Informal Reciprocity Relationships

- When innovation communities serve themselves and a limited “loyal” user base that supports credit and reciprocal benefits beyond simply payment transactions, formal patent systems are not necessary
- However, when one or more of the community’s members choose, or are forced, to operate in a larger impersonal user base where informal reciprocity exchanges break down, then a formal system is needed that can act as a proxy for those informal relationships.
- Patents of importation can fit this model because the artisan sought does not have informal reciprocity relationships upon arrival in the new country



Formal Patent Systems as a Proxy for Informal Reciprocity Relationships

- Thus, formal patent systems arguably emerged in 15th c. Europe (particularly Florence and Venice) to act as this proxy. The inventor is granted the legal rights of:
 - Public credit (by nature of the grant itself and continuing to the present requirement in jurisdictions such as the U.S. to list all and only the actual inventors, regardless of rights assignments to other owners)
 - Exclusive use and economic benefit, enforceable in court
- However, such systems cannot impose or enforce the informal reciprocity exchanges of niche innovation communities
- Unsurprisingly, such communities then continue to spring up and flourish *until* their products/services go “mainstream,” at which time a switch to rely on formal patents occurs for some or all members





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