Copyright and the Algorithmic Assemblage

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Automated pattern analysis and decision-making, colloquially designated as "artificial intelligence" or "AI," is increasingly being deployed to mediate or to assist in legal determinations across a range of domains. Both public and private legal functions have become targets for algorithmic enhancement. In this paper I consider the effects of incorporating algorithmic metrics into legal standards, using the copyright system as a vehicle to discuss the imperfect enforcement of algorithmic law.

Recent scholarship has proposed the personalized modulation of copyright infringement liability based on consumer market profiles. This work postulates matching a consumer's willingness to pay for copyright protected content to liability for violating the owner's exclusive rights – in essence, waiving exclusivity based on market profiling. If the content were available only at a price higher than the consumer's algorithmically determined willingness to pay, no liability would accrue for copying the work. Conversely, if the protected work were available at or below the consumer's expected willingness to pay, liability would attach.

However, an increasingly robust sociological literature on human interaction with algorithms demonstrates that such approaches will likely distort the markets in which they are applied. Consequently, in this paper, I begin to map out the intersection between the social construction of markets and the social construction of algorithms in the context of intellectual property law.
I begin by examining the problematic assumptions that economic consumer metrics bring to copyright. I then turn to a consider use of algorithmic data processing to determine such metrics, outlining first the decontextualized nature of algorithmic data ingestion, and then the strong social reflexivity effects associated with algorithmic scoring.

When applied to copyright liability, these effects can be expected to categorically re-structure both markets and market actors associated with copyright. When further taken as a metric for judicial determinations of liability, I the social effects of algorithmic categorization can be expected to generate unexpected and perverse outcomes. Thus, reliance upon algorithmic consumer scoring is not merely problematic for copyright policy, and has implications not only for algorithmically determined copyright liability, but for the use of algorithmic metrics in other areas of law as well.