

# An Economic Approach to the Ethics of Copyright Violation

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## *Abstract*

The utilitarian approach to ethics of Kaplow & Shavell (2001) can be fruitfully applied to the question of whether people should feel guilt over illegally copying copyrighted material. To entirely deter copying would require a norm inflicting a considerable amount of guilt on copiers, since legal enforcement of copying by individuals is so difficult. To partially deter it would be undesirable for two reasons. First, it would generate a large amount of disutility while failing to deter the target misbehavior. Second, it would reduce the effectiveness of guilt in other situations, by pushing so many people over the threshold of being moral reprobates. At the same time, the benefit from deterring copying by individuals, the increased incentive for creation of new products, is relatively small. I thus conclude that people should not feel guilty about copying.

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“Do not steal,” says the Bible, but applying that commandment to intellectual property begs the question.

Bible: Nothing on intellectual property

Locke: A right to one’s labor

Hegel: The value of self-expression via creation and control

The big problem for both theories is why the originator should have a right to prevent others from using his idea.

Do those theories condemn people who go the library or rent videos as evil?

Value-Maximization Approach: unpublished Kaplow & Shavell (2001).

I ask what levels of guilt and self-satisfaction we should attach to an action if our objective is to maximize social welfare. Constraints:

1. We must apply the same moral rule to all people, even though they are heterogeneous in their response and we will not be able to induce all of them to behave correctly.

2. cannot use unlimited amounts of guilt and self-satisfaction. If we make someone feel badly about one action, we will not have as much guilt left to make him feel badly about other actions. There is a MORAL BUDGET.

If consumer  $i$  copies or buys the product being modelled he gets a benefit of  $b > 0$ .

If he copies it without paying the originator of the product, he incurs cost  $n_i c$ , where  $n_i$  is a parameter indexing the heterogeneity among consumers in copying costs, distributed with density  $g(n)$  and support  $[0, \infty]$ .

If he buys instead, he pays the price  $p$  and incurs the transaction cost  $t$ , and the originator incurs production cost  $c_o$  and transactions cost  $t_o$ .

Consumers differ in their degree of morality,  $m$ , a parameter with density  $f(m)$  and support  $[0, \infty]$ . A consumer who copies loses  $m_i g$ . A consumer who buys the product, on the other hand gains  $m_i s$ .

Consumer  $i$  will prefer copying to buying if

$$\pi(\text{copy}) = (b - m_i g - n_i c) > (b - p - t + m_i s) = \pi(\text{buy}) \quad (1)$$

It may be, however, that not using the product is better for him than either paying or copying.

Originator's payoff:

$v = 0$  if the product is not used

$v = b_o$  if it is copied,

$v = p + b_0 - t_0 - c_o$  if it is bought.

**Figure 1: Consumer Utility as a Function of Degree of Morality, Fixing Technological Sophistication at**  
 $n = \theta$

The social objective function.

$x$  = the percentage of the utility of a guilty copying consumer that we count as social benefit.

$k$  (originator payoff) = value of the incentive for future creation

If consumers of type  $(m, n)$  copy the product, the social benefit is  $(xb - nc - mg)$  from consumer utility,  $b_0$  from originator utility, and  $k(b_0)$  from future creation.

If consumers of type  $(m, n)$  do not use the product, the social benefit is 0.

If consumers of type  $(m, n)$  buy the product, the social benefit is  $(b - p - t + ms)$  from consumer utility plus  $p + b_0 - t_0 - c_o$  from originator utility, and  $k(p + b_0 - t_0 - c_o)$  from future creation.

**Figure 2: Consumer Behavior as a Function of Degree of Morality and Degree of Technological Sophistication**

The social problem is to choose the levels of guilt  $g$  and self-satisfaction  $s$  to maximize social utility.

To incorporate this, we need to add a term to social welfare for “all other bad acts,” similar to “all other goods” in a typical maximization problem.

Let each consumer choose not only his copying behavior but whether or not to do another action, deriving additional guilt  $mg_a$  if he does it or self-satisfaction  $ms_a$  if he does not.

This action represents all other socially harmful actions, but for concreteness let us call it “cheating on taxes”. The benefit of cheating is  $b_a$  and the harm to other people is  $h_a$ , where  $b_a > h_a$ , since it is a socially harmful act. A person of type  $m$  cheats if

$$b_a - mg_a > ms_a; \tag{2}$$

that is, if

$$m < \overline{m}_a \equiv \frac{b_a}{s_a + g_a}. \tag{3}$$

The social welfare arising from cheating on taxes or not is then

$$\int_0^{\overline{m}_a} (b_a - h_a - mg_a)f(m)dm + \int_{\overline{m}_a}^{\infty} ms_a f(m)dm \tag{4}$$

Following Kaplow & Shavell (2001), let us assume that there are two psychological constraints such that the amount of guilt and self-satisfaction to be allocated among different actions are limited. The moral budget constraint is then

$$Z_2 \equiv \int_0^{\frac{b}{g}} g f(m) dm + \int_0^{\overline{m}_a} g_a f(m) dm \leq \overline{g} \quad (5)$$

and

$$Z_3 \equiv \int_{\frac{b+p-t}{s}}^{\infty} s f(m) dm + \int_{\overline{m}_a}^{\infty} s_a f(m) dm \leq \overline{s}. \quad (6)$$

The Lagrangian problem, the problem of maximizing without constraints which is equivalent to the problem of maximizing  $Z_1$  subject to these two constraints, is

$$\begin{array}{l} \text{Maximize} \\ g, g_a, s, s_a \end{array} \quad \text{Social Welfare} + \lambda_g(\overline{g} - Z_2) + \lambda_s(\overline{s} - Z_3), \quad (7)$$

where  $\lambda_g$  is the shadow price of guilt (the value of having a little more guilt available, so  $\overline{g}$  is bigger) and  $\lambda_s$  is the shadow price of self-satisfaction (the value of having a little more self-satisfaction available, so  $\overline{s}$  is bigger).

If the form of the distribution function  $f(m)$  is such that many people will choose to copy in equilibrium, then the social planner should set the guilt from copying to be low (another point made in the general case by Kaplow & Shavell [2001], for the first three reasons below but not the fourth, which is special to copyright). To the extent that he wishes to try to deter copying, he should make the self-satisfaction from not copying high instead. This is so for a number of reasons.

1. If the consumption benefit of copiers does not add to social welfare ( $x$  is small or negative), then making copying immoral eliminates the positive effect on social welfare that copiers would otherwise have.

2. If many people are copying, many people must feel guilt.

3. Substitution to non-use.

4. The distortion created by the positive price for a good with zero marginal product (balanced by the incentive effect for creation— but a *marginal* incentive effect).

Thus, it seems there is a strong case for not imposing guilt for those who violate copyright.

What about self-satisfaction for those who do pay? Kaplow & Shavell (2001) suggest that when guilt fails to deter a large number of people, self-satisfaction may be a better tool.

## **Implications for how the optimal moral rule would tell you to behave**

:

- (a) Copy when you wouldn't buy otherwise.

- (b) Don't copy when buying has lower real costs, unless you wouldn't buy otherwise.