



University of Kentucky
UKnowledge

Law Faculty Scholarly Articles

Law Faculty Publications

2022

Toxic Public Goods

Brian L. Frye

University of Kentucky, brianlfrye@uky.edu

Follow this and additional works at: https://uknowledge.uky.edu/law_facpub



Part of the [Law and Society Commons](#)

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

Repository Citation

Frye, Brian L., "Toxic Public Goods" (2022). *Law Faculty Scholarly Articles*. 715.
https://uknowledge.uky.edu/law_facpub/715

This Article is brought to you for free and open access by the Law Faculty Publications at UKnowledge. It has been accepted for inclusion in Law Faculty Scholarly Articles by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

Toxic Public Goods

TOXIC PUBLIC GOODS

Brian L. Frye

ABSTRACT

I. THE GOODS AND THE BADS

- A. What are Goods?*
- B. What are Common Goods?*
- C. What are Public Goods?*
- D. What are Public Bads?*
- E. What are Demerit Goods?*
- F. What are Toxic Goods?*
- G. What are Toxic Public Goods?*

II. A CORNUCOPIA OF TOXIC PUBLIC GOODS

- A. Internet Trolling*
- B. Pornography*
- C. Ideology*

III. DETOXIFYING PUBLIC GOODS

IV. A GREAT CLEANSE

V. CONCLUSION

TOXIC PUBLIC GOODS

Brian L. Frye

“Be careful what you wish for, you may receive it.”¹

ABSTRACT

Everybody loves public goods. After all, they are a perpetual utility machine. Obviously, we want as many of them as possible. But what if the consumption of a public good actually decreases net social welfare? I refer to this kind of public good as a "toxic public good." In this essay, I discuss three kinds of potential toxic public goods: trolling, pornography, and ideology, and I reflect on how we might make the production of toxic public goods more efficient.

I. THE GOODS AND THE BADS

Everybody loves public goods. The only problem is that we don't make enough of them. After all, public goods are perpetual welfare machines, pumping out endless utility whenever they are used. Unlike scarce goods, consuming a public good doesn't reduce the supply, so all may sup to their fill without fear of diminishing the table for others. Accordingly, we should always encourage the production of public goods because they increase public welfare at no marginal cost.

But what if consuming a public good causes negative externalities? Presumably, people choose to consume a public good only if they expect consumption to increase their own welfare. But what if consuming a public good increases the welfare of the consumer while decreasing the welfare of someone else? People have every incentive to consume goods that increase their own welfare, even if doing so decreases someone else's. When it comes to public goods, people will just keep on consuming, so long as they derive some marginal benefit, no matter how much harm their consumption causes third parties. Consumption of the public good might still be efficient if the marginal benefit to the consumer exceeds the marginal cost to the person harmed, but the distributional effects are troubling.

Even worse, what if people think consuming a public good increases their welfare, but they are mistaken? In theory, people will stop consuming public goods if and when consumption decreases their welfare. But people are cursed. What if they don't? With public goods, there's a limitless supply, so people can just keep on consuming, making themselves worse and worse off the more they consume.

Throughout this Essay, public goods that cause negative externalities when consumed will be referred to as "toxic" public goods because they are public policy poison. They are still public goods because they are non-rival and non-excludable, but they are toxic because they impose negative externalities and may even decrease net welfare. Toxic public goods resemble "public bads," which also cause negative externalities. The difference is that public bads cause negative externalities when they are produced, whereas toxic public goods cause negative externalities when they

1. See W.W. Jacobs, *The Monkey's Paw*, HARPER'S MONTHLY MAG., Sept. 1902, at 634-39.

are consumed. Toxic public goods also resemble “demerit goods,” which harm the consumer. The difference is that demerit goods usually aren’t public goods and don’t necessarily cause negative externalities.²

If toxic public goods were merely a theoretical problem, they would be interesting, but we wouldn’t have to worry about them. However, we may in fact encounter them all the time but simply not recognize them as toxic public goods. After all, welfare is a slippery concept. It can be hard to know how consumption of a good will affect one’s *own* welfare, and even harder to know how consumption of that same good will affect someone *else’s* welfare.

In this Essay, I will briefly discuss three potential toxic public goods: internet trolling, pornography, and ideology. Each is a public good because it is either literally or effectively non-rival and non-excludable. And each may be toxic because consumption may cause negative externalities or reduce the welfare of the consumer.

So, how should we respond to toxic public goods? Regulation is always an option, but it may not work well, especially because of the peculiar qualities of toxic public goods. It’s hard to regulate supply because people enjoy producing toxic public goods. It’s hard to regulate demand because toxic public goods are freely available to consumers. And it’s hard to regulate in general because toxic public goods are usually information goods protected by the First Amendment. Even worse, the market for toxic public goods is usually a gift economy, precluding economic regulation via Pigovian taxation. What a dilemma!

Thankfully, regulation may still be possible if we focus on incentives that are salient to the producers and consumers of toxic public goods. After all, a non-economic market is still a market. If we want to regulate a non-economic market, we just have to use non-economic incentives. Typically, both producers and consumers of toxic public goods value social status, albeit in peculiar and slightly different forms. So, we can effectively “tax” toxic public goods by limiting the ability of producers and consumers to internalize the social status they value.

Of course, the government cannot constitutionally burden the production and consumption of the kinds of speech that typically constitute toxic public goods. But private companies can. And they are. When internet companies regulate speech, they’re often regulating the production and consumption of toxic public goods. Or at least, they’re trying. Maybe reflecting on the choices of these internet companies through the lens of toxic public goods will help us better understand the decisions they made and offer us more helpful suggestions on how we can regulate the production and consumption of toxic public goods as a society.

A. What are Goods?

A good is anything that can produce utility when consumed. An apple is a good because people can eat it. A painting of an apple is a good because people can own it. And even the idea of an apple is a good because people can think about it.

Most goods are scarce because consuming them decreases the supply. Scarce goods are “rival” because consumption by one person prevents consumption by a different person. An apple is a rival good. If one person eats an apple, a different

2. Thanks to Roger Ford for suggesting the analogy to demerit goods.

person can't eat the same apple. A painting of an apple is also a rival good. If one person owns a painting of an apple, a different person can't own the same painting, even though lots of people can look at the painting or own a reproduction. But the idea of an apple is a non-rival good because an unlimited number of people can think about an apple.

We use property rights to "solve" the problem of scarcity by making goods excludable. In theory, property rights ensure that goods go to their best use. If I own an apple, you can't eat it without my permission. If you value the apple more highly than I do, you can buy it from me, and we will both benefit. Accordingly, in a world without transaction costs, the market will automatically distribute all goods in the most efficient way possible.³

Unfortunately, transaction costs are ubiquitous. While markets are usually the most efficient way to communicate information about the supply and demand of goods, they are never perfectly efficient, so market failures are inevitable.⁴ Making matters worse, the unequal distribution of capital precludes the socially optimal distribution of goods because the best consumer of a good often can't afford the market price.

In theory, the government can solve market failures in scarce goods by redistributing them to the best consumers. But efficient redistribution is hard. After all, regulation also has transaction costs. The government can't always identify the best consumers of a good and doesn't always know the optimal distribution of capital.

B. What are Common Goods?

A common good is a scarce good that isn't excludable. Accordingly, consumption of a common good decreases the supply, but no one is prevented from consuming the good. Neoclassical economics predicts market failures in common goods because people will consume the good until it is depleted rather than reserving it for its best use, a phenomenon known as the "tragedy of the commons."

Of course, the tragedy of the commons can be avoided if common goods are made wholly or partially excludable. One way to solve the tragedy of the commons is to privatize common goods. Unfortunately, privatization often results in an inequitable allocation.⁵ Another way to solve the tragedy of the commons is through regulation. Either the government can regulate the use of a common good by fiat, or communities can agree to manage a common good collectively.⁶ Of course, either solution is vulnerable to government failures caused by unfair allocation or inadequate information. For example, when communities manage a common good, they often form cartels, giving members more rights than non-members.

3. See generally R. H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

4. See generally F. A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519 (1945).

5. See, e.g., LEON ROSSELSON, *The World Turned Upside Down, on THAT'S NOT THE WAY IT'S GOT TO BE* (Fuse Records 1975).

6. See generally ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* (Cambridge Univ. Press, 1990).

C. What are Public Goods?

A public good is a good that is non-rival and non-excludable. In other words, the consumption of a public good doesn't reduce the supply of the good, and no one can be prevented from consuming the good. Public goods are great because they generate welfare at no marginal cost. Paradigmatic public goods are information goods like ideas and expressions. The consumption of information goods does not affect supply. However, such consumption often does increase demand and, consequently, value.

Sadly, neoclassical economics predicts market failures in public goods caused by "free riding," which is consumption without paying the marginal cost of production. While consuming a public good doesn't reduce the supply, public goods are still costly to produce. However, public goods are non-excludable, so people consume them without paying the marginal cost of production. This means that producers can't recover their costs, let alone generate a profit. Accordingly, rational economic actors won't invest in the production of public goods, likely causing a market failure. Consumers want to consume more public goods, but they don't want to pay for them.

The government can solve market failures in public goods by subsidizing their production. But transaction costs often cause government failures. In particular, the government often doesn't know which public goods to subsidize or how much of a subsidy to provide. Accordingly, the government often indirectly subsidizes public goods. For example, the government indirectly subsidizes philanthropy by making certain contributions to charitable organizations tax-deductible.⁷ And it indirectly subsidizes the production of ideas and expressions by granting patents and copyrights, which makes inventions and works of authorship excludable.

Indirect subsidies solve government failures by reducing transaction costs. The government often doesn't know which charitable organizations, inventions, or works of authorship to subsidize. But private parties may have information the government lacks. By making charitable contributions tax-deductible, the government leverages private knowledge about which charitable organizations are likely to be effective. By granting patents and copyrights, the government leverages private knowledge about which inventions and works of authorship are likely to be valuable.

Of course, indirect subsidies can't solve all government failures in public goods. Sometimes, the government fails to provide a subsidy when doing so would be efficient. Other times, the government provides a subsidy when doing so is inefficient. Many people think subsidizing charitable organizations is inefficient because the wrong organizations excessively receive subsidies. And many people think patents and copyrights are inefficient because they protect too many inventions and works of authorship, provide too much protection, and last too long.

D. What are Public Bads?

A public bad is the opposite of a public good. Like public goods, public bads are non-rival and non-excludable. But unlike public goods, public bads decrease

7. Brian L. Frye, *Solving Charity Failures*, 93 OR. L. REV. 155, 162 (2014).

welfare by imposing negative externalities. The classic example of a public bad is air pollution because it is non-rival, non-excludable, and imposes negative externalities on everyone.

Typically, public bads are byproducts of the production of goods. For example, factories produce goods, which people want to consume, but they also produce pollution, which people don't want to consume. The problem is that factories internalize the benefits of producing goods, but they externalize the harms of producing pollution. Accordingly, factories will produce goods so long as there is demand, irrespective of the costs imposed by pollution.

So, public goods and public bads are both vulnerable to market failures, but of different kinds. Some market failures can cause the undersupply of public goods because free riding consumers prevent producers from recovering costs or generating profits. Other market failures can cause the oversupply of public bads because some producers ignore the negative externalities of production.

Of course, the government can also solve market failures of public bads by regulating production or by requiring producers to internalize costs. But transaction costs make implementing solutions difficult. It can be hard to measure the costs imposed by public bads and offset them against the benefits of the goods they accompany. And politics can complicate regulation, especially because the producers of public bads often have considerable political power.

E. What are Demerit Goods?

A demerit good is a good that harms its consumer. Classic examples of demerit goods include tobacco, alcohol, and other recreational drugs, which are unhealthy to consume, especially in excess. The problem with demerit goods is that consumers want them even though they are harmful. Accordingly, demerit goods cause market failures because consumer demand for demerit goods causes consumers to harm themselves.

In theory, demerit goods shouldn't be a problem because rational economic actors won't consume goods that are harmful. Unfortunately, people aren't always rational economic actors. Occasionally, people engage in activities that decrease their welfare even though neoclassical economics predicts otherwise.

Of course, the government can solve market failures caused by demerit goods through regulation, taxation, or prohibition. But this often doesn't work out as planned. Regulation of demerit goods increases their costs, and taxation of demerit goods generates revenue, but neither necessarily reduces demand, and both tend to encourage evasion. Prohibition isn't any better because it ironically imposes additional harm on the very people it is supposed to protect. Once again, transaction costs are also a problem. For example, the government doesn't always accurately identify demerit goods. Sometimes, the government regulates, taxes, or prohibits goods that don't actually harm consumers, but instead merely offend the sensibilities of political majorities. In this case, democratic politics is itself the harmful good.

F. What are Toxic Goods?

A toxic good is a good that imposes negative externalities when consumed.⁸ Toxic goods are similar to demerit goods because their consumption causes harm, but they are different from demerit goods because they harm different people. The consumption of a demerit good harms its consumer, while the consumption of a toxic good harms others. So, guilt is a demerit good because it harms its consumer, but shaming is a toxic good because it harms someone else. Some goods, such as cigarettes, are both demerit goods and toxic goods because their consumption harms both the consumer and others.

Toxic goods, when compared with demerit goods, present a more difficult public policy problem. At least in theory, consumption of demerit goods is limited by the internalization of costs; even if consumers overvalue the benefit of consumption, eventually the internalized costs may cause them to limit or cease consumption. By contrast, consumers of toxic goods have no incentive to stop consuming because they—like producers of public bads—internalize the benefits of consumption but externalize all of the costs.

Of course, the government can regulate, tax, or prohibit the production and consumption of toxic goods, just as it can with demerit goods, but such actions are even more difficult. Just as with demerit goods, regulation may have undesirable consequences, and transaction costs make it difficult to know what to regulate. Even worse, toxic goods are often non-economic goods, which makes them more difficult to regulate. And toxic goods are often information goods, which are constitutionally protected from regulation.

G. What are Toxic Public Goods?

A toxic public good is a public good that imposes negative externalities when consumed. Toxic public goods are similar to public bads because they are non-rival, non-excludable goods that impose negative externalities. But they are different because public bads impose negative externalities when they are produced, while toxic public goods impose negative externalities when they are consumed. This is an important distinction because it makes toxic public goods more difficult to regulate.

Public bads are typically a byproduct of producing goods. They are vulnerable to market failures because producers can internalize the benefits associated with producing goods, while externalizing the harms associated with public bads. By contrast, toxic public goods are both public goods and public bads at the same time. They are vulnerable to market failures because the consumers of toxic public goods can internalize the benefits of consumption while externalizing the costs.

In theory, the government could regulate toxic public goods in much the same way that it regulates public bads—either by forcing consumers to internalize both the benefits and costs of consumption or by prohibiting their production. But it's harder to regulate toxic public goods than public bads. As demerit goods show, regulating consumers is harder and riskier than regulating producers. It's difficult to

8. "Toxic goods" is a term I have coined for the purpose of this Essay.

know which goods are toxic public goods—as opposed to regular public goods—and it's hard to regulate consumption without imposing undesirable regulatory costs. It's also hard to regulate the production of toxic public goods because producers are typically altruists that produce toxic public goods in a non-economic market. Moreover, toxic public goods are typically information goods, which are constitutionally protected from regulation.

Why should we care about toxic public goods? They have the potential to impose enormous costs. Unlike demerit goods, the consumption of toxic public goods isn't limited by the capacity of their consumers to internalize the harm they cause. Demerit goods are bad because they cause harm, but the harm they cause is limited to their consumers. By contrast, consumers of toxic public goods can ignore the harms caused by consumption because those harms are externalized.

To make matters worse, because the supply of toxic public goods is limitless, so is the harm they can cause. Unlike demerit goods, which are typically scarce, toxic public goods are non-rival. Accordingly, consumers of toxic public goods can consume as much as they like, imposing negative externalities all the while. And unlike public bads, which are effectively limited in supply by the demand for the consumer goods they accompany, the supply of toxic public goods is truly unlimited. No one demands public bads; they are merely an unfortunate consequence of producing other goods. By contrast, consumers demand toxic public goods and are merely indifferent to the harms caused by their consumption.

Ironically, all of this would be fine if toxic public goods were vulnerable to free riding. Normally, we worry about free riding causing market failures in the supply of public goods. In the case of toxic public goods, market failures in the supply would be welcome. Why can't the government limit the supply by simply declining to solve those market failures?

Unfortunately, many producers of toxic public goods are altruists who are indifferent to the cost of production. Consequently, they produce toxic public goods with no expectation of economic return. However, in at least some cases, producers of toxic public goods may have an interest in non-economic returns in the form of social status.

What's more, toxic public goods are difficult or impossible for the government to regulate because they often consist of information goods, which receive constitutional protection. Even if the government could accurately identify toxic public goods, their producers, and their consumers, they would still be difficult or impossible to regulate. The First Amendment is indiscriminate. Speech is exempt from government regulation, largely irrespective of its quality or value.⁹

The most peculiar and vexing aspect of regulating toxic public goods is that they both increase and decrease welfare. The very reason toxic public goods are such a problem is that they benefit their consumers while imposing costs on others. Even if the production and consumption of toxic public goods could be prohibited, it might be inefficient if the benefits of consumption exceed the costs imposed on others. In that case, it would be preferable to make the consumers of toxic public goods internalize some or all of the costs associated with their consumption in order to

9. See, e.g., *Cohen v. California*, 403 U.S. 15 (1971).

encourage them to consume more efficiently. Even better, the negative externalities associated with consuming toxic public goods could be reduced or eliminated.

The internet and social media have only made toxic public goods more of a problem. In the past, the harm caused by toxic public goods was limited by distribution costs. It was difficult and expensive to distribute toxic public goods to consumers, and the negative externalities imposed by the consumption of toxic public goods were constrained by networks of limited scope. The problem was apparent but artificially constrained. The internet and social media effectively reduced the cost of distributing toxic public goods to zero, making it possible to spread the negative externalities caused by consumption to an inordinate number of people. As is so often the case, technology has proven to be a boon and a curse—not because of its nature but because of ours. It gives us access to whatever we want to consume, whether for good or for ill.

II. A CORNUCOPIA OF TOXIC PUBLIC GOODS

So, toxic public goods are non-rival, non-excludable goods that impose negative externalities when they are consumed. They are a problem because the supply is unlimited, and consumers internalize the benefits of consumption while externalizing the costs. And they are difficult or impossible to regulate because they consist primarily of information goods created by altruists and distributed in a non-economic market. Further, the government is largely precluded from regulating toxic public goods, and technology has made them ubiquitous by eliminating transaction costs on distribution.

But I should be more specific. What kinds of goods are toxic public goods? There are so many! In this Essay, I will discuss three examples: internet trolling, pornography, and ideology. I will then explain why each qualifies as a toxic public good and reflect on how we might be able to mitigate their potential harms.

Of course, not everyone will agree that internet trolling, pornography, and ideology are in fact toxic public goods. That's fine! People will define costs and benefits differently. But hopefully these examples will help illuminate how toxic public goods can be identified, and how their harms can be mitigated.

A. Internet Trolling

Trolling is the signature rhetorical form of the 21st Century. It has existed since time immemorial, but it needed the printing press to germinate, the internet to grow, and social media to blossom. Many websites consist of nothing but trolling, and trolling is nearly unavoidable on any website.

While there are as many flavors of trolling as there are trolls, the essence of trolling involves making insulting, inflammatory, or irrelevant claims in order to provoke a response.¹⁰ Of course, trolling is always in the eye of the beholder. One person's troll is another person's Trollope. But the game remains the same, and the goal is always to provoke a response.

10. See, e.g., wint (@dril), TWITTER (Nov. 10, 2011, 7:20 PM), <https://twitter.com/dril/status/134787490526658561?s=21> [<https://perma.cc/4QMW-2UAJ>] (“‘im not owned! im not owned!!’, i continue to insist as i slowly shrink and transform into a corn cob”).

In any case, trolling is a quintessential public good because it is perfectly non-rival and non-excludable. A troll is a work of authorship. Like every work of authorship, a troll is non-rival because consumption doesn't decrease the supply. In fact, the consumption of a troll usually increases the supply, as its consumers like and share it. And trolls are non-excludable by design. The author of a troll never tries to limit its consumption. The whole point of a troll is for it to be consumed by as many people as possible. Unlike the authors of other forms of literary works, trolls don't even expect attribution. In fact, they avoid it, typically relying on pseudonyms and "burner accounts" to maintain anonymity.

At least from an economic perspective, trolling is a form of altruism. The author of a troll produces a public good that people want to consume, and they don't expect compensation, other than the pleasure they derive from seeing other people consume and distribute the troll. But the altruism is what makes trolling so dangerous because it creates a feedback loop. Trolling begets trolling, no compensation necessary.

Unfortunately, trolling isn't all fun and games. It has costs, often considerable ones. Of course, trolling is costly for the target of the troll. Even an unsuccessful troll can be hurtful, and successful trolls can cause considerable harm—both emotional and financial.¹¹ Sometimes, they even get you elected President.¹² While the consumers of a troll get utility, the target of a troll gets a steaming pile of disutility.

So, trolling is a toxic public good because it is a non-rival, non-excludable good that people want to consume, but their consumption imposes costs on other people. Not only does trolling impose costs on the target of the troll, but it also imposes costs on people who dislike trolling. Trolling might also impose costs on the consumers of the troll if it ultimately decreases their welfare. For example, consuming trolls could make someone callous or unhappy. Trolling could even impose costs on the authors of trolls if it distracts them from economically productive activity, tarnishes their characters, or gets them in trouble.

B. Pornography

For better or for worse, pornography is the predominant artistic genre of the 21st Century. More pornographic works are produced and consumed than works in any other genre.¹³ It is a truism that "[t]he internet is for porn."¹⁴ Indeed, the internet is a veritable cornucopia of pornography of every conceivable—or inconceivable—variety.

11. See, e.g., Joel Stein, *How Trolls Are Ruining the Internet*, TIME (Aug. 18, 2016), <https://time.com/4457110/internet-trolls/> [<https://perma.cc/RL9K-UXYH>].

12. John Cassidy, *Donald Trump Will Go Down in History as the Troll-in-Chief*, NEW YORKER (June 29, 2017), <https://www.newyorker.com/news/john-cassidy/donald-trump-will-go-down-in-history-as-the-troll-in-chief> [<https://perma.cc/GW2C-Z3G7>].

13. People disagree about what percentage of internet use involves pornography, but agree it is substantial. Even conservative estimates imply that pornography is the most popular genre of internet video. See, e.g., Katharina Buchholz, *How Much of the Internet Consists of Porn?*, STATISTA (Feb. 11, 2019), <https://www.statista.com/chart/16959/share-of-the-internet-that-is-porn/> [<https://perma.cc/DK2E-GE4A>].

14. See ROBERT LOPEZ & JEFF MARX, *The Internet is for Porn*, in AVENUE Q (2003).

Under the Copyright Act, pornographic works are just another genre of audiovisual works, albeit with unusually prurient subject matter. Accordingly, copyright vests in the author of a pornographic work who can prohibit use of the work without permission. At least in theory, copyright turns pornographic works into private property, like any other copyrighted work. However, in practice, the ubiquity and sheer volume of pornography available to consumers renders copyright largely irrelevant.¹⁵ Sure, the Copyright Act provides that the copyright owner of a pornographic work has the exclusive right to distribute it, just like any other motion picture work. But a copyright is only worth as much as consumers are willing to pay,¹⁶ and no one pays for pornography unless they take pleasure in the paying.

In other words, pornography is effectively a public good because people can consume as much as they want for free. Presumably, people consume pornography because they like it. The evidence suggests that they like it a lot because they consume extraordinarily large quantities of it. Pornography is the most common category of Google search queries, accounting for about twenty percent of all searches.¹⁷ So, it seems that consuming pornography produces utility in its consumers, or at least they believe it does.

But there are harms associated with pornography.¹⁸ The most serious harms are inflicted on the people who appear in pornographic works. Obviously, child pornography and non-consensual pornography cause terrible harm. Consenting adults can also be harmed in the production of a pornographic work, especially if their consent is coerced, the scope of their consent is exceeded, or they later regret their appearance in a pornographic work.

But those are not the only potential harms caused by pornography. Some people argue that the production of pornography reduces net social welfare, and the consumption of pornography reduces the net welfare of its consumers.¹⁹ Among other things, people argue that producing pornography debases society and harms women.²⁰ And they argue that consuming pornography ultimately harms consumers by debasing their character and making them unhappy.²¹ At the very least, some consumers regret or feel shame about consuming pornography, which implies that it can have hedonic costs.

Of course, the critics may be wrong. Maybe pornography doesn't actually harm society or consumers. Maybe people make pornography because consumers like it,

15. See generally Kal Raustiala & Christopher Jon Sprigman, *The Second Digital Disruption: Streaming and the Dawn of Data-Driven Creativity*, 94 N.Y.U.L. REV. 1555 (2019).

16. See 17 U.S.C. § 102(a)(6); see also Mitchell Bros. Film Grp. v. Cinema Adult Theater, 604 F.2d 852 (5th Cir. 1979).

17. See MARYAM KAMVAR & SHUMEET BALUJA, A LARGE SCALE STUDY OF WIRELESS SEARCH BEHAVIOR: GOOGLE MOBILE SEARCH, tbl.1 (2006).

18. A cottage industry of anti-pornography advocacy groups has emerged to highlight those harms. See, e.g., FIGHT THE NEW DRUG, <https://fightthenewdrug.org/> [<https://perma.cc/R4GL-CZQC>] (last visited Dec. 28, 2021).

19. See CATHARINE MACKINNON, TOWARD A FEMINIST THEORY OF THE STATE 195-214 (1989).

20. See, e.g., *id.*; U.S. DEP'T OF JUST., ATTORNEY GENERAL'S COMMISSION ON PORNOGRAPHY: FINAL REPORT 229-349 (1986); ANDREA DWORKIN, PORNOGRAPHY: MEN POSSESSING WOMEN (1981).

21. See FIGHT THE NEW DRUG, *supra* note 18.

and people consume pornography because it gives them pleasure. But if the critics are right, then pornography is clearly a toxic public good.

C. Ideology

Ideas are the paradigmatic public good because they are perfectly non-rival and non-excludable. Unsurprisingly, liberal democracies tend to encourage the production and distribution of ideas, and the United States is no exception. In fact, it encourages ideas to a fault. While copyright protects concrete expressions, it can't protect abstract expressions because that would infringe on people's abilities to express ideas in their own ways. Similarly, while patents protect specific ideas, they can't protect abstract ideas for the same reason. In addition, the First Amendment prohibits the government from regulating the expression of ideas altogether, especially political ideas.

Ironically, ideas are also the paradigmatic toxic public good, especially when they take the form of ideology. An ideology is "a system of ideas and ideals, especially one which forms the basis of economic or political theory and policy."²² What a delightfully anodyne description of an inexorable force! An idea is a wisp of a thing, barely worth remarking, until it becomes an ideology, at which point you ignore it at your peril.

It should be uncontroversial to observe that ideology can have both welfare-increasing and welfare-decreasing effects. For example, liberalism is an ideology. Some people think liberalism generally has welfare-increasing effects, but others disagree. Fair enough. Maybe they disagree about the normative goals we ought to pursue. Maybe they disagree about whether liberalism promotes those goals. In any case, different strokes for different folks.

Other ideologies are even more controversial. For example, some people think communism is a bad idea, either because it is normatively wrong or because it tends to produce bad outcomes. Others feel the same way about capitalism. Everyone's a critic, I guess.

Anyway, it seems pretty clear that ideology could decrease net public welfare. After all, some ideologies don't value net public welfare, and others even hold that increasing net public welfare is wrong. After all, ideology is all about conception of the good, and some people don't think maximizing net public welfare is particularly good or interesting. Go figure!

For better or worse, the 21st Century has produced a bumper crop of ideologies that sure look like toxic public goods. Most recently, the QAnon variety of Trumpism seems like a prime example.²³ It's certainly a public good. Anyone can consume their fill, free of charge, and there's plenty more where it came from. And it's plenty toxic. After all, it consists entirely of a congeries of ludicrous claims and hateful ideas. For example, a core premise of the QAnon ideology is that the United States government, media, and financial sector, "are controlled by a group of Satan-

22. *Ideology*, LEXICO, <https://www.lexico.com/en/definition/ideology> [<https://perma.cc/DP5B-Z4YD>] (last visited Dec. 28, 2021).

23. See, e.g., David Gilbert et al., *What Is QAnon? Everything to Know About the Conspiracy*, VICE NEWS (Dec. 2, 2021), <https://www.vice.com/en/article/akvd5b/what-is-qanon> [<https://perma.cc/48SL-F3JW>].

worshipping pedophiles who run a global child sex trafficking operation.”²⁴ And yet, many people are delighted to consume QAnon ideology. Hell, they clamor for more of it. Is it a firehose of bullshit? No matter, they want it on full blast.

Oh no. We have spent generations telling ourselves that the market for ideas values good ideas and that sunlight is the best disinfectant, only to discover that many people have terrible taste in ideas and sunlight helps bad ideas germinate and grow. Oops. I guess that is what democracy looks like.

III. DETOXIFYING PUBLIC GOODS

Never fear, all is not lost. We still have public policy tools we can use to address the problem. After all, if toxic public goods resemble public bads, maybe the policy tools we use to mitigate public bads can also help us mitigate toxic public goods.

The obvious solution to public bads is regulation. Unfortunately, regulation often doesn't work very well. For one thing, it's hard to regulate public bads efficiently. And for another, it's hard to mobilize the political will to regulate public bads. Everyone knows that the carbon emissions causing climate change are a paradigmatic public bad, but governments can't seem to impose meaningful regulations to limit these emissions.

But there are other ways of mitigating public bads. One of the most popular and effective ways is Pigovian taxation. Essentially, Pigovian taxation mitigates public bads by requiring producers to internalize the negative externalities associated with their actions. Often, producing a good entails producing a bad. For example, manufacturing means pollution. If producers aren't responsible for the pollution they cause, then they'll ignore it.

Pigovian taxation solves the problem by making producers pay for their pollution. Ideally, it makes production socially efficient. Producers will create goods so long as the value of the goods they produce exceeds the cost of the Pigovian taxes they have to pay for polluting. But when the cost exceeds the benefit, they will stop producing. Essentially, Pigovian taxation ensures that producers create goods when doing so increases net social welfare but stop when production no longer increases net social welfare.

Obviously, Pigovian taxation is relevant to toxic public goods. We want people to produce public goods when they increase net social welfare, but not when they decrease net social welfare. If we could force the producers of public goods to internalize the costs associated with the goods they produce, then we would make the production of public goods more efficient and “detoxify” toxic public goods.

IV. A GREAT CLEANSE

Not so fast. There's a problem. Pigovian taxation not only requires government action, but it also requires the capacity to tax. The government often can't regulate toxic public goods because they are protected by the First Amendment. And even if it could regulate them, it couldn't tax them because there is nothing to tax. After all,

24. Chuck Todd et al., *Study Finds Nearly One-in-Five Americans Believe QAnon Conspiracy Theories*, NBC NEWS (May 27, 2021), <https://www.nbcnews.com/politics/meet-the-press/study-finds-nearly-one-five-americans-believe-qanon-conspiracy-theories-n1268722> [<https://perma.cc/V227-PW2Z>].

no one is selling toxic public goods; they're available for anyone to consume, free of charge.

Thankfully, private actors can take the government's place. Sure, the government can't regulate speech protected by the First Amendment, but businesses can. Typically, people use social media platforms to distribute toxic public goods. The companies that own those platforms have every right to regulate them. If they want to prohibit certain kinds of speech, they can. And if they want to regulate speech, they can do that as well.

Companies that own internet platforms can not only prohibit people from using their platforms in toxic ways, but they can also tax toxic uses of their platforms. For example, the owner of an internet platform could prohibit the expression of certain ideologies or impose penalties for the expression of ideas supportive of those ideologies.

Of course, they already do. Companies like Facebook, Twitter, and Google have invested a lot of time and energy in thinking about how to regulate speech in order to maximize its value. That is their business model. Unsurprisingly, they focus on managing speech rather than controlling it. After all, speech is a public good and sometimes, it's a toxic public good. But it's hard to know when a public good becomes toxic. Better to rely on the market and regulate on the margins.

V. CONCLUSION

Public goods are wonderful, but toxic public goods are terrible. Reflecting on why goods become public goods—and why public goods can be toxic public goods—should encourage us to reflect on what we want public policy to achieve. Maybe the government isn't the best entity to regulate speech. And maybe private regulation is fine. Or, at least, it is the best we can do.

We want to believe that the internet can be an ugly place because internet companies like it that way. But in our hearts, we know the internet can be an ugly place because we like it that way. Internet companies are just giving us what we want to consume but don't want to admit we enjoy. "We have met the enemy and he is us."²⁵ If we want to make things better, we should start by admitting responsibility.

25. Walt Kelly, Pogo (cartoon), in *Pogo Collection*, BILLY IRELAND CARTOON LIBRARY & MUSEUM, OHIO STATE UNIV. (Apr. 22, 1971) <https://library.osu.edu/site/40stories/2020/01/05/we-have-met-the-enemy/> [<https://perma.cc/3CC6-ZWLU>].