A Technological Politics Analysis of OxyContin's Role in the Opioid Crisis

STS Research Paper
Presented to the Faculty of the
School of Engineering and Applied Science
University of Virginia

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April 26, 2024

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Introduction

The opioid crisis, particularly the widespread distribution and misuse of OxyContin, has devastated communities across the United States. Purdue Pharma, the manufacturer of OxyContin, has faced extensive criticism and legal challenges over its role in the crisis. Current scholarship has primarily focused on the addictive nature of OxyContin and Purdue Pharma's aggressive marketing tactics. While existing literature has extensively explored the addictive properties of OxyContin and the ethical lapses of Purdue Pharma, there is still a lack of understanding around the broader socio-political implications of the epidemic. This gap in scholarship particularly overlooks how OxyContin as a technological artifact has influenced social relations of power and privilege, further exacerbating social inequalities especially in vulnerable regions such as Appalachia. Drawing on Langdon Winner's technological politics framework, I will examine how the design and distribution of OxyContin reflect and reinforce various power relations. Failing to address both the technical and social facets of the opioid crisis, particularly through the lens of OxyContin, perpetuates the epidemic by ignoring the relationship between the drug's properties and the socio-economic injustices it deepens, rendering any solution incomplete and ineffective.

In this paper, I will use the technological politics framework to argue that the distribution strategies of OxyContin by Purdue Pharma intentionally leveraged and perpetuated power dynamics, disproportionately benefitting corporate entities at the expense of Appalachian communities. I will do this by dissecting how OxyContin's design and distribution were not merely business strategies, but also mechanisms that molded the healthcare industry in ways that reflect underlying power structures. This not only intensified social disparities but also eroded trust in the healthcare system and compromised its moral integrity. To substantiate this argument,

I will analyze primary sources including a transcript from the California v. Purdue Pharma court case, government press releases, and firsthand accounts from victims of the opioid epidemic as well as doctors. These sources reveal the profound implications that OxyContin as a technological artifact had on public health, social structures, and the integrity of the healthcare system.

Background

The period following World War II saw a significant increase in the number of disabled veterans, leading to a greater focus on pain and its management. This focus was institutionalized in 1995 when the American Pain Society introduced pain as the "fifth vital sign," compelling healthcare providers to prioritize pain assessment and treatment as a standard of care (Bernard et al., 2018). OxyContin, put on the market by Purdue Pharma shortly after in 1996, was marketed as a revolutionary long-acting formulation of oxycodone, intended to manage pain with a supposedly lower risk of addiction due to its controlled-release mechanism (Reisfield, 2014).

However, the optimism surrounding this new treatment option soon gave way to concern as reports of misuse and addiction began to surface. As a result, the narrative around OxyContin's safety and efficacy, which was heavily shaped by Purdue Pharma's deceptive marketing strategies, began to unravel. This shift in perception marked the beginning of widespread criticism that Purdue Pharma faced for their role in fueling the opioid epidemic; it eventually became evident to the general public that the company's priorities were skewed towards maximizing OxyContin's financial success rather than ensuring its safe and responsible use. The company allocated an enormous sum of money to the marketing of OxyContin, exceeding even the funds that they had dedicated to research and development of the drug (Van Zee, 2009). Sales representatives received bonuses for increasing their OxyContin sales, and

were known to employ data mining strategies to target high-prescribing physicians (referred to as "pill mills") in specific zip codes (Rigg et al., 2010; Van Zee, 2009).

This overprescription of OxyContin led to a rise in opioid abuse, notably in the Appalachian regions of Kentucky, Virginia, Tennessee, Ohio, and West Virginia. These areas, characterized by large populations of disabled or chronically ill individuals, high unemployment rates, and low education levels, became hotspots for the opioid crisis (Satterwhite, 2017). Physicians in these regions were known to prescribe large amounts of opioids after patient procedures to help mitigate pain and simultaneously minimize refill requests, inadvertently contributing to the problem (Rummans et al., 2018). As prescription rates soared, so did instances of abuse and addiction, creating a vicious cycle that devastated communities.

Literature Review

The opioid crisis, particularly as it relates to OxyContin, presents a complex network of medical, social, and economic factors that have contributed to one of the most devastating public health crises of the modern era. The existing literature on this topic critically examines the roles played by pharmaceutical companies, healthcare providers, and regulatory bodies. However, while significant attention has been paid to the direct actions of these entities, there is a lack of scholarship about the broad socio-political contexts and consequences of OxyContin itself, being that it is a technological artifact.

Van Zee offers a thorough analysis of the role of social actors in the abuse of OxyContin, focusing primarily on the culpability of Purdue Pharma and healthcare providers. Van Zee's paper documents the aggressive marketing tactics that Purdue Pharma used to sell their product, as well as the incentives that were provided to doctors to increase prescriptions of opioids (Van Zee, 2009). While this analysis provides valuable insights about the mechanics of the crisis, it

fails to explore the broader socio-political ramifications of these practices. Specifically, it does not address how these strategies have exacerbated existing social inequalities, particularly in regions like Appalachia, where the impact of opioid addiction has been disproportionately large. It does not explore the dichotomy of the empowerment of healthcare professionals through perks and incentives contrasted with the devastation faced by the communities that were the targets of these concentrated marketing efforts. Van Zee's writing also overlooks the way in which the crisis has reinforced societal norms about pain management, thereby failing to explore the systemic nature of the opioid epidemic.

On the other hand, Krueger (2017) provides an analysis of the economic consequences of widespread opioid use, noting a correlation between high rates of opioid prescription and reduced labor force participation. His analysis, however, like Van Zee's work, falls short of fully articulating the socio-political ramifications of such trends. Specifically, he does not explore how the economic decline experienced by individuals due to opioid dependency – exacerbated by the marketing and distribution strategies of OxyContin – destroys not only individuals' financial stability but also their physical and mental health, leading to a vicious cycle of increased drug reliance. By focusing solely on economic indicators without a direct link to OxyContin's unique impact on vulnerable populations, this analysis is also incomplete.

This paper will use the STS framework of technological politics to better understand the social impacts of OxyContin, particularly how its distribution and marketing efforts have deepened social inequalities in Appalachian regions and diminished trust in the healthcare sector. It aims to bridge the existing gaps in scholarship by focusing on the nuanced socio-political implications of these strategies. Through this approach, I will develop a comprehensive argument that addresses OxyContin's role in exacerbating the opioid crisis.

Conceptual Framework

The conceptual framework for this research draws heavily on the principles of technological politics as outlined by Langdon Winner, focusing on the examination of power, justice, and care within technological designs and their broader implications. Winner's argument that technological artifacts inherently possess political properties provides a lens through which the case of OxyContin can be analyzed for its social and ethical impacts (Winner, 1980). According to Winner, "technology" encompasses "pieces or systems of hardware of a specific kind." Meanwhile, "politics" in this context refers to "arrangements of power and authority in human associations as well as the activities that take place within those arrangements" (Winner, 1980). This framework is grounded in the understanding that the making of technologies, including medical ones such as drugs, are influenced by power dynamics that affect their distribution and use; technologies can embody and enact forms of power, privileging some while marginalizing others, whether through deliberate design or as an unintended consequence.

The momentum of large-scale sociotechnical systems, a key component of this framework, illustrates how societal responses to technology and the adaptation of human ends to technical means can create a path dependency that is difficult to reverse (Winner, 1980). The healthcare system's rapid adoption of OxyContin exemplifies how technological momentum can lead to entrenched practices that are resistant to change, even when their potential negative outcomes are known. This research integrates technological momentum into the broader narrative of technological politics to understand how OxyContin interacted with existing social and economic frameworks to deepen disparities and trust issues in healthcare. Moreover, it examines the extent to which the design and dissemination of OxyContin were aligned with specific interests, influencing these practices intentionally. Through the lens of technological

politics, I will explore how OxyContin as an artifact shaped social structures and healthcare

practices. Using Winner's insights, I will analyze the drug's role in deliberately shaping power

dynamics to unpack the complex relationships between technology and society in the context of

the opioid crisis.

Analysis

Viewing Purdue Pharma's OxyContin distribution through the lens of the technological

politics framework reveals the strategic manipulation of medical technologies not simply as

advancements in healthcare, but also as tools for corporate interests, overshadowing their

therapeutic intent. Through this perspective, we can understand how this technology managed to

shape social relations of power, privileging certain groups – corporate interests, in this case –

while marginalizing others, particularly the patients and communities that were impacted by the

opioid crisis.

Marginalization of Appalachian Communities

The substantial value and power of OxyContin, due to its effective yet addictive qualities,

not only placed it at the forefront of Purdue Pharma's operations but also exacerbated public

health issues and social disruption, particularly in socio-economically challenged Appalachian

communities, which were further marginalized by the addiction cycle driven by Purdue's

practices. The marginalization and subsequent opioid crisis in Appalachia can be directly linked

to Purdue Pharma's deceptive practices and the broader healthcare system's failure to adequately

address addiction. According to the California v. Purdue Pharma court case in 2014, the

company promoted the concept of "pseudoaddiction," suggesting that the signs of addiction were

merely indicators of undertreated pain and should be addressed by prescribing even more

opioids. This guidance directly contradicted the known features of addiction, such as "a

pronounced craving for the drug, obsessive thinking about the drug, erosion of inhibitory control over efforts to refrain from drug use, and compulsive drug taking," thereby fueling a cycle of dependency and abuse within vulnerable populations (Vincenzes et al., 2019).

This manipulation of medical understanding and practice contributed to a vicious cycle where individuals, already facing socio-economic hardships, found themselves trapped in patterns of addiction. The consequences of such addiction were devastating, leading to job loss, familial strain, incarceration, and a profound sense of personal failure and social isolation. Dr. Rebecca Jones highlights the deep social and emotional roots of addiction, noting, "[Addicts] go to jail, lose their jobs, children, freedom, and when they get out they can't get jobs, they have no emotional support and they blame themselves for their vulnerability. Why wouldn't they? The rest of the world blames them. No wonder they go back to using drugs" (Yin, 2018).

The impacts of addiction extend beyond the individual to affect their relationships and economic stability. Partner troubles, economic and financial distress, disabilities, and the loss of health insurance, while significantly impacted by opioid dependence, can also create environments conducive to continuation of drug use, including relapse (Park & Powell, 2021). Research indicates that regions with higher opioid prescription rates, notably Appalachian communities, have seen significant declines in labor force participation (Harris et al., 2020). Furthermore, the opioid crisis has been linked to increased rates of occupational injuries, crime, and intimate partner violence, further destabilizing these communities (Confer et al., 2021; Paris & Rowley, 2023; Polenick et al., 2021). One poignant reflection from an anonymous individual, a prior shopkeeper, in a study illustrates this: they recounted not only the loss of their shop, but also the "[loss of their] reputation as a shopkeeper," highlighting the profound consequences their opioid use extending beyond personal health to affect professional lives and community

standing (Amini-Rarani et al., 2020). All of these factors combined collectively fuel a cycle of social isolation and strain, exacerbating substance use and raising the risk of return to use. This cycle not only makes initial drug use and relapse more likely but also impedes recovery efforts, contributing to the ongoing patterns of illicit opioid use (Amini-Rarani et al., 2020; Polenick et al., 2021).

In addressing the opioid crisis and its impact on disadvantaged communities and the broader healthcare system, it's important to acknowledge that the cycle of addiction is fueled by this incredibly complex network of factors. Yet, there is a common counter argument that focuses solely on the notion of personal responsibility. Proponents of this view argue that individuals have the autonomy to make choices about their health, including the decision to use or misuse prescription opioids like OxyContin. According to this perspective, the responsibility for addiction lies with the individual, suggesting that the consequences of opioid misuse are the result of personal failings rather than systemic issues or corporate misconduct; therefore, there is no disadvantaged group, because each individual's situation is seen as the outcome of their own choices rather than the influence of external factors. This argument posits that if people chose to begin using OxyContin, regardless of the context or circumstances leading to that choice, they alone are responsible for the consequences of their actions.

However, this argument significantly oversimplifies the complex dynamics at play, particularly when examined through the lens of technological politics. Technological politics explores how technologies such as OxyContin, do more than serve their intended functions – they also shape and are shaped by social relations, power dynamics, and inequalities. Purdue Pharma's marketing and distribution strategies for OxyContin, supported by some health practitioners, did not merely make a pharmaceutical product available; they manipulated

healthcare practices and patient behaviors in ways that disproportionately affected vulnerable Appalachian populations.

Additionally, according to the The Diagnostic and Statistical Manual of Mental Disorders (DSM)-5 the behavioral changes that accompany opioid addiction are associated with "structural and functional changes in reward, inhibitory, and emotional circuits of the brain" (Vincenzes et al., 2019). Purdue Pharma's tactics of promoting opioids to "trusted" patients suggested a flawed screening process for addiction risk, irresponsibly expanding drug access (State of California Department of Justice Office of the Attorney General, 2019). However, even when taken as directed by a responsible physician, opioids can lead to substance abuse disorder (National Institute on Drug Abuse [NIDA], 2021). The company's assertion, as echoed by Dr. Richard Sackler, that "[the abusers] are the culprits and the problem," deflects from the addictive nature of opioids, as understood medically. This narrative, ignoring the scientific evidence of addiction's impact on the brain, overlooks the systemic manipulation and the role of corporate strategies in fostering the opioid epidemic, particularly harming those in already vulnerable communities.

Healthcare System and Ethical Compromises

The introduction of OxyContin by Purdue Pharma marked a pivotal moment in the history of healthcare, wherein the drug's potential for widespread application and profitability was leveraged to redefine relationships within the healthcare ecosystem. The inherent political power of OxyContin lay not just in its clinical efficacy but in its marketability and the opportunities it presented for reshaping healthcare provider behaviors under the guise of advancing patient care, shifting the balance of power towards corporate interests. As the drug's distribution intensified, it began to play a dual role: a medical solution for chronic pain and a tool for economic and strategic manipulation by Purdue Pharma.

OxyContin's inherent properties facilitated a blurring of lines between legitimate medical practice and the blatant commercialization of healthcare. This blurring was manifested in the marketing strategies that exploited the drug's potential to fulfill and expand the market for pain management solutions. According to a press release by the United States Department of Justice Office of Public Affairs in 2020, Purdue Pharma's promotion tactics involved the dissemination of misleading prescription data to healthcare authorities, which included doctors known to be engaged in drug diversion. Purdue Pharma was also found to have deliberately provided deceptive data to the Drug Enforcement Administration, inflating their manufacturing limits (United States Department of Justice Office of Public Affairs, 2020). Both of these actions highlight a deliberate strategy to manipulate the healthcare system for corporate gain using OxyContin. This practice not only compromised the integrity of healthcare monitoring systems but also facilitated the widespread and unregulated distribution of OxyContin, directly benefiting Purdue Pharma at the cost of public health safety; the artifact itself became a means through which Purdue Pharma could assert its influence over the healthcare system, privileging corporate interests over public health safety.

The promotion of OxyContin, supported by misleading education programs and financial incentives for physicians, catalyzed a significant shift in the healthcare system's power dynamics. This shift resulted in healthcare providers becoming unwitting accomplices in the overprescription epidemic, eroding patient trust in the very institutions meant to preserve their health. For example, the press release also stated that Purdue Pharma engaged in kickback schemes, providing payments to doctors in exchange for writing more prescriptions of OxyContin, along with offering various other incentives to healthcare professionals (United States Department of Justice Office of Public Affairs, 2020). This not only facilitated Purdue's

marketing strategy but also contributed to a breakdown in the ethical relationship between patients and healthcare providers. This manipulation of medical ethics not only empowered Purdue Pharma by boosting sales but also significantly disadvantaged patients, who were left to deal with the devastating consequences of opioid addiction – in the words of Deputy Attorney General Jeffrey Rosen, the actions of the company "contributed to a national tragedy of addiction and deaths" (United States Department of Justice Office of Public Affairs, 2020). This unethical compromise further eroded trust that was meant to be foundational in healthcare providers and institutions, exacerbating the vulnerability of patients and making them even more susceptible to addiction and its consequences. As the Department of Justice noted, "Purdue put opioid profits ahead of people and corrupted the sacred doctor-patient relationship." This erosion of trust was particularly pronounced in Appalachian communities where access to comprehensive pain management resources and addiction support services may have been lacking, further intensifying social disparities and altering the dynamics of patient care. For Purdue Pharma, OxyContin was a tool for corporate gain, but for many patients and communities, particularly in Appalachia, it became a source of profound social and health inequalities.

The firsthand experiences of patients, as expressed by a 41-year-old woman who said that "[doctors] just [asked] you what you want" illustrates the depth of the ethical erosion within the healthcare system as a result of the introduction and distribution of OxyContin. Her account reveals a transactional nature of medical consultations, where the question "What do you want?" replaces comprehensive clinical assessments (Rigg et al., 2010). This disturbing interaction highlights the transformation of medical practice into a marketplace, with OxyContin as the good being offered. Such patient narratives express the drug's role in undermining the foundational trust in the healthcare system, as the prescriptive process becomes a mere exchange, completely

lacking the necessary medical scrutiny. This testimonial indicates that OxyContin's very existence within these communities redefined the patient-healthcare provider relationship, creating an environment where the lines between therapeutic care and substance abuse became dangerously blurred. This shift in dynamics demonstrates how OxyContin acted as an political agent of change, not only through the actions of Purdue Pharma but through its intrinsic properties and the socio-medical practices it endangered.

Conclusion

OxyContin is a technology that has done more than just fulfill its medical purpose – it's altered the social fabric and power balances in profound and troubling ways. The aggressive marketing strategies of Purdue Pharma, influenced by their drug's incredible potential, ultimately prioritized the company's financial growth over the well-being of their patients, setting off a series of social inequalities. OxyContin as a technological artifact compounded suffering, particularly among those in the already struggling Appalachian communities. The influx of this drug into these areas demonstrates a misalignment of technological advancements with societal needs and ethical considerations.

Through the lens of technological politics, the failure of OxyContin is arguably a result of deliberate choices that served to empower a pharmaceutical giant while disregarding the rising levels of addiction and its effects on social structures. In this case, OxyContin, far from being neutral (as medical advancements should be), became a tool that reshaped power dynamics, privileging the interests of the few while leaving many others in an extremely disadvantaged predicament. Moving forward, it's crucial for those involved in the development and distribution of such impactful health-related technologies to be aware of their broader social responsibilities. OxyContin can be a precautionary example of how technological politics can lead to the

exacerbation of existing vulnerabilities in social systems. Although the opioid crisis began many years ago, the repercussions of OxyContin's influence on Appalachian communities will take concerted effort and time to heal.

Word Count: 3,496

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