JURISPRUDENCE

Toxic Pollution as a Right to Harm Others: Contradictions in Feinberg's Formulation of the Harm Principle

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Under existing legal classifications, environmental laws permit the release and regulate levels of toxic pollution in the general environment. Although the stringency of the specific legislation varies widely between different legal systems, no state has legislated for an absolute prohibition on the release of toxic pollutants by industry or individuals as an activity that causes harm to others in society. This accommodation of toxic pollution in law seemingly exists in contradiction both (i) to the definition of toxic pollution as a substance that can be demonstrated to cause harm to the physiology of those whom are subsequently exposed and (ii) to the epidemiological and medical evidence testifying to the actual harms caused by toxic pollution.

Also known as non-malfeasance, the purpose of the harm principle in liberal political and jurisprudence theory is to provide a rationale to prohibit actions that are known to cause harm to others. The harm principle is the sole criterion that liberal theorists use to decide whether state intervention in the autonomy of individuals is justified. Joel Feinberg articulates that "no responsible theorist denies the validity of the harm principle, but the liberal would prefer to draw the line there, and deny validity to any other proposed ground for state intervention."

This article examines how Feinberg has placed toxic pollution outside of the remit of the harm principle. This exclusion is instructive in that it reveals how—despite emphatic assertions to the contrary—legal institutions have been constructed on an overtly political basis, which privileges certain values over others. The exclusion of toxic pollution from the harm principle also reveals how influential intellectuals have both denied the politicization of law and overlooked how social power interests determine which forms of knowledge are to be accepted and which are to be ignored or downplayed.

Few theorists have had as great an impact on liberal moral, social, and legal philosophy as Joel Feinberg. Feinberg was a past president of the American Philosophical Association, held many major fellowships during his career, and taught at Brown University, Princeton University, UCLA, Rockefeller University, and the University of Arizona, where he retired in 1994 as Regents Professor of Philosophy and Law. His major four-volume work, *The Moral Limits of Criminal Law*, was published between 1984 and 1988. These volumes undertook the task of defining the moral conditions under which the state is justified in overriding individual liberty and exercising coercion. Feinberg argued that the state should use coercive power only when the actions of individuals are likely to be harmful to others and not, for example, if they are merely offensive to majoritarian sentiment. Though Feinberg provides an eloquent defense for excluding pollution from prohibition under the remit of the harm principle, his argument can be overturned by applying the formula itself.

Toxic Pollution as Harm

Overwhelming evidence exists to show that toxic pollution causes significant harm. The numbers killed by the toxic pollutants routinely emitted from vehicle engine exhaust fumes, for example, vastly outweigh the number of people killed in terrorist attacks in any one year. In the case of exposure to a terrorist bomb, injury is caused by an explosive device that propels foreign objects into bodily tissues. In the case of exposure to toxic pollution, the foreign object is a chemical pollutant that causes injury by damaging the genetic integrity of cellular tissues. Whereas terrorism is on the top of the political agenda, the toxic pollution caused by routine economic operations has been depoliticized, since exposure to toxins is presented as "normal," and the harmful implications are classified as a health issue rather than a political matter.

A number of toxins found in the environment are produced from natural, rather than human-made sources. Since small quantities of toxic chemicals occur naturally in the environment, existing legal doctrine holds that the addition of synthetic chemicals is no different, thus the production of toxic pollution is exempt from constituting harm. However, the fact that humans have much more control over what we produce than what nature produces makes this argument absurd. Furthermore, economic activity is much more readily influenced and changed by political and legal decisions.

Pollution can be defined as any chemical compound emitted into the general environment by human activity. Current legal doctrine recognizes three categories of pollutants: non-toxic pollutants, pollutants whose danger increases with exposure, and pollutants for which there is no safe exposure level. Carbon dioxide is classified as a non-toxic pollutant, since it poses great risks for climate change but has no known direct deleterious effects on human health and therefore is not classified as harmful. An example of the second category of pollutants, which only harms when exposure reaches a threshold level, is nitrogen dioxide. Exposure to 400 parts per billion (ppb) or more of nitrogen dioxide in inhaled air causes epithelial cell dysfunction in the lungs. During an episode of smog in London in December 1991, levels of nitrogen dioxide reached 423 ppb, and death rates subsequently increased by 10 percent, according to an unpublished report for the British Department of Health. The third category of pollutants causes physiological harm by damaging cells at any level of exposure. This harm may not result in immediate death but may build up over a number of years to cause cancers or cardiopulmonary illnesses, among other symptoms.

The everyday use of cars illustrates the routine harm incurred by this third category of toxic pollutants. Collectively, vehicle emissions constitute the single most important source of toxic air pollutants in industrial societies. Smog and tailpipe emissions are widely understood to be unhealthy, but the extent of the harm caused by this source of pollution is significantly underestimated. Though specific exhaust pollutants damage cellular structures in all people exposed to them, not all will

become sick or die as a result. As epidemiologists explain, "many inhaled pollutants do not kill cells, but are responsible, directly or via their breakdown products, for mild, ongoing damage to DNA and other cellular structures."

A wealth of epidemiological evidence explains how this harm can subsequently induce allergies, result in brain damage, cardiovascular diseases, respiratory infections, bronchitis, lung cancer, a decline in lung function, emphysema, headaches, and leukemia, as well as damage the immune and nervous systems. A United Nations report on the health effects of exhaust pollutants in France, Austria and Switzerland found that toxic exhaust emissions are responsible for 21,000 deaths annually—more than the number of deaths resulting from traffic accidents. The report also found that pollutants from car exhausts caused 300,000 extra cases of bronchitis in children each year and 15,000 additional hospital admissions for heart disease. In Britain, a 1998 government report found that 24,000 deaths "were hastened" by the effects of three toxic pollutants: ground level ozone, particulates and sulfur dioxide. Sulfur dioxide harms the respiratory system and was found to have "hastened the deaths" of 3,500 people in the U.K. each year.

PM10s, another class of toxic pollutants found in exhaust emissions, carry chemicals and acids into the alveoli of the lungs. In the alveoli, PM10s inflame tissues and stimulate affected cells to produce the coagulants, fibrinogen and factor 8, to levels that can strain the cardiovascular system. Epidemiological studies reveal that an incremental increase of 10 micrograms of PM10s per cubic meter causes a 1 percent correlative and sustained rise in the death rate from heart attacks, and a 3.4 percent increase from respiratory illnesses. A group of American epidemiologists have concluded that "thousands of deaths every year are associated with particulate air pollution, even at levels well below that which the Environmental Protection Agency considers safe." PM10s cause approximately 60,000 deaths per year in the United States. A study in Athens linked high levels of PM10 pollution to a 5 percent increase in deaths. A 1998 U.K. government report placed the number of annual deaths in Britain "hastened" by PM10s at 8,100 and said another 10,500 required hospital treatment as a result of exposure to the pollutant. This figure is consistent with research conducted by a World Health Organization (WHO) panel examining deaths from PM10s. The WHO estimated that "thousands" of Europeans who are exposed to airborne particles common in cities "will suffer or die." The WHO has refused to set a safe limit for PM10 exposure, since it has concluded that no such level exists. Other epidemiological studies reached the same conclusion.

Ground level ozone is produced when sunlight reacts with vehicle exhaust fumes. Ozone can worsen asthma conditions; increase susceptibility to viruses; impair the immune system and lung function; and cause respiratory tract infections and coughing, difficulty in breathing, chest tightness, nausea and lung inflammations. Ozone is a powerful oxidizing agent and damages the lungs by reacting with a number of biological molecules. Vaughan and Cross point out that "ozone weakens the body's immune system and attacks lung tissue." They quote the U.S. Centers for Disease

Control, saying "ozone destroys lung tissue about as well as some chemical weapons do." The 1998 U.K. government report on the effects of air pollution found that 12,500 people prematurely die as a result of ground level ozone in Britain each year, and a further 9,900 seek hospital treatment.

The carbon monoxide found in exhaust fumes is "highly toxic," since it combines with the hemoglobin of the blood more effectively than oxygen. Half the urban populations in North America and Europe are routinely exposed to harmful levels of carbon monoxide. In 1991 motor vehicles in Europe emitted 28 million metric tons of carbon monoxide. Another toxic chemical found in exhaust fumes, 1,3 butadiene, is known to damage DNA and is classified by the U.S. Environment Protection Agency as a probable human carcinogen. Hydrocarbons constitute yet another variety of exhaust pollutants that are both toxic and carcinogenic at any level of exposure. Exhaust fumes from vehicles in Europe released 5.5 million metric tons of hydrocarbons into the atmosphere in 1990.

Although epidemiologists debate the exact number of deaths caused by specific pollutants, it is a demonstrable fact that identifiable toxins cause significant, even deadly, physiological harm. A major European study of the effects of air pollution in Austria, Switzerland and France recently found, for example, that air pollution "caused 6 percent of total mortality—more than 40,000 attributable cases per year" (emphasis added).

Legally Recognized Harms

Legal Categorization of Toxic Pollution

In dealing with toxic pollution, legal systems can be differentiated into two categories. The first category lacks any systematically enforced environmental protection and includes a number of African states as well as Export Processing Zones (EPZs), which are littered throughout the developing world. Countries set up EPZs to attract investment from global manufacturing corporations by exempting relocating industries from costly labor and environmental regulation. Created in 1965, the maquiladora EPZ in Mexico, for example, contains more than 2,000 multinational industrial plants. Levels of toxic pollution in these areas are substantially higher than levels normally found in Western states. Since their establishment, EPZs have seen significant increases in rates of infectious diseases, cancers, neurological disorders, birth defects and deaths among people who live near them.

The second legal category applies to states that have "environmental rights" and stipulate controls on the amounts of pollution that people can be legally exposed to. Constitutional texts in approximately 40 countries now contain some variant of an environmental right. Most common in the wording of these rights is the guarantee to a "healthy," "healthful," "safe" or "balanced"

environment, or to an environment "suitable for development." But despite the reassurance implied by these constitutional guarantees, in practice they are often meaningless, because they are nearly always vaguely worded and rarely enforced. Furthermore, it is almost impossible to pinpoint when a "healthy" environment becomes an "unhealthy" environment. Consequently, toxic pollution has not been eliminated as harm in any states proclaiming environmental constitutional rights, though some communities in the United States have passed binding ordinances that begin to do so.

Environmental legislation typically specifies legal levels for each pollutant, which vary from state to state, depending upon the degree of toxins that lawmakers decide the general public may be exposed to. For example, under the leadership of William Reilly, the U.S. Environmental Protection Agency increased the permissible levels of benzene pollution in the environment from causing one death in a million to one death in 10,000. Rather than being prohibited as "harm," permissible levels of toxic pollution are thus accommodated under environmental laws and reclassified under the category of "risk." Those individuals who subsequently suffer illnesses or die from the effects of exposure to toxic pollutants are not considered to have been the victims of "harm" as such. Rather, they are said to have suffered the unfortunate, but indirect, consequences of exposure to environmental risks.

Understanding the processes of exposing individuals to "risks" has generated substantial amounts of research within the discipline of political sociology in recent years. However, the epidemiological evidence demonstrates that toxic pollution is not a risk but a harm. Though not all individuals exposed to toxic pollutants will suffer illness or death as a result of that exposure (the degree of harm is undoubtedly influenced by individual genetic makeup), physiological harm is incurred to those exposed nonetheless. Deaths and diseases attributable to pollution reflect the harm incurred by earlier exposure to toxins. Existing environmental laws that control pollution levels therefore accommodate—albeit somewhat mitigated—their harmful effects.

Political Liberalism and Harm

The tradition of political liberalism spans a wide range of nuanced positions that have been categorized and differentiated along various lines. Legal harms theorist Joel Feinberg is an adherent of "impartial liberalism," a philosophy that claims to be a "higher-order theory." The "higher order" claim rests upon the notion that liberalism can impartially and evenhandedly deal with the many different but coexisting approaches to what is defined as good in modern societies. Thus, impartial liberalism rejects using legislation to define and promote any one perception of the good life (political paternalism) and instead advocates tolerance of a plurality of diverse versions of the good in society, limited by *prima facie* application of the harm principle.

The importance of preventing harm to others is a long-established liberal principle. In 1672 Pufendorf ranked "first and noblest" the requirement "that no man hurt another." Radical libertarian Nozick articulates the underlying imperative in stating that "a person has the liberty to leave his knife wherever he wants, but not in someone else's back." Similarly, John Stuart Mill articulated that "the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others." According to Mill, not only is it permissible for society to prevent an individual from engaging in an activity that harms others, there exists a *prima facie* case for criminalizing such actions. This elevation of non-malfeasance is noteworthy, since Mill tends to focus as much on the overall good of society as he does on individual rights. Yet even here, acts that harm others are delineated as illegitimate. Where the use of private property causes harm to others, its use cannot be justified on liberal grounds without violating the conceptual autonomy of individuals that lies at the heart of liberal political theory.

Although he took issue with various aspects of Mill's work, Feinberg is a vigorous defender of Mill's harm principle. However, for Feinberg, the pressing issue is what precisely constitutes harm. Feinberg asserts that one person harms another "by invading, and thereby thwarting or setting back, his interest." Feinberg expands on this explanation to claim that "A harms B when 1) A acts 2) in a manner that is defective or faulty in respect to the risks it creates to B—i.e., with the intention of producing the consequences for B that follow, or similarly adverse ones, or with negligence of recklessness with respect to those consequences; and 3) A's acting in that manner is morally indefensible—that is, neither excusable nor justifiable; and 4) A's action is the cause of a setback to B's interests, which is also 5) a violation of B's right."

The criterion Feinberg provides for establishing harm is therefore extremely stringent and clearly more than whatever an individual thinks injures his or her interests. Yet applying this formula, Feinberg himself denies that "routine" toxic pollution constitutes harm that deserves to be criminalized. Against the growing body of epidemiological evidence, Feinberg states pollution "rarely [causes] clear and substantial harm to any specific person or group." He later declares that "the harm principle lends legitimacy to legislative efforts to solve the multidimensional problems of air and water pollution, but in its bare formulation without supplement, it offers no guide to policy."

Questioning Feinberg

Identifiable Actors

The first requirement for A to harm B under Feinberg's formulation of the harm principle is that A engages in an action. Individuals and corporations engaging in activities that emit toxic pollutants into the general environment can be subsequently identified as A, since it is these agents whose actions result in exposing others to harmful toxins.

Fault

Feinberg's second requirement for the application of the harm principle relates to fault. In the case of the production of toxic pollutants, A's manner is faulty with respect to the risks it creates to B, since such pollutants damage the physical bodies of exposed individuals. Furthermore, under Feinberg's formulation of fault, the harmful consequences need not be intentional for the act to be categorized as harmful. Actions known to result in harm to others are explicitly prohibited by Feinberg's definition of harm, even where those consequences are an unintended byproduct of an activity rather than the specific motivation. The epidemiological evidence reviewed above establishes that toxic pollution, by definition, harms human physiology. That the originators of toxic pollution rarely intend to cause harm to others is irrelevant. Those responsible for toxic pollution have either intentionally, or through negligence, produced consequences that harm others in society, therefore satisfying the second requirement of Feinberg's harm principle.

Moral Considerations

The third paragraph in Feinberg's harm principle stipulates that the behavior must be "morally indefensible, that is, neither excusable nor justifiable." This provision appears to be uncontentious, since morally justifiable actions cannot be simultaneously immoral. Yet Feinberg's standard of "adequacy of justification" is devoid of any further elaboration or defense. This is a notable omission given that in making ethical judgments, it is necessary to have an internally coherent set of criteria to interpret and balance competing values such as economic growth versus the eradication of toxic emissions. Rather than being systematically explained, let alone defended or justified, the paradigm of morality Feinberg adopts simply privileges existing social practices, thereby automatically removing "normal" activities from critical scrutiny. Indeed, Feinberg is quite open about this when, for example, he describes car driving as an "indispensable innocent activity." As such, paragraph three in Feinberg's harm principle becomes a self-legitimizing instrument for the legal system to excuse "normal" social practices.

A dominant ethical paradigm (defined as a framework that removes prominent existing social norms and practices from critical scrutiny) can usually dismiss challenges from external ethical codes by recourse to its own internal coherence. However, Feinberg's exclusion of toxic pollution from the remit of his formulation of harm exposes three internal contradictions: (i) methodological failings in investigating whether toxic pollution constitutes harm by giving more weight to economic analysis than epidemiological evidence, (ii) precepts of impartial liberalism are contravened, and (iii) the omission of toxic pollution from the categories of "substantial" and "avoidable" harm is morally arbitrary and not based on the application of impartial criteria.

Contradiction One—Methodological failings: Feinberg asserts that toxic pollution cannot be prohibited as harm, since that would hinder allocative efficiency and economic growth. Instead of requiring a criminal prohibition of toxic pollution, he advocates "an elaborate scheme of regulation, administered by a state agency empowered to grant, withhold and suspend licenses, following rules to promote fairness and efficiency." But regulating toxic pollution to promote "fairness" and "efficiency" simply subordinates the harm principle to the quest for allocative efficiency and economic growth, since such regulation can only deduce harm from an economic cost-benefit analysis. Efficiency concerns thereby provide a rationale to inflict harm on others and the environment in the name of economic growth.

The epidemiological evidence offers a competing criterion to differentiate the harmful from the safe based on sole consideration of the physiological effects of specific pollutants. However, acknowledging the validity of epidemiological and ecological over economic data would require prohibiting toxic pollution as harm, a possibility Feinberg dismisses as "utterly trivial and nearly vacuous" since it leads to the undesired result of an inefficient allocation of resources, a position Feinberg refuses to consider.

Contradiction Two—Liberalism as a higher order theory: The status of liberalism as a higher order theory means that it cannot condone an activity that entails harm to others even when the political predilections of the majority of a population want the activity to be allowed. Take, for example, the issue of car use. Cars are popular among the majority as a means of personal mobility, though a minority sees them as a social evil. Herbert Read articulates the view of the latter constituency:

Walking in our time, like philosophy in our time, has declined to a state of paralysis. The paths across the fields have long since been ploughed away; even bridle-paths, which in my childhood were busy with human traffic, have completely disappeared. The cause of this rapid obliteration of pathways: the internal combustion engine. We have lost the physical experience that comes from a direct contact with the organic processes of nature... elementally human experiences that to be deprived of them is to become something less than human.

Less articulate, if more demonstrative, in his dislike of the car culture was Kudno Mojesic, who was arrested in 1979 on the street outside his Belgrade home for attacking cars with an axe while shouting "cars are the devil's work." Supporters of radical ecological groups such as *Earth First!*, Road Alert and Reclaim the Streets have consistently identified the car culture as a predominant social ill, a position that has gained some popular sympathy with growing ecological awareness and ever-increasing levels of congestion.

Liberal theory cannot excuse toxic pollution from constituting harm on the grounds that the trade-off enjoys overall popular support since (i) this would condone violating minority rights in response to majoritarian pressures and (ii) consent provides no justifiable basis for harm. As we have

seen, even the utilitarian strand of liberalism promoted by Mill holds that physical security be accorded the status of a weighty moral right that in ordinary circumstances cannot be revoked by considerations of general welfare.

Likewise, the matter of consent provides no justifiable basis for activities that cause physiological harm such as assault, battery, mayhem and homicide, which, as Feinberg rightly points out, "remain unexcused and unjustified even when there was a perfectly willing victim." Applying his harm formula to exclude toxic pollution from its remit therefore contradicts a fundamental principle of impartial liberalism. Since (i) a particular political ideology privileging values of economic growth and market efficiency is being erroneously promoted as a universal good, and (ii) this vision entails harm to other individuals through exposure to harmful chemicals, excluding toxic pollution from the harm principle is not compatible with the impartial liberalism Feinberg promotes.

Nowhere is this better illustrated than when Feinberg acknowledges that pollution can indeed contribute to harm but then asserts "that can hardly be the sense of harm in any formulation of the harm principle that can serve as a guide to legislators, since it would provide a reason for banning indispensable innocent activities, like car driving and fossil-fuel-fired electricity-generating plants, across the board." Feinberg is selectively applying the concept of harm in order to accommodate desired practices of production and consumption that result in environmental degradation. Aside from causing thousands of deaths each year from pollution worldwide, cars have also been responsible for more than 17 million deaths in traffic accidents. Given that cars are responsible for far more deaths than have ever been caused by terrorism in any year, the claim that car driving is an innocent activity appears to rest solely on carefully cultivated social norms and existing customs rather than any considered position of impartiality.

Contradiction three—Selective application: Entirely consistent with his formulation of the harm principle, Feinberg claims that, "clearly not every kind of act that causes harm to others can rightly be prohibited, but only those that cause avoidable and substantial harm." The third inconsistency arises from the way that this exemption is applied to exclude toxic pollution from constituting a harm that ought rightly to be prohibited.

Toxic pollution is avoidable in the sense that it results from identifiable processes of production and consumption that are accommodated within a broader political structure. For example, technology currently exists to power vehicles by alto voltaic cells rather than by petrochemicals. These cells create power by electrochemically combining hydrogen from a fuel tank with oxygen from the air without the occurrence of combustion, so that the only byproduct is water vapor. Categorizing toxic pollution as unavoidable or inevitable makes invisible the political and legislative choices that have simultaneously facilitated harmful levels of pollution while serving the commercial interests of petrochemical and automotive corporations.

The imperative to organize society around the goals of economic growth and allocative efficiency is not inevitable. Instead this is a choice made in political and legal institutions based on privileging commercial and economic over ecological considerations. Toxic pollution, therefore, is seen as unavoidable to corporate and political elites who have internalized the belief that progress means economic growth. However, sectors of society that have questioned this assumption see toxic pollution as far from inevitable. For example, the deep ecologist characteristically identifies progress by focusing on enhancing biodiversity and preserving habitats rather than on macroeconomic variables. The claim that toxic pollution is unavoidable therefore rests on untenable assumptions that human societies *must* be organized for the benefit of economic growth and allocative efficiency above other purposes.

Most people would agree that the estimated 3,000 deaths caused by the September 11, 2001 attacks on the World Trade Center in New York and the Pentagon on Washington, D.C. were substantial. Yet PM10 pollution alone is responsible for 20 times as many deaths each and every year in the United States as those killed in the al-Qaeda attacks. On July 7, 2005 when bomb blasts in London killed 52 people, government figures estimate that PM10 pollutants, ground level ozone, and sulfur dioxide were responsible for 65 deaths in Britain. Yet, the comparatively small number of deaths from terrorist attacks has topped the political agenda and motivated wars at a cost of billions of dollars, while the statistically more significant daily deaths caused by routine exposure to toxic pollution remain categorized as "unsubstantial." Acknowledging the greater real danger of routine toxic pollution would likely threaten the ability of the economic system that produces it to continue externalizing its costs onto society at large. Thus, the number of people who die, are injured, or become ill as a result of routine toxic exposure is categorized as normal, and the true impact of toxic exposure is kept invisible.

In one passage, Feinberg concedes that toxic pollution can constitute "direct and serious" harm to citizens, but only "rarely," since he maintains that anti-pollution legislation defines harm and therefore prevents direct and serious harm to individuals. Refuting this assertion, epidemiologists have demonstrated that legislation accommodates levels of toxic pollution that can cause harm, injury, and death, since there are no safe exposure levels to some toxic pollutants accommodated in law. Even in those states with comparatively high standards of air quality, toxic pollution has been implicated in indiscriminately shortening the lives of the general population by an average of between one and two years. Levels of air pollution below those limits set by environmental legislation in the United States have been linked to higher rates of cancer, cardiopulmonary disease, and death. Exposure to ground level ozone damages the biochemistry of the lungs "at levels that are well below international limits for the maximum amount of ozone that should be present in clean air." Research published in *World Health* similarly concludes that "legally permissible levels of air pollution can lead to heart and lung disease." Williams reports that in the

1990s, an estimated 2,500 Californians died each year as a result of cancers caused by routine, rather than illegal, exposure to toxic chemicals released by oil refining and the petrochemical industry. The absence of safe threshold levels for a wide range of legally permitted toxic pollutants such as benzene, PM10s and hydrocarbons means that the only permissible level of emissions for this category that satisfies the conditions of the harm principle is zero.

Interests

The fourth stipulation of Feinberg's articulation of the harm principle requires that "A's action is the cause of a setback to B's interests." Nagel succinctly defines universal human interests in stating that "people don't want to be injured, robbed, or killed, and they don't want to get sick." Since legally permissible levels of toxic pollution injure, kill, and make people sick, such permission can be properly identified as a setback to three of the four interests that Nagel identifies. Unless the universal human interests identified by Nagel can be demonstrated to be inaccurate—and there is little evidence to support such a conclusion—toxic pollution indeed constitutes a setback to the interests of individuals who are exposed to it.

Rights

The final condition that must be satisfied for an act to be categorized as harm under Feinberg's formula is that it must be "a violation of B's right." In order to stop this leading in a circular direction that simply legitimizes existing legal rights, Feinberg expressly states that the rights he refers to are moral rather than legal rights. By virtue of its properties to damage individuals at the cellular level, toxic pollution violates the most basic moral right—the right to life. Therefore this final stipulation of Feinberg's harm formula is also satisfied. In one revealing passage, Feinberg accepts this and concedes a "right to unpolluted air" as a "moral right," because individuals have no choice but to breathe whatever air happens to be around them. Yet Feinberg still subjugates this moral right to the needs of the economy.

Conclusion

The foregoing analysis has examined the status of toxic pollution with respect to each of the five requirements presented in Feinberg's harm formula. Toxic pollution satisfies the conditions stipulated in the formula, yet Feinberg maintains the remit of harm doesn't apply to toxic pollution, because the economic needs of the society as a whole are more important. However, by definition, toxic pollution constitutes harm. If a pollutant did not harm human physiology, it could—and would—be classified as non-toxic, rather than toxic pollution. As one scientist summarized the harmful effects of toxic pollution on human health, "the essential issue is one of degree more than one of determining whether or not effects exist."

Feinberg could acknowledge toxic pollution as a harm under his formula but add that toxic pollution is nonetheless justified, because overall suffering could be greater without the economic activity that produces it. After all, nowhere did Feinberg require all harms to be criminalized; the explicit purpose of his work on harm was to establish the moral scope within which legislation may justly be enacted rather than to say what would be a good idea to legislate against. Although perhaps superficially attractive, such a position would entail three problems for Feinberg.

First, acknowledging toxic pollution as harm but then allowing its continued production in line with utilitarian concerns could lead to controls being placed on the trivial (rather than necessary) consumption of polluting goods. The capitalist economy endorsed by Feinberg serves consumer lifestyle choices and fashions that are increasingly detached from actual human needs. For example, currently there is no legal requirement to demonstrate any need in order to use polluting goods such as airplanes, Sports Utility Vehicles (SUVs), or any private vehicle, or to purchase goods that create toxic pollution in their production or consumption. Instead, consumption patterns are legitimated by market-based transactions alone. Even overlooking the fact that utilitarian arguments are generally insufficient to trump the rights of others in liberal political theory, utilitarian arguments cannot offer a defense for prioritizing unnecessary consumer tastes over more urgent human needs of health and survival, which are themselves violated by toxic pollution.

Second, openly sacrificing the harm principle on the altar of efficiency contradicts the requirements of *impartial* liberalism, because it would require the explicit acknowledgement and acceptance of a vision of the good society (based around economic efficiency) that causes and permits harm to others. Such blatant acknowledgement opens the way for other, more extreme social visions. For example, Westerners may see social happiness in terms of maximizing consumerism, but those from different cultural backgrounds may see happiness in terms of accepting religious scripts, or, say, killing heretics, with each perspective arguing on an equally internally coherent basis that the greater good of society requires that others must die. Once the principle is conceded that some in society can be justifiably harmed to further the "greater good," society could become very oppressive indeed. This is precisely the reason that Feinberg ascribed such prominent value to the harm principle in the first place.

Third, acknowledging toxic pollution as a harm and then accommodating it as normal and routine would illustrate that the harm principle lacks any coherent substance. Rather than being impartially applied, if the routine deaths of thousands of people can be accepted as "normal" and excluded from prohibition, the remit of harm can subsequently be filled by whatever semantics and versions of what is "good" respective authors cared to impute. That would expose the process of defining harm as little more than a cover through which different authors could articulate an underlying political ideology. Such open acknowledgement undermines the moral weight that

Feinberg attributes to the harm principle as a guide to policy. It also exposes the myth that law is based on universal principles of justice rather than specific interests and values.

In line with other liberal theorists of political jurisprudence, Feinberg purports that law (i) acts as an impartial rules-based mechanism to rectify infractions of justice and (ii) uses objective criteria to adjudicate between conflicting private interests in society. Indeed, Collins points out that "Western legal theory has become obsessed with the task of demonstrating the apolitical qualities of judicial reasoning and proving how issues of preference and interest play no part in the legal process." The legal mythology of neutrality would be exposed as a chimera if it were acknowledged that rather than being a natural, impartial and universal rules-based mechanism, the harm principle is socially constructed and selectively applied. The logical conclusion to this proposition would advocate that society should rightly be organized to allow those with money to pursue a consumer lifestyle whose costs should be socialized and imposed upon those individuals who are least able to avoid those social costs.

In conclusion, the process of defining the remit and applicability of the harm principle can be seen as an overtly political act that privileges one set of values and interests over others. Its defenders advance the harm principle as an impartial, universal, natural, and indeed irrefutable expression of moral law. This premise is built upon the idea that the ordering of society is constructed on grounds that prevent individuals from harming each other. However, the process of including or excluding specific acts from the remit of the harm principle is an overtly political process in the sense that competing economic and environmental values must be privileged or subjugated and certain interests prioritized over others.