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Bentham, Not Epicurus: The Relevance of Pleasure to Studies of Drug-Involved Pain

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Drugs are associated with many harms (Bennett & Holloway, 2007; Nutt, King, & Phillips, 2010). Governments seek to reduce these problems for the greater good, though the best strategy is debatable. Policy-relevant research on drugs, or the “field” for short, informs the conversation (see, e.g., Brownstein, 2013, 2016; MacCoun & Reuter, 2001; Nutt, 2012; Zimring & Hawkins, 1992). Largely, the field is “Epicurean.” To explain what that means, allow a bit of background (also see Strodach, 2012; Warren, 2009). Epicurus was a Greek philosopher who lived around 300 BC. He is known for devising hedonism. However, he did not think of this moral philosophy like we do today: as the pursuit of pleasure. Rather, Epicurus (2012) saw the greatest good as the elimination of pain. Thus, research is Epicurean if it focuses on pain.

Among criminologists, the emphasis on pain is more often attributed to another philosopher, Jeremy Bentham (1748-1832). Like Epicurus, Bentham was a hedonist (Gere, 2017; Moen, 2015; Scarre, 1994). He spent his life thinking about the best way to govern (Schofield, 2009). Doing so, he argues, entails minimizing people’s pain, but also maximizing their pleasure. Unlike Epicurus, Bentham (2005 [1789]) put pleasure on equal footing as a guiding moral principle. For him, the morally right thing to do is that which prevents pain and promotes pleasure in their many manifestations. Of course, drugs are not only associated pain, but also pleasure (Dennis & Farrugia, 2017; Holt & Treloar, 2008; O’Malley & Valverde, 2004). Yet, the field is not Benthamian: proportionately focused on pain and pleasure.

Not everyone will think the field should be Benthamian. It is a philosophical choice without a single right answer. Indeed, some scholars, government officials, and laypersons believe pleasure should not, or practically will not, be a serious consideration in real-world efforts to control drugs (see Kleiman, Caulkins, & Hawken, 2011: 137-8). It follows that research on drug-involved pleasure is of little to no importance. In turn, that means the field is “right” to be Epicurean, not Benthamian. But that view is mistaken. Because drug-involved pleasure and pain are opposites, better theoretical and empirical knowledge of the latter is generated from

better understanding the former, and vice versa (see also, Author, XXXXa; Fleck 1979: 102). In turn, that information may be used to better control drug-involved pain.

With that logic in mind, this article seeks to improve the field's approach to identifying, categorizing, and connecting cases of drug-involved pleasure and pain. The goal is to provide researchers with a wider "conceptual lens" for examining not only drug-involved pain, nor only drug-involved pleasure, but both with respect to one another. Toward that end, first I lay the groundwork by describing existing typologies of drug-involved pleasure, crime, and harm. Next, I propose typologies of drug-involved pain and pleasure consisting of four types: drug-specific corporal; drug-related corporal; economic; and, social. I illustrate each concept with findings from a different body of literature. I conclude by discussing implications for the field.

Existing Typologies

To my knowledge, there are only two published drug-involved pleasure typologies. Holt and Treloar (2008) describe one thusly:

There are two broad approaches to conceptualising the pleasures associated with drugs. One approach sees pleasures as a sensation or conscious experienced produced by substance use. ... The other approach sees the pleasures derived from drug use as inextricably linked to the ways in which drugs are used, the activities associated with their use and contexts in which they are expressed and understood. (p. 350)

A limitation of this typology is it only covers a single type of drug-involved pleasure, specifically physical and mental aspects (i.e., what I term "corporal"), but other types are relevant to the field (i.e., what I term "economic" and "social"). Thus, this typology lacks comprehensiveness.

Bunton and Coveney's (2011) drug-involved pleasure typology is more encompassing. They list four types: carnal; disciplined; ascetic; and, ecstatic. These refer, respectively, to pleasure "involv[ing] bodily basics and fleshy desires" (p. 13); "that has been rationalized" (p. 14); "the practice of ... self-discipline" (p. 15); and, "in spiritual ceremonies" (p. 16). These concepts are interesting, but, owing to being esoteric, it is hard to imagine their widespread

adoption among researchers in the field, much less policymakers and enforcers. This typology, then, lacks instrumentality, or usability in the real world (see Cooney and Phillips, 2002).

My drug-involved pleasure typology – presented in the next section – is more comprehensive than that of Holt and Treloar (2008), and more instrumental than that of Bunton and Coveney (2011). Moreover, its instrumentality is bolstered by being based on two prominent, instrumental typologies: those of drug-involved crime and harm, described directly below. By connecting my typology of drug-involved pleasure to typologies of crime and harm, researchers, policymakers and enforcers should be more likely to see and consider its possibilities for informing drug control.

First is the drug-involved crime typology, which is explicitly or implicitly adopted by many governments (Bennett & Holloway, 2007; BJS, 1994; Zimring & Hawkins, 1992). See figure 1. Its broadest concept is drug-involved crime. There are two types of drug-involved crime: drug-defined and drug-related. Drug-defined crime encompasses acts formally prohibited and inextricably involving a drug. Thus, subtypes of drug-defined crime include various forms of illicit possession, distribution, and production of drugs, among potentially others. Drug-related crime refers to offenses that do not inextricably involve a drug (e.g., robbery, burglary, fraud), but one is involved. Drug-related crime is psychopharmacological if due to consumption of a drug; economic compulsive if committed to afford a drug; and, systemic if attributed to the anarchy of black-market trade (Goldstein, 1985; also see Brownstein, 1993).

--FIGURE 1 ABOUT HERE--

Second is the drug-involved harm typology, exemplified in Nutt, King, and Phillips' (2010) *Lancet* article (also see Nutt, 2012). See figure 2. Its broadest concept is drug-involved harm, which is the sum of harm to users and harm to others. Each of those harms may be physical, psychological, or social. Also, Nutt, King, and Phillips (2010) provide a list of specific physical, psychological, and social harms to users and others.

Among users, the subtypes of physical harm are drug-specific mortality, drug-related mortality, drug-specific damage, and drug-related damage. Also for users, the subtypes of psychological harm are drug-specific impairment of mental functioning, drug-related impairment of mental functioning, and dependence. The subtypes of social harm incurred by users are loss of tangibles and loss of relationships.

For others, the only specified subtype of physical and psychological harm is injury. Social harm is more varied among others. Its subtypes consist of (acquisitive) crime, environmental damage, family adversities, international damage, economic cost, and harm to the community.

In panel 1 of their article, Nutt, King, and Phillips (201) define the specific phenomena and provide examples. I reworked it into table 1 to demonstrate the harm typology's comprehensiveness.

--FIGURE 2 ABOUT HERE--

--TABLE 1 ABOUT HERE--

Clearly, the harm framework is more comprehensive than the crime framework. Comprehensiveness is valuable in its own right, but also because it relates to power. As Cooney and Phillips (2002) explain:

[A] good typology is *powerful* – it allows the facts to be better explained. The typology itself provides no explanation – it merely orders reality – but it creates categories that may liberate a theory or model to explain a set of empirical findings more fully. The more facts a typology permits to be explained, the more powerful, and the more scientifically valuable, it is. (p. 78)

Comprehensiveness boosts power to the extent that a typology's exhaustiveness and abstract connections facilitate cross-fertilization: theories of and findings on one phenomenon (i.e., part of the typology) shed light on others.

Creating Typologies

My goal is not to produce a typology of drug-involved pleasure for its own sake. Rather, as a criminologist interested in the field, my goal is to unlock the power of drug-involved pleasure for improving the study of drug-involved crime and harm. Obtaining said power requires building a coherent conceptual bridge between the “good” and “bad” phenomena associated with drugs. This bridge will foster the ability for knowledge of drug-involved pleasure to inform its “evil” opposite, and vice versa, as opposed to remaining isolated on proverbial islands of knowledge.

Flipping I

There a variety of ways to increase comprehensiveness and power. One approach is “flipping” an existing typology’s concepts. By flip, I mean devising the mirror opposites of existing concepts. The result is a conceptual dichotomy, such as “good and bad guys” or “war and peace.” Those broad types may have subtypes that are mirror opposites, too. Among good and bad guys, for instance, the converse of lovers are fighters, of anonymous gift givers are burglars, and of honest businesspersons are defrauders (e.g., Jacques & Wright, 2015). I refer to two mirroring typologies as a “framework.” Compared to any given typology on its own (i.e., not explicitly connected to a mirrored version), a framework is more comprehensive and powerful because, one, more is encompassed and, two, knowledge of each typology bears on its mirrored opposite.

Flipping may be straightforward, but does not always produce a valid outcome. Close to a decade ago, for instance, I attempted to flip Goldstein’s (1985) drug-related violence typology by proposing a drug-related love typology. It consisted of three concepts: psychopharmacological love, economic compulsive love, and systemic love. The problem was systemic love never struck me as a sufficiently valid concept, so I abandoned that approach without publishing it.

In other cases, flipping works well. For example, it is reasonable to flip harm into “pleasure” or a synonym, like “help,” thereby creating a framework of drug-involved harm/help based on Nutt, King, and Phillips (2010). Proposing and illustrating such a framework would be a contribution to the field. I considered taking that path, but, first, I wanted to see if I could produce a better framework. Already, I have listed a few traits that make a typology “better”: instrumentality, comprehensiveness, and power (Cooney & Phillips, 2002; Bailey, 1994). Two other traits are simplicity (i.e., parsimony, elegance), summed up by the maxim “less is more,” and generality, meaning a concept applies more broadly (see Cooney & Phillips, 2002; as relates to theory, see Kuhn, 1977).

Synthesizing

In addition to flipping, another approach to improving conceptual knowledge is synthesizing existing typologies. In my attempt to improve upon the harm/help framework, I looked for ways to synthesize it with the crime typology. On and off for years, I tinkered with and trashed synthesized versions. Below, I describe the final train of thought that led to my typology of drug-involved pain, which then I flipped to produce a typology of drug-involved pleasure. Together, they form a framework of drug-involved pain/pleasure.

Before describing the outcome, note that a synthesized typology or framework has value distinct from the aforementioned evaluative criteria. The unique synthetic value hinges on the ability to connect otherwise disparate areas of research, such as those of public health researchers (inclined to use the harm typology) and criminologists (apt to use the crime typology). A synthesis of their respective conceptualizations amounts to a reduction in the social distance between them, which, in theory, should increase interest in the other’s findings, theories, and so on (Black, 2000). Thus, it is advantageous to have a third framework that bridges the crime and harm frameworks, especially if the new framework is equal to or, more so, better than them. This bridging is another aspect of instrumentality, as it improves usefulness.

The first step in creating the typology was to choose an overarching (i.e., first-level) concept. As noted above, harm is more encompassing than crime, so I chose the former to be my first-level concept. Note that to linguistically differentiate the harm framework from my own, I refer to “harm” with a synonym – “pain.” Herein, both are broadly defined as anything perceived as bad (see Bentham, 2005 [1789]: 42).

The next step was choosing second-level concepts (i.e., subtypes of the first-level concept). Recall that in the harm typology, the second-level concepts are harm to users and harm to others; in the crime typology, they are drug-defined crime and drug-related crime. Given my first-level concept drew from the harm typology, I explored synthetic possibilities by adopting something in line with the crime typology’s drug-defined versus drug-related distinction. However, instead of use the word “defined,” I gave a nod to the harm typology by using the word “specific,” which further serves to linguistically synthesize the typologies. Ergo, the pain typology’s first set of subtypes were, initially, “drug-specific pain” and “drug-related pain.” These are defined, respectively, as pains directly tied to a drug (e.g., liver cirrhosis attributable to alcohol consumption) and pains indirectly tied to a drug (e.g., drunken bar fight).

Subsequently, I considered how to draw on the harm and crime typologies’ third-level concepts (i.e., subtypes of the second-level concepts). In the harm typology, harms are physical, psychological and social; in the crime typology, drug-defined offenses include possession, distribution, and production (again, among potentially others), whereas drug-related offenses are psychopharmacological, economic compulsive, and systemic. Because drug-defined offenses lack generality, I subtracted them from synthetic consideration. The basis for this decision is examined in the next subsection, after which I return to synthesis.

Subtracting I

Removing parts of a typology, or subtracting, is a third way of improving conceptual knowledge. Subtraction increases simplicity, which is good. Also, subtraction may increase

generality if it involves removing concept(s) that lack applicability, at least compared to the other concept(s) within a typology. As expounded by Cooney and Phillips (2002, p. 79), “The more settings to which a typology can be applied, the more general it is ... And the more general it is, the more scientifically useful it is. A typology that classifies violence” – or drug-involved phenomena, for instance – “is therefore less useful than a typology that classifies ... [phenomena] in different societies in different times.”

Nutt, King, and Phillips’ (2010) and Goldstein’s (1985) respective subtypes of harm and drug-related crime are more general than subtypes of drug-defined crime. Across time and place, drugs may be associated with the subtypes of harm and drug-related crime delineated by Nutt, King, and Phillips (2010) and Goldstein (1985). For example, today and in ancient societies across the globe, consumption of alcohol may lead to psychopharmacological violence, which is a physical harm to others. Within those typologies, the least general concept is systemic crime. By definition, this phenomenon can only occur in state societies, and, more narrowly, in those that prohibit drug distribution. Looking at it the other way, though, systemic crime is a general concept insofar as it may be found in any state society that prohibits any drug distribution.

Based on the same logic, the least general concepts reviewed to this point are the subtypes of drug-defined crime. To explain why, first, note that like systemic crime, drug-defined crime is (only) relevant in state societies that prohibit drug distribution. However, the subtypes of drug-defined crime are far less general than their umbrella concept. The lack of generality stems from many different governments having control over what drug-involved phenomena it defines as illegal, including not only distribution but also many forms of production, possession, use, and other actions. There is a vast degree of variability in what is illegal – and, thus, what are subtypes of drug-defined crime – across jurisdictions (e.g., the United States versus Saudi Arabia), and even within jurisdictions over time (e.g., Prohibition era versus before and after in

the United States). This means the subtypes of drug-defined crime are jurisdiction- and time-specific. As such, they lack generality.

Back to Synthesizing

To best explain the basis for my third-level concepts, allow me to reiterate part of this article's background and purpose: I am a criminologist; in criminology, the dominate typology of drug-related crime is Goldstein's (1985) typology; outside criminology, Nutt, King, and Phillips' (2010) framework is prominent; both typologies have merit, and the latter can be used to produce a framework of drug-involved harm/help; but I was curious about the prospect of improving upon them; one technique for doing so is synthesis; among other potential benefits, synthesis may reduce the social distance between researchers in different areas of inquiry – such as public health and criminology – who, heretofore, use different typologies; the closing of social distance should promote interdisciplinary knowledge of theories and findings, thereby bettering the whole of scholarship on drug-involved issues.

Though I tried different synthetic arrangements, ultimately I adopted the third-level concepts of the harm framework, with a few modifications. Instead of differentiate “psychological” from “physical” pain, as do Nutt, King, and Phillips (2010), I grouped them into a single category: corporal pain. This change reflects that the “mind” versus “body” distinction is increasingly difficult to maintain in scientific research (Gallagher, 2006; Van der Kolk, 2014). Corporal pain, then, is defined as that affecting the mind and body, i.e. psychological and physical.¹ Another option was to label corporal pain as “psychopharmacological,” thereby drawing on Goldstein (1985), but that connotation is far too narrow. However, Goldstein's (1985) other terms are more workable. So, rather than refer to all other harm as “social,” ala Nutt, King, and Phillips (2010), I split it into two types: economic pain and social pain, which loosely

¹ Of course, if researchers see merit in the psychological/physical distinction, they may simply put them as fourth-level concepts.

linguistically parallel Goldstein's notions of economic compulsive and system crime. In my typology, economic pain pertains to resources, including not only money but also social status (e.g., education, criminal record). Social pain concerns interpersonal relationships and communal networks.

The above process produced six types of drug-involved pain: drug-specific (1) corporal, (2) economic, and (3) social; plus, drug-related (4) corporal, (5) economic, and (6) social; see figure 3. However, this original formulation was no better than the harm typology in comprehensiveness, power, simplicity, or generality, though arguably more instrumental by narrowing the social distance between the harm typology and drug-related crime typology.

--FIGURE 3 ABOUT HERE--

Subtracting II

From working on table 2, I realized it is possible to make the pain typology simpler than the harm typology via subtraction, without any cost to comprehensiveness and power. To show how, recall that table 1 is an adaptation of Nutt, King, and Phillips' (2010) panel 1. In table 1, their definitions and examples of drug-involved harm are fit into six cells: harm to users that is (1) physical, (2) psychological, (3) social; or, to others that is (4) physical, (5) psychological, or (6) social. To demonstrate that my pain typology is equally comprehensive as the harm typology, I reclassified those definitions and examples as drug-specific or drug-related corporal, economic, or social pain.

After completing table 2, I was struck by the lack of definitions and examples found within the cells for drug-specific economic pain and drug-specific social pain. First, I considered whether I mistakenly categorized any definitions and examples. That seems not to be the problem. Rather, those cells are empty because there is no such thing as drug-specific economic pain or drug-specific social pain. All economic or social pain associated with drugs is inherently drug-related.

--TABLE 2 ABOUT HERE--

In turn, that realization led to a reorganization of the pain typology that simplified it via subtraction. Instead of have its second-level concepts be drug-specific pain and drug-related pain, I changed them to corporal, economic, and social pain (i.e., I moved the third-level concepts to the second-level). The drug-specific versus drug-related distinction was moved to the third-level and only connected to corporal pain, as that distinction is irrelevant to economic pain and social pain. Thus, the final formulation of the pain typology has four types: (1) drug-specific corporal, (2) drug-related corporal, (3) drug-related economic, and (4) drug-related social; see figure 4. With only four types, the final formulation is simpler than the harm typology, despite being equally comprehensive, powerful, and general, plus arguably more instrumental.

--FIGURE 4 ABOUT HERE--

Flipping II

Satisfied with the final formulation of the pain typology, I flipped its key concepts to a produce a drug-involved pleasure typology, which jointly make up a drug-involved pain/pleasure framework.² Because there are four types of pain, flipping results in four types of pleasure: (1) drug-specific corporal, (2) drug-related corporal, (3) drug-related economic, and (4) drug-related social; see figure 4. By “pleasure,” I mean anything perceived as good (see Bentham, 2005 [1789]: 42). Corporal pleasure is that affecting the mind and body; economic pleasure pertains to resources; social pleasure concerns interpersonal relationships and communal networks. Corporal pleasure is drug-specific if directly due to drug use, but drug-related if indirect. Economic and social pleasure are only drug-related.

² It could also be referred to as the utility framework, though I have opted not to do so herein because different meanings of “utility” may produce unnecessary confusion among readers.

Illustrations of the Drug-Involved Pain/Pleasure Framework

I illustrate the four types of drug-involved pain/pleasure by drawing on different literatures. To be clear, these illustrations are not “findings” or “results.” This is because they did not inductively lead to the proposed typologies. Rather, and as explained above, the typologies were “found” by synthesizing the harm and crime typologies, and flipping the product of that synthesis. The result is a coherent, instrumental, comprehensive, powerful, and simple conceptual framework for studying drug-involved pain and pleasure. That result is this article’s contribution to the field.

Despite the proposed framework’s merits, readers may be unsure how to use it in their research. At the most basic level, doing so requires identifying the concept(s) relevant to phenomena being researched. To help scholars do so, the following subsections provide examples. Owing to practical issues, the illustrations are necessarily limited. Word/page length is always a limiting factor, but the bigger issue is that the framework encompasses all instances of drug-involved pain and pleasure across time and place (i.e., maximally comprehensive). Thus, it is impossible to provide anywhere near an exhaustive list of examples of each concept, much less examine all of them in the span of an article. I will focus my efforts on four areas that have been well researched: drug-specific corporal pain/pleasure among methamphetamine users; drug-related corporal pain/pleasure tied to college student drinking and sexual behavior; drug-related economic pain/pleasure pertaining to drug distribution; and, social pain/pleasure of relationships and communities emanating from drugs. In addition to illustrating each concept, I draw on these areas to demonstrate that the concepts can be used to organize and connect a diversity of areas within a single framework, thereby aiding knowledge growth.

Before proceeding, I paraphrase Goldstein (1985: 494) so readers do not make more of the concepts than intended: The four types of drug-involved pleasure and pain must be viewed as ideal types. They are not mutually exclusive categories, but the overlap does not harm the framework’s value for conceptually orientating research.

Drug-Specific Corporal Pain and Pleasure

Drug-induced pleasure is older than we are – as a species (see Dudley, 2012). Until relatively recently in history, people drank alcohol because it was safer than water, but also because it produced pleasurable effects (Phillips, 2016). Alcohol intoxication may make a person feel warm, cheery, and sexually aroused, all of which are examples of drug-specific corporal pleasure. Of course, the same substance may cause corporal pain, too. An example is the nausea that results from drinking more alcohol than the body, or mind, can handle.

As I write today, there is an opioid epidemic in the U.S. (Quinones, 2015), with a record number of overdoses (Centers for Disease Control and Prevention, 2018). In 2016, for instance, there were about 64,000 overdose deaths, a rate of nearly 20 per 100,000 persons. The year before, there were more than 300,000 hospitalizations for nonfatal drug poisoning, with an age-adjusted rate of nearly 1 per 1,000 people. About two centuries ago, De Quincey's (2003 [1821]) *Confessions of an English Opium-Eater* provided first hand insight into the utility of opioids (also see, e.g., Bourgois & Schonberg, 2009; Courtwright, 2001a, 2001b). There are two parts to *Confessions*. Part II is more important to the present article, as its sections include "Pleasures of Opium" and "Pains of Opium." In short, De Quincey's use began as a way to reduce pain; he found opium immensely pleasurable, so continued to use it; but, with time, he became addicted and thus the pain associated with use mounted, whereas the pleasure depreciated.

Prior to the most recent opioid crisis, the drug-involved moral panic in the U.S. was over methamphetamine (see Linnemann, 2016). Some of the drug-specific corporal effects are visible, such as "meth mouth" (ibid.). The physical effects are internal, too. "My kidneys are messed up" – said a heavy methamphetamine user – "My liver is messed up. I have really high liver enzymes. I had thyroid trouble since this" (Brownstein, Mulcahy, & Huessy, 2014: 15). Quantitatively, it is evident that methamphetamine remains a problem. In 2015, for example,

there were close to 15,000 hospitalizations for methamphetamine-related poisoning (Centers for Disease Control and Prevention, 2018).

Like it or not, methamphetamine use is not entirely bad. To best illustrate the drug's positives, I should reiterate that pain and pleasure are conceptually distinct, and, thus, so too are pain reduction and pleasure enhancement. For example, people may explain their methamphetamine use as follows: "It was almost like a self-medication type of thing. ... I almost felt normal, as sick as that sounds" (Boeri, 2013: 43); and, "It just kind of drowns out all the issues that I have" (p. 112; also see Carbone-Lopez, Owens, and Miller, 2012; Shukla, 2016). Those are examples of pain reduction, but drug use may also be a matter of pleasure enhancement. A methamphetamine user said of intoxication: "I felt great. ... I felt powerful, I felt confident and energized and just – made me feel good. I liked the way it made me feel ... because it made me feel confident. I had really low self-esteem ... [And] crystal meth made me ... think about things really deeply. So you felt really intelligent and really smart" (Boeri, 2013: 53; also see Carbone-Lopez, Owens, & Miller, 2012; Shukla, 2016). Another methamphetamine user spoke to both the pain reduction and pleasure enhancement effects:

[When doing meth] I wasn't miserable anymore. [I was miserable because] we always had financial problems. We never had enough money. ... But then came along ice, and no more depression, and no more pills, no more feeling sleepy. ... [Meth] would give me energy. Yeah, I'd get up, and clean the whole house up, and cook, have a big dinner ready, and felt happy. You know, that's the thing. That's the devil in the methamphetamine—because it makes you happy. ... I was not doing enough to get the *high, high* feeling. Just enough to [be like] wow, I feel great. I feel good. Let's paint the house. (Boeri, 2013: 56)

It is important not to conflate a drug's legal status with its association to pain or pleasure. There is not a one-to-one relationship between a drug's utility and subjection to formal control. This is the major conclusion of Nutt, King, and Phillips' (2010) article. In their words, "Our findings lend support to previous work in the UK and the Netherlands, confirming that the present drug classification systems [i.e., law] have little relation to the evidence of harm" (p. 1564). To be clear, not every drug's legal status is out of line with its harm. Heroin and

methamphetamine are among the most harmful and controlled substances. Yet alcohol and tobacco are similarly harmful, but subject to much less control. Moreover, those regulated drugs are considered much more harmful than prohibited ones, like ecstasy, LSD and psychedelic mushrooms (ibid.). If utilitarianism is the moral guide, a drug's pleasure should also be factored into policy decisions about legality. Based on findings of the Global Drug Survey (2018a), people score ecstasy, LSD, and psychedelic mushrooms as the most pleasurable drugs, but alcohol and tobacco as the least (see also Global Drug Survey, 2018b). The implications are as obvious as they are contra to current laws.

Drug-Related Corporal Pain and Pleasure

As with drug-specific corporal pleasure, the drug-related type affects the mind or body, but the effect is indirect. I illustrate this concept with research on college students drinking alcohol and then "hooking up," a term that encompasses a wide range of consensual sexual acts among non-committed, relative strangers (Bogle, 2008). Before doing so, I would be remiss not to mention that drinking is a source of much pain among college students. Binge drinking increases their risk of legal trouble, poor school performance, accidental injury, health problems, and others (Vander Ven, 2011; Wechsler & Wuethrich, 2002; Weiss, 2013).

Furthermore, a large proportion of sexual assaults among them involve an intoxicated offender or victim. A variety of studies suggest that half of sexual assaults are committed by inebriated men; at the high end of estimates, this characterizes 80% of incidents (Abbey, Zawacki, Buck, Clinton, & McAuslan, 2001; Zawacki, Abbey, Buck, McAuslan, & Clinton-Sherrod, 2003). Also, research consistently finds that students who binge drink are more likely to have ever committed dating violence, as well as to commit it on a more frequent basis.

Statistics are better felt in personal stories, such as a female student who reported: "The guy took advantage that I was wasted. I don't quite remember. I passed out. I did not want it. I felt horrible and used[,] and experienced physical pain for days" (Paul & Hayes, 2002: 653).

Another student recalled: "I (drunkenly) fell asleep and woke up with the person on top of me. ... He just mauled me in my drunken stupor. I wanted to cry and throw up. I felt used. The guy was gross and totally took advantage of me" (p. 655).

Such incidents involve much pain. Studying drug-involved pleasure does not suggest otherwise, nor does it discount drug-involved harms. Yet, it is important to research both sides of the utility coin. Many alcohol-involved sexual occurrences are enjoyable, and, thus, fit the mold of drug-related corporal pleasure. This relationship is well established in the literature on college students hooking up. Among participants in a nationally representative sample of college women, 40 percent agreed that "[g]oing out in a group, drinking a lot, and then having sex is common at my college" (Glenn & Marquardt, 2001: 74). Consider the account of one female college student:

We didn't go out till like 11 p.m. and I had my first 2 drinks gone by 11:45. I got intoxicated but not wasted. Mixed drinks (rum and coke) and tequila shots laced the night of bar hopping. I ran into people I know and a guy I liked in particular. We hung out with my friends for a while, then he and I went off alone. I was buying him beers to get him to stay and hang out with me because I wanted to see what would happen between us. At 2:00 a.m. when the bars closed we decided to go to his house ... We smoked pot, drank more, then had sex. I was drunk; however, I do not regret it. I had fun, celebrated my birthday, and even got some ass from a guy I liked. (Vander Ven, 2011: 65)

It is possible that the relationship between drinking and hooking up is spurious. In some instances, that is probably true. But the literature also suggests that drinking exerts an indirect effect on pleasurable sex acts (e.g., Paul & Hayes, 2002; Vander Ven, 2011; Williams, 1998).

For example, a male student observed:

The likelihood of [hooking up] happening when you are totally sober is very unlikely, I would say. It is only when people start loosening up by drinking, I call it liquid courage. Most guys are shy about going up to pretty girls, [so that is why] I call it liquid courage. They got enough courage up to go up and talk to the girl. And if she was the same status regarding alcohol consumption, then the two people that are attracted to each other will just go ahead and [hook up]. (Bogle, 2008: 168)

Another male student stated: "Sometimes it's just something that happens, like you have something to drink and you just feel this sudden attraction for someone and they feel this attraction for you it just happens and it ends after that" (p. 47).

Economic Pain and Pleasure

Illicit drug marketplaces are infamous for predation. Users steal from other users as well as dealers, who steal from their competitors and users (e.g., Jacques, Allen, & Wright, 2014; Jacobs, 1999; Sandberg & Pedersen, 2009; Taylor, 2007). Moreover, robbers, burglars, and defrauders steal from users and dealers (e.g., Jacobs, 2000; Morselli et al., 2017; Wright & Decker, 1994, 1997), plus users steal from other people to afford their habit (e.g., Johnson et al., 1985; Nurco, Kinlock, & Balter, 1993). Predation is not solely associated with illicit drugs. For example, people steal alcohol from bars, liquor stores, grocery stores, their parents, friends, and neighbors (e.g., Hearst et al., 2007; Jacques et al., 2016).

Perhaps no research says more about the quantity of economic pain than findings published in two articles with John Ball at the head. In one, Ball, Shaffer, and Nurco (1983) analyzed data gathered from a representative sample of male heroin addicts in metropolitan Baltimore. The authors found “that the average addict committed over two thousand offences” during a nine year period (p. 125). More specifically, the average addict over that time perpetrated theft on about 829 days, among other crimes, to help support their drug habit. In another article, Ball, Rosen, Flueck, and Nurco (1982) estimate the number of crimes committed by heroin addicts in the United States per year and over their lifetime. The numbers are startling, respectively exceeding 50 million and 819 million. Not all of these offenses are cases of economic pain, but many thefts and robberies are instances of such.

Yet, drug-related economics is not all predatory. For instance, many illicit and licit distributors earn income by making fair exchanges (e.g., Jacobs, 1999; Levitt & Venkatesh, 2000). Gifting is part of drug transfer, too (Jacques & Wright, 2008a). A significant percentage of users and dealers act altruistically (Bright & Sutherland, 2017; Harrison et al., 2007). Perhaps more than any other drug, marijuana is known as a beacon of generosity (Zimmerman & Wieder, 1977). Exemplary quotes include “it’s just the culture of marijuana ... I mean, you have

it, you share” and “I think it’s just an understanding that [if] you have something, you share it” (Belackova & Vaccaro, 2013: 296). Dealers are expected to chip in their fair share (Jacques & Wright, 2015). In his counterculture work, *Steal This Book*, Hoffman (1971: 98) righteously states: “Giving dope away can be a real mind-blower. Every dealer should submit to voluntary taxation by the Nation. If you are a conscientious dealer, you should be willing and eager to give a good hunk of your stash away at special events or to groups into free distribution.”

Gift-giving occurs among persons involved in the perceptually “worst” drugs, too. For example, Williams (1992: 44) observes: “There are peculiar contradictions in the crackhouse: generosity and a willingness to look after others are as characteristic of the life as is the stingy practice of stealing drugs from others.” The Global Drug Survey (2018b) asked cocaine users about the amount they purchased for personal use but consumed by others. About 60% of respondents shared a quarter to all of their cocaine. The survey also asked users about the proportion of cocaine for which they paid. Only 1.3% reported all, whereas, at the opposite extreme, nearly 20% reported none.

Sellers of hard drug sellers also give gifts. A person high in the methamphetamine world asserts: “[A]ll good dealers give it to you to start with, always” (Shukla, 2016: 67). Maybe the oldest theory is “pushers” are givers only to get people addicted and thereby make them into steady clientele (Coomber, 2003, 2006). That ties into a more general theory: giving is good business sense. As Adler (1993: 102) notes in *Wheeling and Dealing*: “Dealers and smugglers liked doing business with righteous associates. By ... throwing in extra bits of drugs for their customer’s personal use ... dealers built up good will with their colleagues in the community.”

Some dealers push people to buy from them, but customers are pushy with dealers, too. Jacobs (1999: 68) writes of a crack-cocaine market: “[S]ellers confront a steady and predictable barrage of users who are trying in some form or fashion to take them in [i.e., take advantage of them]. The most innocuous of such attempts involves pleas for more crack than users are willing or able to pay for. ... Dealers reported these pleas to be linked ... to proclamations of

affection.” Gifting among users may be seen as a sign of affection, as well; such is the case among heroin addicts who share to starve off painful withdrawal symptoms (Bourgois & Schonberg, 2009). Indeed, a general principle behind altruism is the golden rule – treat others how you want to be treated. A marijuana user explained her gift giving thusly:

I know there are times when people come over and I don't want to smoke what I have, but I do anyways, because they're my friends and I know they want to get high. There's always [the thought] that, I won't have anything to smoke tomorrow morning or something like that. But the more you share the more it comes back around to you ... whenever I do have it, which is usually, I do share it. People remember that. (Belackova & Vaccaro, 2013: 299)

Social Pain and Pleasure

Drugs are associated with micro and macro forms of social pain, such as family breakdown and declining social cohesion. These problems are evident in many urban ethnographies, such as Anderson's (1999) *Code of the Street* (also see, e.g., Harding, 2010; Venkatesh, 2000). He gives examples of familial pain, like that caused by a wife and mother whose “crack habit got completely out of control, and she gravitated to the streets to become a prostitute to support her habit” (p. 46). And speaking to communal harm, he observes that “drugs ... have become deeply rooted in the inner-city black community, a situation largely tolerated by civic authorities and the police. As law-abiding residents witness this situation, they become ever more cynical and alienated” (p. 111).

Surprisingly to me, statistics on social pain are in short supply. It would be useful to have more quantitative information on the connections between drug-involved behavior, interpersonal relationships, and community. Nutt, King, and Phillips (2010: 1563) agree, noting, “Social harms are harder to ascertain.” In turn, they cite a few quantitative studies that are germane to *their conception* of social harm. I should restate that social harm, per their typology, is not wholly the same as my conception of social pain. By coincidence, for example, the studies they cite as bearing on social harm are not relevant to social pain. Specifically, they refer to “estimates

based on road traffic and other accidents at home, [and] “drug-related violence” (ibid.), which, in my framework, are examples of drug-related corporal pain, not social pain. They also cite studies on the “costs to economies in provider countries” (ibid.); in my framework, that is drug-related economic pain, not social pain.

Despite the dearth of statistics, it is clear that drugs push people apart. However, it is equally apparent that drugs facilitate interaction and glue some people into a community (e.g., Bourgois & Schonberg, 2009; Gallupe & Bouchard, 2015; Kreager, Rulison, & Moody, 2011; Parker, Aldridge, & Measham, 1998). A case in point is the common saying, “Let’s get together for a drink.” When people utter that phrase (and actually follow-up on it), they are using a drug to promote social pleasure. They may also enjoy the corporal effects of alcohol, despite its economic cost. Some people are so fond of a drug that they become deeply enmeshed in a community devoted to the substance, which is its own source of pleasure. They may even travel the world for that very purpose, as did John Locke and Thomas Jefferson owing to their love of French wines (Phillips, 2016), or like the troves of marijuana enthusiasts who visit Amsterdam’s coffeeshops (Leuw & Marshall, 1994).

People can acquire various drugs locally and thereby become enmeshed in their respective subcultures and networks. A young drug user said of his high school drug scene, “You’re like part of a community that’s always sociable” (Jacques & Wright, 2015: 20-1; also see Carey, 1968; Mohamed & Fritsvold, 2010). Right or wrong, people may perceive drugs as one of the few things to do together. Another young drug user put it this way: “I spent a lot of money in high school on drugs, but there was nothing else to do. ... There’s a lot more to it than getting high. ... It’s a very social thing. ... That’s what we did. I don’t know what else you would do. We don’t go to the arcade; we don’t do any of that shit. We don’t go to the ice cream parlor. We drive around in our vehicles and smoke” (p. 21).

Drug selling may be primarily motivated by economic pleasure, but some dealers appreciate its social benefits, too. A couple dealers commented, “I really met so many people

through it. A lot of them are acquaintances or whatever, but a lot of them became friends out of it"; and, "I really met a lot of people through selling, and some of them have actually become really good friends. Selling drugs has made me a lot of really good connections as far as good friends go" (p. 23; also see Carey, 1968; Mohamed & Fritsvold, 2010). Similar to some alcohol-infused hook ups, drug dealing may lead to long-term, friendly relationships. The experience of the following seller illustrates the point:

Most of my customers were my friends [before I started selling]. Some of them were just acquaintances, but I mean a lot of people wanted to hang out with me more. Everybody wants to hang out with a drug dealer. I started hanging out with a lot of people. I mean I know a lot of people that weren't the closest friends became closer friends with me. ... I was hanging out with them, and yeah, they were my friends. They became my friends, and after I stopped dealing, they were still my good friends. (p. 23)

No doubt, drugs lead to social problems, including familial ones. Some of the above-quoted individuals experienced such, an example of which is provided in the next section. Yet, drugs may also improve family relations. An anecdotal example is the untold number of drinks I have shared with my mother to good effect. And, it may not be popular to admit it, but drugs may even make a person into a better parent, partner, son, or daughter (e.g., Boeri, 2013; Carbone-Lopez, Owens, & Miller, 2012). For example, a parent may have a cup of coffee to keep up their energy, or maybe some methamphetamine:

I just thought that [meth] was the greatest thing in the world. ... I could get so much done. I could get, you know, we finished the basement and redid the floors in the kitchen ... [P]hysically I had the energy that could last me forever. ... I would get my family at the dinner table, and I'd run to the store to get whatever I had to get ... I was constantly running. I had one kid in swimming, one kid in judo, one kid that was just a social butterfly. I was constantly on the go. I did events at my daughter's school. Field trips. I had to be at every single one. ... I volunteered at every field trip. (Boeri, 2013: 54-5)

Discussion

This article's purpose has been to further research on drug-involved pleasure to learn about, and thereby inform control of, drug-involved pain. To further illustrate how, imagine that theorists propose or researchers find causes of drug-involved pleasure. Because pain is the

opposite of pleasure, the theories and findings suggest circumstances that do *not* produce drug-involved pain. Likewise, theories and findings on the factors that produce pain should provide insight into the factors that do not produce pleasure. Such information could then be used to inform real-world efforts to control drug-involved pain, and, perhaps, even promote drug-involved pleasure.

The cross-fertilization of theories and findings is promoted by the widespread use of a comprehensive and powerful conceptual framework, all the more so if it is simple, general, and instrumental. That is why I propose the framework of drug-involved pain/pleasure that I did. For the sake of the field, I encourage researchers to adopt the framework, think about the paths it points toward, and act on them. Surely, for instance, more about mental and bodily deterioration due to drug use would be learned by exploring its effect on corporal improvement. More about sexual victimization would be learned from simultaneously considering how alcohol leads to consensual hooking up. More about drug market predation would be learned from dually attending to altruism. And, more about the social breakdown associated with drugs would be learned from examining their association to relationship and community building.

It goes without saying that a powerful framework is of little use unless paired with theory (Cooney & Phillips, 2002). An array of perspectives could be used to explain the causes of and connections between pleasure and pain in their many manifestations (the dependent variables) with various forms of drug involvement, such as use, possession, distribution, and production of different drugs (the independent variables). The field will likely need to – and should – draw on multiple disciplines (e.g., biology, economics, psychology, sociology) to wholly explain the concepts proposed herein. To that point, researchers should keep in mind that the relationships are likely contingent, meaning mediated or moderated by other variables, like “the type of product involved, the people who buy and sell it, and the larger social environment in which the commerce takes place” (Zimring & Hawkins, 1997, p. 153).

Concepts are inherently abstract, but they are not merely academic. Policymakers, enforcers, and researchers should pay close attention to how their decision-making is affected by their working typologies. As another illustration, imagine legislators or law enforcement officials are deciding how to allocate limited resources toward controlling two drugs: “Drug A” and “Drug B.” Researchers determine that A and B cause equal amounts of drug-related crime, but only A produces non-criminal harm/pain. If government officials depend on the crime typology to guide decision-making, they should decide to apply equally severe controls to A and B. But if officials use the drug-involved harm or pain typologies, they should decide to more severely control A than B. Taking the hypothetical scenario a step further, also imagine that researchers determine A produces far more pleasure than pain, but B produces less pleasure than pain. This finding is irrelevant if government officials only concern themselves with preventing pain. In that case, they should do more to control A. Yet if the officials weigh pain and pleasure, they should decide to more severely control B than A.

In short, those scenarios show that choosing between typologies matters in the real world. However, evidence-based policy-making cannot proceed without quantifying the phenomena in question. There is no one right way to quantify the pain and pleasure associated with drug-involved behavior, but the field can help governments and “the people” by devising sound procedures (Nutt, 2012). One possibility is to extend the strategy described by Nutt, King, and Phillips (2010) to score harm: First, experts would choose pleasures to quantify, like those illustrated herein. Next, experts would score drugs with points from 0 of 100, with 100 assigned to the most pleasurable drug on a specific criterion, and 0 indicating no pleasure. The process would be more complicated than just described (for details, see Nutt, King, and Phillips 2010), but it would result in pleasure scores for various drugs. To determine their utility, the pain scores would be subtracted from the pleasure scores.

Another possibility is to combine the above process with Bentham’s (2005 [1789]) ideas on quantifying pain and pleasure. He proposes that for individuals, discrete cases of pain and

pleasure vary in four ways: intensity, duration, certainty, and propinquity.³ He refers to these as “elements” or “dimensions” of pain and pleasure, the sum of which are its “value.” Thus, a case has a greater value of pain or pleasure to the extent it is more intense, lasts longer, more likely to occur, or occurs more quickly.

Post a discrete case of pain or pleasure (e.g., after someone is no longer intoxicated), the initial act may lead to further pain or pleasure. Bentham refers to these long(er)-term effects as fecundity and purity. The former is the likelihood that pleasure leads to pleasure and pain to pain, whereas purity is the odds that pleasure leads to pain and vice versa. To illustrate these concepts, I return to the relationships between drinking, sexual victimization, and hooking up among college students. Pain leading to pain is evident in the physical trauma concurrent with sexual assault turning into persistent psychological trauma (e.g., Brown, Testa, & Messman-Moore, 2009; Schwartz & Leggett, 1999). Pleasure to pleasure is seen in any relationship that starts with an alcohol-infused hook-up and turns into a committed relationship (e.g., Bogle, 2008). An example of pleasure leading to pain is the contraction of an STD during an otherwise enjoyable hook-up, or the embarrassment and shame of a drunken one night stand. For instance, a female student admitted: “We were at this party, drinking. We had sex ... I kicked myself in the ass because beer goggles made me a pick a dog” (Paul & Hayes, 2002, p. 655).

Finally, Bentham (2005 [1789], p. 39) specifies a seventh aspect of quantifying pain and pleasure: “Its *extent*, that is, the number of persons to whom it *extends*; or in other words who are affected by it.” An example is how the pleasure-motive of drug dealing results in familial pain. Consider how a seller’s mother and father reacted to learning of his illegal activity:

I was down and felt like shit. My parents knew that I was selling weed, and my parents thought that I was a bad person because of it. ... My dad said I was an idiot. ... He just talked down to me like I wasn’t a person, you know, like I was a fucking dog or something. ... My mom was like, “I can’t believe this has happened, but it’s alright. I still love you.” ... She said I was lucky they didn’t kill me. Mom was just scared. (Jacques & Wright, 2008b, p. 1020)

³ Criminologists often refer to intensity and duration as severity, and propinquity as celerity.

In sum, there are seven elements of pain's and pleasure's value: intensity; duration; certainty; propinquity; fecundity; purity; and, extent. After outlining and describing those, Bentham (2005 [1789]) proceeds with ideas on how these elements could be used to quantify the "general tendency" of a (drug-involved) behavior to be associated with pain or pleasure: Begin by focusing on the people most immediately affected by the behavior; for them, determine the value of each pleasure and each pain produced by its first instance and thereafter. Next, sum the pleasures and the pains; if there is more pleasure than pain, the behavior has a "good tendency" with respect to the interests of individuals, otherwise a "bad tendency." The final part of the process provides the values on which governments should mark out certain behaviors as "good" or "evil," and control them accordingly:

Take an account of the number of persons whose interests appear to be concerned; and repeat the above process with respect to each. Sum up the numbers expressive of the degrees of good tendency, which the act has, with respect to each individual, in regard to whom the tendency of it is good upon the whole: do this again with respect to each individual, in regard to whom the tendency of it is good upon the whole: do this again with respect to each individual, in regard to whom the tendency of it is bad upon the whole. Take the balance which if on the side of pleasure, will give the general good tendency of the act, with respect to the total number or community of individuals concerned; if on the side of pain, the general evil tendency, with respect to the same community. (p. 40)

Conclusion

I end with a thought on morals: At present, the field and drug policy reflect Epicurus' (2012) notion of right and wrong. For him, the greatest good is the elimination of pain, which may require suppressing the desire for pleasure. Other hedonists, most prominently Bentham (2005 [1789]), argue that in addition to minimizing pain, pleasure should be maximized. Social science involves conceptualizing, theorizing, and researching morals, but it cannot tell us which morals are right (Black, 2013; but see Becker, 1967). Thus, the field cannot determine if drug policy should be more in the shadow of Epicurus or Bentham. Still, research on drug-involved pleasure should be of high importance because it informs knowledge of drug-involved pain and

how to control it. Though not in the way meant by Bentham, knowledge of pain and pleasure are required to maximize good governance.

References

- Adler, P. (1993). *Wheeling and dealing: An ethnography of an upper-level drug dealing and smuggling community*, 2nd edition. New York: Colombia University Press.
- Anderson, E. (1999). *Code of the street: Decency, violence, and the moral life of the inner city*. New York: W.W. Norton & Company.
- Author. (XXXXa). Identifying reference.
- Author. (XXXXa). Identifying reference.
- Ball, J. C., Rosen, L., Flueck, J. A., & Nurco, D. N. (1982). Lifetime criminality of heroin addicts in the United States. *Journal of Drug Issues*, 12, 225-239.
- Becker, H. S. (1967). Whose side are we on? *Social Problems*, 14, 239-247.
- Belackova, V., & Vaccaro, C. A. (2013). "A friend with weed is a friend indeed": Understanding the relationship between friendship identity and market relations among marijuana users. *Journal of Drug Issues*, 43, 289-313.
- Bennett, T., & Holloway, K. (2007). *Drug-crime connections*. New York: Cambridge University Press.
- Bentham, J. (2005 [1789]). *The principles and morals of legislation*. New York: Oxford University Press.
- Black, D. (2000). Dreams of pure sociology. *Sociological Theory*, 18, 343-367.
- Black, D. (2013). On the almost inconceivable misunderstandings concerning the subject of value-free social science. *British Journal of Sociology*, 64, 763-780.
- Boeri, M. (2013). *Women on ice: Methamphetamine use among suburban women*. New Brunswick, NJ: Rutgers University Press.
- Bogle, K. A. (2008). *Hooking up: Sex, dating, and relationships on campus*. New York: New York University Press.
- Bourgeois, P., & Schonberg, J. (2009). *Righteous dopefiend*. Berkeley, CA: University of California Press.

- Bright, D. A., & Sutherland, R. (2017). "Just doing a favor for a friend": The social supply of ecstasy through friendship networks. *Journal of Drug Issues*, 47, 492-504.
- Brown, A. L., Testa, M., & Messman-Moore, T. L. (2009). Psychological consequences of sexual victimization resulting from force, incapacitation, or verbal coercion. *Violence Against Women*, 15, 898-919.
- Brownstein, H. H. (1993). What does "drug-related" mean? Reflections on the problem of objectification. *The Criminologist*, 18, 5-7.
- Brownstein, H. H. (2013). *Contemporary drug policy*. New York: Routledge.
- Brownstein, H. H. (ed.). (2016). *The Wiley handbook of drugs and society*. New York: Wiley Blackwell.
- Brownstein, H. H., Mulcahy, T. M., & Huessy, J. (2014). *The methamphetamine industry in America: transnational cartels and local entrepreneurs*. New Brunswick, NJ: Rutgers University Press.
- Bunton, R., & Coveney, J. (2011). Drugs' pleasures. *Critical Public Health*, 21, 9-23.
- Bureau of Justice Statistics (BJS), United States. (1994). *Fact sheet: Drug related crime*. Rockville, MD: ONDCP Drugs & Crime Clearinghouse.
- Carbone-Lopez, K., Owens, J. G., & Miller, J. (2012). Women's "storylines" of methamphetamine initiation in the Midwest. *Journal of Drug Issues*, 43, 226-246.
- Carey, J. T. (1968). *The college drug scene*. Englewood Cliffs, NJ: Prentice-Hall.
- Centers for Disease Control and Prevention (CDC). (2018). *Annual surveillance report of drug-related risks and outcomes — United States*. Washington, DC: U.S. Department of Health and Human Services.
- Coomber, R. (2003). There's no such thing as a free lunch: How "freebies" and "credit" operate as part of rational drug market activity. *Journal of Drug Issues*, 33, 939-962.
- Coomber, R. (2006). *Pusher myths: Re-situating the drug dealer*. London, UK: Free Association Books.

- Cooney, M., & Phillips, S. (2002). Typologizing Violence: A Blackian Perspective. *International Journal of Sociology and Social Policy*, 22, 75-108.
- Courtwright, D. T. (2001a). *Forces of habit: Drugs and the making of the modern world*. Cambridge, MA: Harvard University Press.
- Courtwright, D. T. (2001b). *Dark paradise: A history of opiate addiction in America*, enlarged edition. Cambridge, MA: Harvard University Press.
- De Quincey, T. (2003 [1821]). *Confessions of an English opium-eater and other writings*. New York: Penguin.
- Dennis, F., & Farrugia, A. (2017). Materialising drugged pleasures: Practice, politics, care. *International Journal of Drug Policy*, 49, 86-91.
- Dudley, R. (2014). *The drunken monkey: Why we drink and abuse alcohol*. Berkeley, CA: University of California Press.
- Epicurus. (2012). *The Art of Happiness*. New York: Penguin.
- Fleck, L. (1979). *Genesis and development of a scientific fact*. Chicago, IL: University of Chicago Press.
- Gallagher, S. (2006). *How the body shapes the mind*. New York: Oxford University Press.
- Gallupe, O., & Bouchard, M. (2015). The influence of positional and experienced social benefits on the relationship between peers and alcohol use. *Rationality and Society*, 27, 40-69.
- Gere, C. (2017). *Pain, pleasure, and the greater good: From the Panopticon to the Skinner Box and beyond*. Chicago, IL: University of Chicago Press.
- Glenn, N., & Marquardt, E. (2001). *Hooking up, hanging out, and hoping for Mr. Right: College women on dating and mating today*. New York: Institute for American Values.
- Global Drug Survey. (2018a). *Drug Pleasure Ratings*. Retrieved September 19, 2018, from <<https://www.globaldrugsurvey.com/past-findings/the-net-pleasure-index-results/>>.
- Global Drug Survey. (2018b). *Key Findings Report*. London, UK: Author.

- Goldstein, P. J. (1985). The drugs/violence nexus: A tripartite conceptual framework. *Journal of Drug Issues, 15*, 493–506.
- Harding, D. J. (2010). *Living the drama: Community, conflict, and culture among inner-city boys*. Chicago, IL: University of Chicago Press.
- Harrison, L. D., Erickson, P. G., Korf, D. J., Brochu, S., & Benschop, A. (2007). How much for a dime bag? An exploration of youth drug markets. *Drug and Alcohol Dependence, 90*(Suppl. 1), S27-S39.
- Hearst, M. O., Fulkerson, J. A., Maldonado-Molina, M. M., Perry, C. L., & Komro, K. A. (2007). Who needs liquor stores when parents will do? The importance of social sources of alcohol among young urban teens. *Preventive Medicine, 44*, 471–476.
- Hoffman, A. (1971). *Steal this book*. New York, NY: Grove Press.
- Holt, M., & Treloar, C. 2008. Pleasures and drugs. *International Journal of Drug Policy, 19*, 349-352.
- Jacobs, B. A. (1999). *Dealing crack: The social world of streetcorner selling*. Boston, MA: Northeastern University Press.
- Jacobs, B. A. (2000). *Robbing drug dealers: Violence beyond the law*. New York: Aldine de Gruyter.
- Jacques, S., & Wright, R. (2008a). The relevance of peace to studies of drug market violence. *Criminology, 46*, 221–253.
- Jacques, S., & Wright, R. (2008b). The victimization—termination link. *Criminology, 46*, 1009-1038.
- Jacques, S., & Wright, R. (2015). *Code of the suburb: Inside the world of young middle-class drug dealers*. Chicago, IL: University of Chicago Press.
- Jacques, S., Allen, A., & Wright, R. (2014). Drug dealers' rational choices on which customers to rip-off. *International Journal of Drug Policy, 25*, 251-256.

- Jacques, S., Rosenfeld, R., Wright, R., & Gemert, F. v. (2016). The effects of prohibition and decriminalization on drug market conflict: Comparing street dealers, coffeeshops, and cafés in Amsterdam. *Criminology & Public Policy*, 15, 843-875.
- Johnson, B. D., Goldstein, P. J., Preble, E., Schmeidler, J., Lipton, D. S., Spunt, B., Miller, T. (1985). *Taking care of business: The economics of crime by heroin abusers*. Lexington, MA: Lexington Books.
- Kleiman, M. A. R., Caulkins, J. P., & Hawken, A. (2011). *Drugs and drug policy: What everyone needs to know*. New York: Oxford University Press.
- Kreager, D. A., Rulison, K., & Moody, J. (2011). Delinquency and the structure of adolescent peer groups. *Criminology*, 49, 95-127.
- Kuhn, T. S. (1977). *The essential tension: selected studies in scientific tradition and change*. Chicago, IL: University of Chicago Press.
- Leuw, E., & Marshall, I. H. (eds.). (1994). *Between prohibition and legalization: The Dutch experiment in drug policy*. New York: Kugler.
- Levitt, S. D., & Venkatesh, S. A. (2000). An economic analysis of a drug-selling gang's finances. *Quarterly Journal of Economics*, 115, 755-789.
- Linnemann, T. (2016). *Meth wars: Police, media, power*. New York: New York University Press.
- MacCoun, R., & Reuter, P. (2001). *Drug war heresies: Learning from other vices*. New York: Cambridge University Press.
- MacCoun, R., Kilmer, B., & Reuter, P. (2003). Research on drugs-crime linkages: The next generation. In *Toward a drugs and crime agenda for the 21st century*, NIJ Report. Washington, DC: US Department of Justice, Office of Justice Programs, National Institute of Justice.
- Moen, O. M. (2015). Hedonism before Bentham. *Journal of Bentham Studies*, 17, 1-18.
- Mohamed, A. R., & Fritsvold, E. D. (2010). *Dorm room dealers: Drugs and privileges of race and class*. Boulder, CO: Lynne Rienner Publishers.

- Morselli, C., Decary-Hetu, D., Paquet-Clouston, M., & Aldridge, J. (2017). Conflict management in illicit drug cryptomarkets. *International Criminal Justice Review*.
- Nurco, D. N., Kinlock, T., & Balter, M. B. (1993). The severity of preaddiction criminal behavior among urban, male narcotic addicts and two nonaddicted control groups. *Journal of Research in Crime and Delinquency*, 30, 293-316.
- Nutt, D. J. (2012). *Drugs without the hot air: Minimising the harms of legal and illegal drugs*. Cambridge, Uk: UIT.
- Nutt, D. J., King, L. A., & Phillips, L. D. (2010). Drug harms in the UK: A multicriteria decision analysis. *The Lancet*, 376, 1558-1565.
- O'Malley, P., & Valverde, M. (2004). Pleasure, freedom and drugs: The uses of 'pleasure' in liberal governance of drug and alcohol consumption. *Sociology*, 38, 25-42.
- Parker, H., Aldridge, J., & Measham, F. (1998). *Illegal leisure: The normalization of adolescent recreational drug use*. New York: Routledge.
- Paul, E. L., & Hayes, K. A. (2002). The casualties of "casual" sex: A qualitative exploration of the phenomenology of college students' hookups. *Journal of Social and Personal Relationships*, 19, 639-661.
- Phillips, R. (2016). *French wine: a history*. Berkeley, CA: University of California Press.
- Quinones, S. (2015). *Dreamland: the true tale of America's opiate epidemic*. New York: Bloomsbury.
- Sandberg, S., & Pedersen, W. (2009). *Street capital: Black cannabis dealers in a white welfare state*. Portland, OR: Polity.
- Scarre, G. (1994). Epicurus as a forerunner of utilitarianism. *Utilitas*, 6, 219-231.
- Schofield, P. (2009). *Bentham: A guide for the perplexed*. London: Continuum.
- Schwartz M. D., & Leggett, M. S. (1999). Bad dates or emotional trauma? The aftermath of campus sexual assault. *Violence Against Women*, 5, 251-271.

- Shorey, R. C., Stuart, G. L., & Cornelius, T. L. (2011). Dating violence and substance use in college students: A review of the literature. *Aggression and Violent Behavior, 16*, 541-550.
- Strodach, G. K. (2012). Introduction. In Epicurus, *The Art of Happiness*. New York: Penguin.
- Shukla, R. K. (2016). *Methamphetamine: A love story*. Berkeley, CA: University of California Press.
- Taylor, A. P. (2007). *How drug dealers settle disputes: Violent and nonviolent outcomes*. Monsey, NY: Criminal Justice Press.
- Van der Kolk, B. (2014). *The body keeps the score: brain, mind, and body in the healing of trauma*. New York: Penguin.
- Vander Ven, T. (2011). *Getting wasted: Why college students drink too much and party so hard*. New York: New York University Press.
- Venkatesh, S. (2000). *American project: The rise and fall of a modern ghetto*. Cambridge, MA: Harvard University Press.
- Warren, J. (ed.). 2009. *The Cambridge companion to Epicureanism*. New York: Cambridge University Press.
- Wechsler, H. & Wuethrich, B. (2002). *Dying to drink: Confronting binge drinking on college campuses*. New York: Rodale.
- Weiss, K G. (2013). *Party school: Crime, campus, and community*. Boston, MA: Northeastern University Press.
- Williams, K. (1998). *Learning limits: College women, drugs, and relationships*. Westport, CT: Bergin and Garvey.
- Williams, T. (1992). *Crackhouse: Notes from the end of the line*. New York: Penguin.
- Wright, R, & Decker, S. (1994). *Burglars on the job: Streetlife and residential break-ins*. Boston, MA: Northeastern University Press.

Wright, R., & Decker, S. (1997). *Armed robbers in action: Stickups and street culture*. Boston, MA: Northeastern University Press.

Zimmerman, D. H., & Wieder, D. L. (1977). You can't help but get stoned: Notes on the social organization of marijuana smoking. *Social Problems*, 25, 198-207.

Zimring, F. E., & Hawkins, G. (1992). *The search for rational drug control*. New York: Cambridge University Press.

Zimring, F. E., & Hawkins, G. (1997). *Crime is not the problem: Lethal violence in America*. New York: Oxford University Press.

FIGURES AND TABLES; in order mentioned in body

Figure 1. Drug-Involved Crime Typology

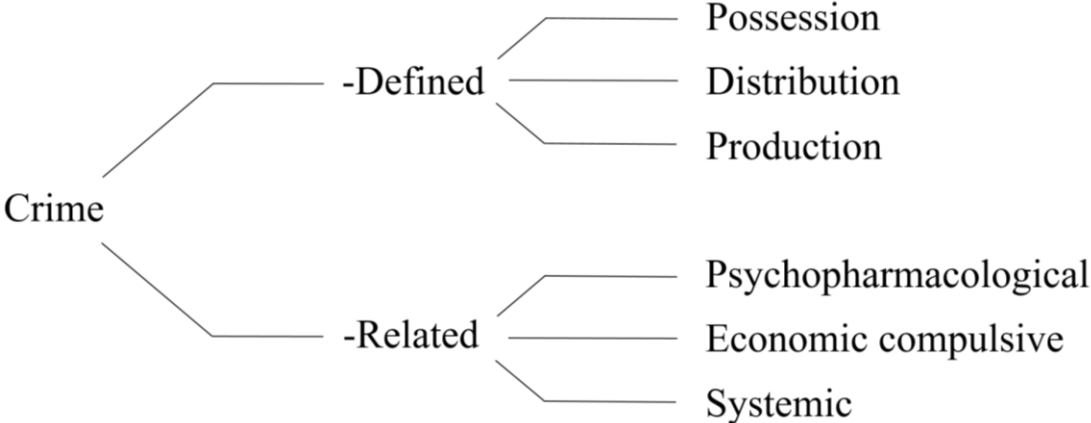


Figure 2. Drug-Involved Harm Typology

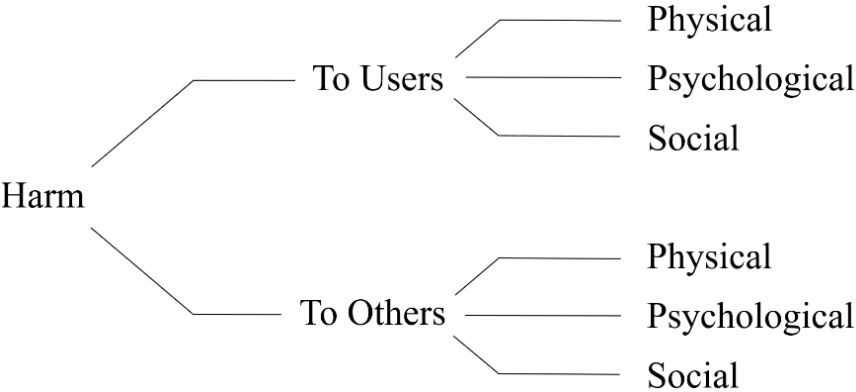


Table 1. Examples of Harm to Users and Others: Physical, Psychological, Social

	Overall Harm	
	Harm to Users	Harm to Others
Physical	Lethal overdose; Life shortened due to, eg, road traffic accidents, lung cancers, HIV, suicide; Cirrhosis, seizures, strokes, cardiomyopathy, stomach ulcers; Sexual unwanted activities, self-harm, blood-borne viruses, emphysema, damage from cutting agents	Chance of physical injury both directly and indirectly, eg, violence, traffic accident, fetal harm, drug waste, secondary transmission of blood-borne viruses
Psychological	Continued use despite adverse consequences; Amphetamine-induced psychosis, ketamine intoxication; Mood disorders secondary to drug-user's lifestyle or drug use	Chance of psychological injury both directly and indirectly, eg, violence, traffic accident, fetal harm, drug waste, secondary transmission of blood-borne viruses
Social	Loss of income, housing, job, educational achievements, criminal record, imprisonment; Loss of relationship with family and friends	Increase in volume of acquisitive crime (beyond the use-of-drug act) directly or indirectly (at the population level, not the individual level); Toxic waste from amphetamine factories, discarded needles; Family breakdown, economic wellbeing, emotional wellbeing, future prospects of children, child neglect; Deforestation, destabilization of countries, international crime, new markets; Direct costs of, eg, health care, police, prisons, social services, customs, insurance, crime, and indirect costs, eg, loss of productivity, absenteeism; Decline in social cohesion and decline in the reputation of the community

Note: Adapted from Nutt, King, & Phillips (2010, p. 1560).

Figure 3. Original Formulation of Drug-Involved Pain Typology

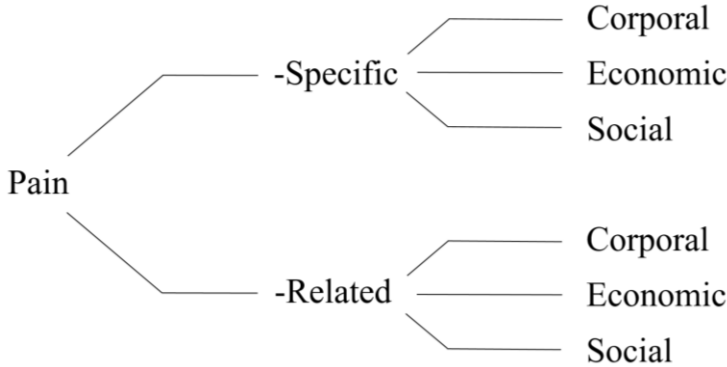


Figure 4. Final Formulation of Drug-Involved Pain and Pleasure Typologies

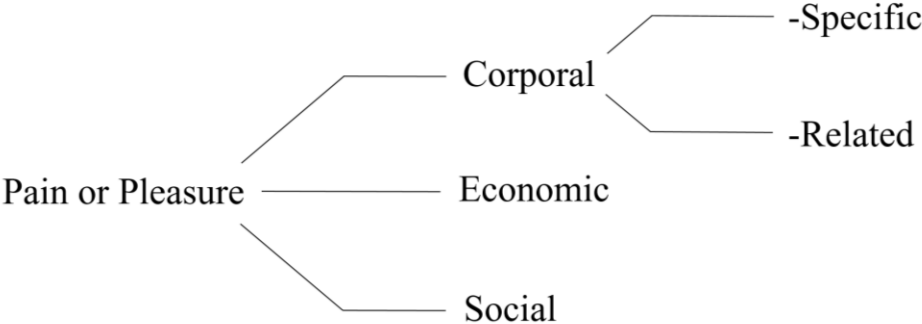


Table 2. Examples of Drug-Specific and -Related Pain: Corporal, Economic, Social

	Overall Pain	
	Drug-Specific Pain	Drug-Related Pain
Corporal	Lethal overdose; cirrhosis, seizures, strokes, cardiomyopathy, stomach ulcers; Continued use despite adverse consequences; Amphetamine-induced psychosis, ketamine intoxication	Life shortened due to, eg, road traffic accidents, lung cancers, HIV, suicide; Sexual unwanted activities, self-harm, blood-borne viruses, emphysema, damage from cutting agents; Chance of injury to others both directly and indirectly, eg, violence, traffic accident, fetal harm, drug waste, secondary transmission of blood-borne viruses; Mood disorders secondary to drug-user's lifestyle or drug use; Emotional wellbeing of family
Economic		Loss of income, housing, job, educational achievements, criminal record, imprisonment; Increase in volume of acquisitive crime (beyond the use-of-drug act) directly or indirectly (at the population level, not the individual level); Toxic waste from amphetamine factories, discarded needles; future prospects of children; Deforestation, ... international crime, new markets; Direct costs to the country (eg, health care, police, prisons, social services, customs, insurance, crime) and indirect costs (eg, loss of productivity, absenteeism)
Social		Loss of relationship with family and friends; Family breakdown, ... child neglect; [D]estabilization of countries; Decline in social cohesion and decline in the reputation of the community

Note: The environment is a resource and thus harm to the environment is a facet of economic pain.