Harm: A Substitute for Crime or Central to It?

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This chapter argues that harm is central to crime, as reflected in early legal doctrine, ongoing scholarly debate, and contemporary criminal policy, but not a substitute for crime. It describes a systematic, evidence-based approach to operationalising 'harm' in criminal policy and criminology, namely, a harm assessment framework; shows how harm assessment can serve criminal policy and criminology; and proposes using 'harmfulness' as a criterion for establishing criminality and to inform decisions about law enforcement priorities, sentencing, victim assistance programs and restorative justice, all with the potential to advance social justice. On that basis, the chapter supports the zemiological perspective, without abandoning criminology.

Introduction

Building on the tradition of critical criminology (e.g., Hulsman, 1986; Christie, 2000), Hillyard, Tombs, and their colleagues have probed the limits and unintended consequences of much contemporary criminological research and have responded audaciously by conventional academic standards. They have proposed replacing the notion of 'crime' with that of 'social harm' and orienting social policy toward harm reduction (see for example, Hillyard et al., 2004; Hillyard and Tombs, 2007; and Yar, 2012) and they have founded an alternative discipline, 'zemiology', which is dedicated to the study of social harm.

Although we share many of their concerns about research and policy, our perspective and intentions are less radical. We agree that criminalisation and prosecution are just one possible strategy for dealing with harm and not necessarily the best, but we do not advocate replacing crime with harm. Rather, we advocate acknowledging the centrality of harm to crime—as reflected in early legal doctrine, ongoing scholarly debate, and contemporary criminal policy—and drawing out the implications for criminal policy.

We also contend that proper acknowledgement of harm requires a means of operationalization. It is one thing to claim the centrality of a concept; it is another thing to put it to effective use. To that end, we offer a methodology, the 'harm assessment

framework', that the policy community, including scholars and practitioners, can use to identify harms and gauge their significance, both systematically and empirically. The framework is evolving, but we take encouragement from an anonymous reviewer of Greenfield and Paoli (2013), who asserted that the framework can do much to move zemiology 'towards rigorous social scientific analysis'.[1]

Lastly, we push back against the long-standing focus of positivist criminology on the causes of crime and argue that 'starting at the end', by making the systematic, empirical assessment of the consequences of crime a new branch of criminology, would benefit criminal policy and the discipline. The emphasis on consequences and assessment could provide crucial evidence for supporting deliberations on criminalization and establishing priorities in crime control and sentencing; for evaluating policy and improving accountability across interventions; and, ultimately, for helping to advance social justice or at least remove manifest cases of injustice. In addition, it could allow criminology to better connect to broader social goals, including, but not limited to, those of justice.

The organization of our chapter parallels that of our arguments. We demonstrate the centrality of harm to crime; describe our harm assessment framework; and discuss how assessment can serve criminal policy and criminology.

Harm's Place in the Theory and Practice of Criminal Policy

Evidence of harm's association with crime dates at least as far back as Roman and Old Germanic law, even if neither body of law defined 'crime' per se. The literature disagrees on whether they distinguished between what would now be called tort and crime, that is, between purely private wrongs and public wrongs (see, for example, Weber, 1960; Mueller, 1955; and Waelkens, 2015). Nonetheless, each body of law, through tort claims or public prosecutions, meant to restore or prevent injuries done to certain goods, interests or rights of individuals or the community.[2] The main reason for these claims and prosecutions was not the breach of law, but the harm to a valuable interest, such life, body or property; religion or morality; or statehood (Eser, 1966: 349-359).

Eventually, focus shifted from harms to individuals or communities to harms to the interests of ruling or governing authorities, the king or the state, and to acts of insubordination: 'the disobedience against the king or the state emerged as the substance of crime' (Eser, 1966: 351). Accordingly, formal definitions of crime surfaced that embraced that perspective and, today, statutory definitions in common and civil-law countries tend to speak of crime as an

[1] After publication, we learned that the reviewer was Gordon Hughes.
[2] Mueller (1955) distinguishes between *delicta privata* and *crimina publica*.

act or omission in violation of a law with an associated punishment (ibid.).

With the shift in focus from individuals to kings, states, and insubordination, 'harm' lost some visibility, but it did not cede its part in the theory or practice of criminal policy. Here, we demonstrate harm's persistence through a brief exploration of its role in criminal policy, beginning with criminalization and proceeding to crime control and policing, sentencing, and programmes for victims of crime and restorative justice.

Criminalization

Harm represents a major, if not the exclusive, criterion for justifying criminalization in academic discourse and as a matter of policy. Taking an extreme consequentialist position, John Stuart Mill ([1859] 1978: 9) famously claimed that 'the only purpose for which power can be rightfully exercised over any member of a civilised community, against his will, is to prevent harms to others'. Most contemporary scholars (e.g., Feinberg, 1985; Simester and von Hirsch, 2011) take a broader view than Mill (for an exception, see Husak, 2007) and advocate for consideration of additional factors (e.g., Hart [1968] 2008: 1).

The non-consequentialist, i.e., moralist, conception of criminal law suggests additional factors for that 'broader view'. The moralist conception makes the immorality of the conduct and the moral culpability of the offender the focal concerns of criminal law (e.g., Duff, 2013). In its extreme formulation, legal moralism leaves no room for consideration of the consequences of crime. According to Moore (1997: 35), for example, the only function of criminal law is to achieve retributive justice by punishing 'all and only those who are morally culpable in the doing of some morally wrongful action'.

More typically, however, scholars propose combinations of harmfulness and wrongfulness (see Duff, 2013). Requirements of justice, for example, might temper or constrain a consequentialist approach to criminal law and preclude some practices, such as the criminalization of faultless conduct, even if those practices would further a goal of harm prevention (Hart, 2008). Others, such as Feinberg (1984; 1985), accept immorality as a reason for criminalization, but emphasise harm prevention as a major purpose of criminal law, drawing on and revising Mill's Harm Principle. Qualifying simple legal moralism, Duff (2007: 140-1) defines crimes as 'public wrongs' that injure collective goods or 'properly concern… the public, i.e. the polity as a whole'.

In contemporary legal theory, though, the term 'Harm Principle' lacks a precise, commonly accepted definition. Duff and Marshall (2014) identify three formulations (Mill, 1859 [1978]; Feinberg, 1984; and Simester and von Hirsch, 2011), from which they derive two different principles, namely a 'harm prevention principle' and a 'harmful conduct principle'. In its

strictest 'Millian' version the former designates harm prevention as 'the only good reason for criminalisation' and in its 'Feinbergian' version it places harm prevention as 'one among other sources of good reason to criminalise' behaviour (Duff and Marshall, 2014:206). The latter, which they associate with Simester and von Hirsch (2011), calls for criminalising acts that elicit harm. The two principles can coincide when, for example, criminalising a conduct that is inherently harmful serves to prevent harm, but can diverge when prevention justifies criminalising conduct that is not in itself harmful.

Despite ambiguities in the doctrine, harm prevention has long served as a main goal of criminal law in the United States (US), Europe, and elsewhere. Until the surge of retributivism (see infra) that began in the 1980s, 'punishment theories, institutions, policies, and practices in the English-speaking countries were based largely on consequentialist ideas' (Tonry, 2011: 6), with offender rehabilitation presented as the leading tool for achieving crime prevention (Tonry, 2011: 6; see also Garland, 2002: 27-52). The American Model Penal Code, which was first published by the American Law Institute in 1962, was shaped by consequentialist ideas. The Code, for instance, declares that the first general purpose of the provisions governing the definition of offences is 'to forbid and prevent conduct that unjustifiably and inexcusably inflicts or threatens substantial harms to individual or public interests' (s.1.01(1) quoted in Duff, 2013).

German criminal law theory posits a similar starting point, with the notion of *Rechtsgüter* or individual and collective interests, which is embedded in Germany's criminal law-making. In this tradition, criminal law is meant to protect specific individual and collective interests against conduct that seriously threatens them (see Roxin, 2006: 8–47).

The legal-interests approach—and attendant concerns for harm—has spread to other European and non-European jurisdictions and contributed to criminal law deliberations at the level of the European Union (EU). For example, in 2009, the Council of the European Union (2009a) adopted model provisions on criminal law, stressing the link between legal interest and harm: 'The criminal provisions should focus on conduct causing actual harm or seriously threatening the right or essential interest which is the object of protection….' (Council, 2009a: 3). In addition, the Council called for consideration of 'how serious and/or widespread and frequent the harmful conduct is, both regionally and locally within the EU' (Council, 2009a: 2) before adopting new criminal provisions.[3]

Crime control

[3] This was the second of three factors for consideration (Council, 2009a: 2).

Contemporary scholars (e.g., Rubin, 1999; Sherman, 2007; Sherman, Neyroud and Neyroud, 2016) and policy-makers (e.g., Radcliffe, 2015; *Economist*, 2016) have proposed harm as a benchmark for priority-setting in crime control and, specifically, policing. Since the 1970s, Finland, a country often regarded as a model for its humane criminal policy and low imprisonment rates, has established the minimization of the costs and harmful effects of crime and crime control as the main goal of its penal policies (Lappi-Seppala, 2007). In other countries and at the EU level, the concept of 'serious crime' epitomises the growing relevance of harm as a benchmark for crime control and has recently become an organizing framework in the crime-control policies of the EU and a number of EU and non-EU states. Europol, for example, claims the fight against serious crime as its mission (Council, 2009a and 2009b) and, in 2007 and 2015, the UK adopted the Serious Crime Acts.[4] In addition, Australia allocates substantial resources to serious crime units.

Although serious crime is not defined univocally, EU policy documents, including treaties, highlight 'the nature and impact … of the offences' (TFEU 2008: Art. 83(1)), which can be interpreted as encompassing harm, as the main substantive criterion for identifying serious crime.[5] Scholars also emphasise the link between serious crime and harm. Dorn (2009: 284), for example, welcomes the policy community's growing attention to serious crime because 'it opens up the possibility of Europol priorities being defined in terms of the seriousness of the harms impacting on individual collective or corporate victim' (see also Sheptycki et al., 2011: 18 and Paoli et al., 2016). Europol, with its 2013 Serious and Organised Crime Threat Assessment (Europol, 2013),[6] as well as several national police and governmental agencies, such as the UK Metropolitan Police Service and the Australian Crime Commission, have begun developing indicators of consequences to implement the idea of serious and/or organised crime (Tusikov, 2012).

Some scholars and practitioners also suggest using harm-related metrics to monitor crime trends, to measure change in the severity of crimes being committed and, ultimately, to improve resource allocation and accountability of policy. In 2007 Sherman (2007: 312) proposed the creation of a total harm index based on the public opinion and Sherman et al. (2016) have developed a 'Crime Harm Index' that relates crimes to penalties, specifically the number of prison days that crimes of that type would incur. In their first application, Sherman et al., work with the Sentencing Guidelines of England and Wales. Along similar lines, statistical agencies from Canada (Statistics Canada, 2009), New Zealand (Sullivan and Su-Wuen, 2013) and the UK (Office for National Statistics, 2016) have developed crime

[4] Available online at http://www.legislation.gov.uk/ukpga/2007/27/contents and http://www.legislation.gov.uk/ukpga/2015/9/introduction/enacted.

[5] The other criterion is the 'special need to combat them on common basis'.

[6] In its second SOCTA, Europol (2017) all but expunges 'harm' and adopts the terms 'threat' and 'impact'.

severity or seriousness scores, multiplying police recorded crime data by actual sentencing data. Ignatans and Pease (2016) have constructed another index, using victims' judgements of offences committed against them as weights of crime counts.

Although it is doubtful that these indexes can account fully for the harms of crime,[7] they testify to a collective, emerging realization that all crimes cannot be treated equally in policy making or implementation and that the consequences of crime must be monitored and considered more systematically in policy deliberations. By comparison, the policy community treats crimes equally and with little introspection when it works with crime counts.

Sentencing

Hall (1960: 213) describes harm as 'the fulcrum between criminal conduct and the punitive sanction', but harm plays its part in sentencing through 'seriousness'. Influenced by retributivist and 'just desert' theories (e.g., von Hirsch, 1986), Ashworth (2006: 30-39) and others hold that appropriate sanctions should be proportional to the seriousness of an offence, which, in turn, depends on a combination of the harm done or risked through the commission of a criminal act and the offender's culpability.

The requirement of proportionality goes back to Cesare Beccaria ([1764] 1995: 14), who in his seminal work, *On Crimes and Punishment*, stressed the need to develop a scale of the seriousness of crimes for setting sanctions. His vision remains unfulfilled—indices built from sentencing guidelines cannot be used to create sentencing guidelines—and, according to Lippke (2012: 464), the lack of 'anchoring points' for a sentencing scheme remains 'one of the unsolved, and seemingly insoluble, problems of sentencing theory'.

Despite the empirical deficit, modern society has not given up on the link between sentencing and seriousness, and thus harm, either implicitly or explicitly. Penal codes and sentencing policies in Western countries tend to reflect the presumed seriousness of offences. For example, penal codes might set maximum sentences for particular offenses or appellate courts regard sentences that are grossly excessive in relation to the gravity of the offence as unfair. Finland, Sweden, the UK, and several US states have adopted statutory guiding principles or sentencing guidelines that require proportionality between the severity of the penalty and the seriousness of the offence. In addition, Canada and New Zealand have enacted statements of desert-oriented sentencing aims (von Hirsch, 2011).

Harm is central not only to crime but also to punishment. Whereas the retributivist tradition emphasises that punishment must be burdensome to achieve the communicative aim of

[7] We discuss some of our concerns, below.

censure on harms and wrongs (Duff, 2011), retributivist scholars, themselves, admit that the excesses and inhumanity of current correctional systems give credibility to the abolitionists' portrayal of punishment as 'delivering pain' (Duff, 2011: 66, quoting Christie, 1981). Empirical studies (e.g., Clear, 2007; Waquant, 2009; Travis, Western and Redburn, 2014) document the serious harms to offenders, their families, and entire communities, generated by the unprecedented expansion of prison systems especially in the US. This body of literature has contributed to initial attempts to reduce mass imprisonment in the US.

Programmes for Victims of Crime and Restorative Justice

Since the 1970s, concern has risen on both sides of the Atlantic about the individuals who are harmed by crime, as evidenced by the extensive media coverage of victims and their experiences, the great expansion of victimology, and the wide range of victim initiatives, programmes, and legislation (e.g. Walklate, 2007). The victims' movement calls for a reform of the criminal justice systems across the world to serve the interests of those directly harmed by crime besides or even before those of the state. A landmark for the global reform movement was the United Nations (1985) Declaration on the Basic Principles of Justice for Victims of Crime and Abuse of Power adopted by the UN General Assembly in 1985. This declaration recognises the centrality of harm to the very concept of victim of crime:

> "Victims" means persons who, individually or collectively, have suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights, through acts or omissions that are in violation of criminal laws operative within Member States.

The declaration also calls on countries to grant victims access to justice and fair treatment, restitution and compensation for the harm suffered as well as material, medical, psychological and social assistance. Many such policies have since been introduced, at least in developed countries, for victims of 'ordinary' crimes (e.g., Office for the Victims of Crime, 2017). However, even these countries are, according to Letschert and van Dijk (2011), still struggling to address the growing number of victims of international crimes. According to some scholars (e.g., Whyte, 2007; Fattah, 2010: 54–57), neither victimology nor policy has paid enough attention to non-individual bearers of harm or to offences that lack immediate individual victims, such as corporate crimes.

The restorative justice movement, as manifest in global initiatives and programmes, also centres on matters of harm and repair.[8] Whether presented as an alternative or

[8] For an overview of initiatives and programmes, see, e.g., Restorative Justice International at http://www.restorativejusticeinternational.com/ and Walgrave (2011).

complement to conventional criminal justice measures, the main purpose of these initiatives and programmes is to repair harm through 'conversations with those who have been hurt and with those who have inflicted the harm' (Braithwaite, 2004: 28). Whereas current programs consist mostly of victim-offender mediation and family conferencing that targets juvenile offenders, Walgrave (2003) and other scholars stress that some existing criminal sanctions, such as compensation or community work, can entail a restorative component and that other criminal sanctions, such as fines or even imprisonment, could be reformed to fulfil a restorative aim. In a 'maximalist version of restorative justice', Bazemore and Walgrave (1999), alongside others, appeal for the development of a fully-fledged justice system that is oriented towards doing justice through restoration, which, with time, would replace the existing punitive and rehabilitative justice systems.

The worldwide growth of restorative justice initiatives has been recognised by the UN Economic and Social Council (ECOSOC, 2002), which adopted a resolution entailing Basic Principles on the Use of Restorative Justice Programmes in Criminal Matters.

The Harm Assessment Framework

If one accepts the premise that harm is central to crime, then one might also see a need for operationalization; more specifically, a means of identifying and gauging harm. Although it might be reasonable to expect to find guidance in a literature replete with debates on theoretical foundations, empirical challenges, and policy implications, that literature has yet to emerge. Perhaps surprisingly, we have not found a methodological cornucopia.

Over the past decade, critical criminologists have begun applying the concept of harm to state crimes, mass atrocities, and a variety of environmentally detrimental and inhumane activities, not all of which are 'criminal' (e.g., Presser, 2013; Rothe and Kauzlarich, 2014; and White, 2011). However, neither these critical criminologists nor the broader policy community, including scholarly advocates of harm-based approaches to crime-control policy, have developed rigorous typologies or assessment tools.

Here, we offer a brief introduction to the literature and its limitations, before turning to our own contributions.[9] Among the scholarly advocates of 'harm', Rubin (1999: 1) proposes 'minimizing harm as a solution to the crime policy conundrum', but without further specification, and Hillyard and Tombs (2004) suggest the scope of a broader 'social harm' approach, but consider its contours only briefly. In pursuit of specification, Maltz (1990), von Hirsch and Jareborg (1991), and Dorn and van de Bunt (2010) attempt to categorise the

[9] For a more complete look back, we suggest Paoli and Greenfield (2013).

harms of crimes, but have gained little traction empirically. Kopp and Besson (2009), Levi and Burrows (2008) and others *de facto* equate harm with social cost and, following the cost-of-crime literature (e.g., Cohen 2005), include the costs of societal reactions, which, as we discuss below, might serve to over-emphasise extant priorities. Europol's (2013) 'Serious and Organised Crime Threat Assessment' is light on methodological insight, but does not appear to distinguish between harms that result from an activity and those that result from the criminalization of or responses to the activity (Paoli, 2014).

Sherman et al. (2016) created the aforementioned 'Crime Harm Index', but, in basing the index on sentencing guidelines, do not distinguish the harms of crime from the factors that came into play in developing those guidelines. The index reflects and codifies prior policy decisions, which, in turn, involved a mix of public perceptions and political imperatives. For that reason, it cannot be used to establish criminality, policy priorities, or sanctions because it already embodies decisions about each. The same is true of the indexes of government agencies that take similar approaches (see, e.g., Office for National Statistics, 2016). Arguably, 'the thing that is broken' cannot be used to fix 'the thing that is broken'.

In recent years, we, the authors of this chapter, have been developing—and applying—a 'harm assessment framework' (Greenfield and Paoli, 2013) that addresses many of the conceptual and technical challenges previously facing proponents of harm assessment (Paoli and Greenfield, 2013). To do so, we have reached across policy communities, disciplines, and literatures, finding salient references as far afield from criminology as U.S. military doctrine (e.g., Greenfield and Camm, 2005). Moreover, we join Ashworth (2006: 30–1), Feinberg (1984: 31–6), and others who treat harm as setbacks to stakeholders' legitimate interests and recognise that the 'dominant political morality' (MacCormick, 1982: 30) plays a central part in establishing legitimacy. Thus, we accept—and even embrace—normativity, but our approach and its transparency, including explicit criteria for legitimacy, allow us to circumscribe the normative and proceed analytically.[10]

Our framework consists of a set of analytical tools woven together in a multistep process (Figure 1) that can be used to identify, evaluate, rank, and prioritise harms. The tools, in order of application, include a template for constructing the narrative or 'business model' of a criminal activity, a taxonomy for identifying the particular harms associated with the activity, scales for evaluating the severity and incidence of those harms, and a matrix for combining that information to rank and prioritise them across society. The assessment process, which uses quantitative and qualitative evidence gleaned from official records, interviews, press reports, etc., does not produce point estimates or fuel an index; rather, it

[10] For example, in tallying harms, we exclude losses of ill-gotten property, such as stolen weapons, from consideration, but we include physical and psychological injuries to perpetrators.

yields rankings of harms that can, among other things, be exploited to establish priorities for criminal policy and inform resource allocation decisions.

[Figure 1 about here.]

The taxonomy gives practical meaning to 'harm' by calling out the potential claimants or 'bearers' of harm and the types of harms they might experience with each criminal activity under consideration (Table 1).

[Table 1 about here.]

The taxonomy accommodates the possibility of harms to each of four general 'classes' of bearers that, together, might constitute much of a society, namely: individuals; private-sector entities, including businesses and nongovernmental organizations (NGOs); public-sector entities, including government; and the social and physical environment.[11]

Bearers in each class experience harms as damages to one or more 'interest dimensions' (von Hirsch and Jareborg, 1991: 19), consisting of functional integrity, material support, reputation, and privacy and autonomy. As apparent in Table 1, not all interest dimensions pertain to all classes of bearers and damages to a particular interest dimension, such as functional integrity, can manifest differently across classes. Following von Hirsch and Jareborg (1991), who build on Sen (1987a and b), we treat these interest dimensions as representing capabilities or pathways to achieving a certain quality of life, referred to as a 'standard of living', or, by analogy, institutional mission.

Our decision to cast a wider net than just individuals and readily quantifiable damages stems largely from our experience working across disciplines.

The severity of a harm depends on the extent to which damages intrude upon either the standard of living or institutional mission; the greater the intrusion, the more severe the harm (von Hirsch and Jareborg, 1991: 17-19). Drawing additionally from Greenfield and Camm (2005: 46-49) and others in the national security community, the framework ranks harms on the basis of both their severity and incidence (Table 2). At one extreme, the damage to an interest could be 'marginal' and occur only 'rarely'; at the other, it could be 'catastrophic' and occur 'continuously'.

[Table 2 about here.]

[11] We define 'government' as all state entities (executive, legislative, or judicial), ranging from local to national, but could include supranational and other publically-funded or -managed bodies.

As shown in Figure 1, the assessment process begins with the characterization of the criminal activity and ends with an investigation of causality. Absent a specific tool, we consider causality in two stages. First, we distinguish the harms that result directly from a criminal activity from those that are 'remote'[12] and, second, we examine the extent to which the harms associated with the criminal activity are intrinsic to that activity or arise from the policy environment and related law enforcement practices.

In summary, the framework regards quantitative and qualitative evidence with equal respect and uses it to produce structured narratives and rankings of harms that accrue to individual, institutional, and environmental stakeholders. On that basis, the approach can be used to render a full accounting of harms and comparisons of harms across society, without resorting to the necessary reductionism and generalizations of point estimates or indices. Moreover, by considering individual, institutional, and environmental interests, we acknowledge that the human experience is multidimensional (see, for example, Nussbaum, 1997, and Sen, 2009) and that the institutions and environmental conditions that help shape the human experience hold value in their own right.

Notwithstanding our interest in casting a wide net, we have set a handful of philosophical and pragmatic bounds on our assessments. For example, we exclude law-enforcement and self-protection costs.[13] This decision might go against common practice in the cost-of-crime literature, but it is not without precedent in the criminological literature (e.g., Dorn and van de Bunt, 2010). As Levi and Burrows (2008, 294) observe, the inclusion of response costs can yield paradoxical results, 'if one includes the costs of responses to crime as part of the "costs of crime", the less that is done about them, the lower are the "costs of crime"' and vice versa. Moreover, although we aspire to full accounting (see Greenfield and Paoli 2012), we did not tally the benefits of crime, itself, in our analyses of drug and human trafficking. This exclusion was not philosophical, but pragmatic. Were we to assess the harms of other activities (e.g. human smuggling) in other places (e.g. Afghanistan, in the case of opium production), the approach could seriously skew our findings.

With other scholars, we have applied the framework to drug production, drug trafficking, and human trafficking in Belgium and the Netherlands (e.g., Paoli, Greenfield and Zoutendijk, 2013; Paoli, Decorte and Kersten, 2015; Greenfield, Paoli and Zoutendijk, 2016) and shown that it can be used to produce policy-relevant 'estimates' of harms across crimes, to prioritise particular types of criminal activities relative to their harmfulness, and, potentially, to allocate public resources accordingly.

[12] Remoteness, in our assessments, refers to the temporal, spatial, or behavioural distance that separates a conduct from its consequences (Greenfield and Paoli, 2013).

[13] We do, however, include medical and reparation costs.

In the discussion that follows, we broaden the case for harm assessment.

The Case for Harm Assessment

Just as harm permeates matters of criminalization, crime control and policing, sentencing, and other societal responses to crime, so too can a systematic, empirical harm assessment serve to strengthen related policy making and implementation.

First, taking either a pure or constrained consequentialist perspective, one might use harm assessment to consider whether specific activities warrant criminalization, even if a final decision on criminalization will not be based exclusively on harmfulness. Pursuant to the 'harmful conduct principle', one might use the approach to test whether an activity, criminal or otherwise, is sufficiently harmful to be called out as criminal. The assessment could, then, help answer what Duff calls a 'central question about criminalization' (Duff, 2010: 109). To paraphrase, when should we—society—abstain from criminalizing some wrongs either because their harms are too trivial or because it is more important to ensure that the harm is repaired or compensated?

In accordance with the 'harm prevention principle', a systematic, empirical harm assessment could be used to establish the extent of harms and investigate the strength of the relationship between a harm and an activity that might not be harmful, in itself. How serious, frequent and remote are the damages associated with an activity and, if not too distant, could criminalizing the activity help prevent substantial harm? In some cases, an assessment might provide solid arguments for avoiding the excessive extension of the harm principle feared by some scholars (e.g., Harcourt, 1999). If future applications of the framework were to entail full accounting and include the benefits of activities, they could accommodate any repeated activity that, even if legitimate, is suspected of generating harms (e.g., tobacco production and trade). This is not to say that we advocate criminalization as an answer to all harms of a particular intensity, but that the approach might provide a means to calibrate the policy response to harm.

Second, the comparison of harms across different types of already-criminal activities can provide initial evidence for setting strategic and tactical priorities for the police and prosecution agencies charged with enforcing criminal (and, possibly, other types of) law. One might, for example, be able to rank activities according to their harmfulness and, without ignoring low hanging fruit, address those activities posing the greatest threats to bearers first. More harmful activities might merit greater attention than less harmful activities, but, as we discuss below, decisions about the implementation of policy

measures—and the allocation of resource to them—should also involve consideration of the feasibility and costs of implementation.

Third, the identification of especially 'harmful' perpetrators might suggest particular avenues of enforcement. For example, the assessment process might reveal that certain types of perpetrators, distinguished by location or criminal affiliations, disproportionally engage in particularly harmful activities. If only implicitly, the High Point, NC, Drug Market Intervention (e.g., Corsaro et al. 2012) took such an approach to reducing violence.

Fourth, an assessment of the severity of the harms of a crime, irrespective of the incidence, could provide evidence to review existing sentencing guidelines and practices. Recalling that 'seriousness' consists of a combination of 'harmfulness' and 'culpability', the assessment might supply an empirical benchmark for judging the former.

Fifth, a systematic, empirical assessment of the harms of crime to different classes of bearers, including businesses, NGOs, government, and the environment, might help programmes for—and research concerning—victims of crime and restorative justice expand their reach beyond traditional crimes and its individual victims (e.g., Fattah, 2010: 54–57; Letschert and van Dijk, 2013). In particular, the assessment might lead to programmes that more rigorously address the harms of non-individual bearers (e.g., Walgrave, 2003: 61; White, 2011). Moreover, a systematic, empirical harm assessment could provide a basis for proportionally aligning restoration and harm. Concerns about proportionality have been raised by several restorative justice scholars (e.g., Duff, 2003) and groups of practitioners (see Van Ness, 2011, for examples). They also inform a basic UN principle: 'Agreements … should contain only reasonable and proportionate obligations' (ECOSOC, 2002: Art. 7). In addition, an assessment that takes the perspective of an 'impartial spectator' (Sen, 2009: 124, citing Smith [1790], 1976) could help policy-makers identify and address all the harms of a conduct, even if victims do not report them fully. The assessment might also avoid unduly privileging the harms recounted by the most vocal victims.

Finally, harm assessment could support the evaluation of existing criminal policy interventions and feed into deliberations about future interventions.

A harm-based approach could be used to assess and compare the impact, including the unintended consequences and distributional effects, of different types of policy regimes or of particular policy measures. The assessment, which might entail a detailed analysis or a well-structured thought exercise, would require repetition to compare the effects of changes in assumptions about the policies or measures in play. A comparison of the status quo with an alternative policy scenario, be it no policy or a newly proposed policy, could support a notional cost-benefit analysis of the status quo in relation to the alternative. However, a full

comparison across options, even if only notional, would necessitate consideration of the implementation costs of each of the alternatives. Absent consideration of those costs, one might inadvertently allocate resources at a net loss.

Through such means, systematic, empirical harm assessment can contribute to deliberations on criminalization, the establishment of priorities in criminal policy, the development of more cost-effective and accountable policy, and, as we discuss below, the advancement of social justice or at least the removal of manifest cases of injustice.

Concluding Remarks

Over the past thirty years, criminology has created an impressive body of evidence on 'what works' and 'what doesn't work' in crime prevention and control (e.g., Sherman, et al. 1998; MacKenzie, 2006); but, it has had less success in other arenas. It has not yet provided policy makers with a firm analytical foundation for establishing priorities or, even more fundamentally, criminality, and it has devoted little attention to the aims, rather than the means, of crime-control policy and the criminal justice system. With the exceptions of critical criminologists (e.g., Hillyard et al., 2004), restorative justice scholars (e.g., Braithwaite, 2002 and Walgrave, 2003) and few mainstream criminologists (e.g., Bottoms, 2008), contemporary criminology has largely eschewed normative theorizing as unscientific and abstained from 'problematizing' the very notions of crime, criminal policy and criminal justice. The dominant positivist criminology also seems to have forgotten that, given the fundamentally constructed nature of crime, criminal policy can only be a means of achieving a higher goal. Both positivist criminology and penal theory, instead, routinely and reductively equate 'criminal justice' with 'retributive justice' and, have become disconnected from broader debates on justice itself (e.g., Brodeur and Shearing, 2005).

We see the systematic, empirical assessment of the harms of crime—and criminal policies—as one of the 'ways of judging how to reduce injustice and advance justice' (Sen, 2009: ix), thus helping to ensure that criminology does more to enhance justice, not just crime control or punishment. Sen's writings indicate a close association between justice and the enhancement and fair distribution of human capabilities and we have adopted such capabilities as our benchmark for gauging the severity of harms to individuals. Without disregard for the relevance of 'procedural justice' to the legitimacy of criminal justice institutions (Tyler, 2006), we agree with Bottoms and Tanbeke (2012) that 'distributive justice', defined in terms of the concrete outcomes of criminal policies, matters and does so increasingly, 'the more significant the outcome [is] for the individual's life' (Bottoms, 2016) or to others' interests. We do not claim harm as the sole criterion for developing and

implementing crime-control policy—or enhancing justice—but, like the mythical Indian prince, Arjuna, who Sen (2009: 213) cites, we argue that 'the results of one's choices and actions must matter in deciding what one should do'.

Almost forty years ago Stanley Cohen (1979; 2015: 86) advocated for a paradigm shift in criminological thought and research in passionate, if polemical, terms:

> There should be a moratorium on nearly all types of standard criminological research and publication. Absolutely prohibited should be any research about the 'causes' of crime and delinquency or the personal characteristics of criminals and delinquents…. Instead, thought and research should be devoted to such questions as: differential perceptions of the seriousness of various crimes and the level of appropriate punishment, the degree to which certain forms of deviance can be tolerated without invoking the criminal sanction; the extent and nature of harm, victimisation and damage by crime.

Cohen's call for a moratorium on mainstream criminology is extreme, but we are convinced that his proposed research programme is no less urgent now than in 1979 and merits consideration as a new branch of criminology. Whether labelled 'zemiological' or 'criminological', such research could serve to elevate the debate on crime among policy makers, law enforcement officials, and scholars; clarify and strengthen the normative foundations of research on crime and criminal policy; benefit concrete policy deliberations and practices; and thus contribute to making our society less unjust.

References

Ashworth, A. 2006. *Principles of Criminal Law*, 5th edn. Oxford: Oxford University Press.

Bazemore, G. and L. Walgrave. 1999. Restorative Juvenile Justice: in Search of Fundamentals and an Outline for Systemic Reform. In G. Bazemore and L. Walgrave, eds, *Restorative Juvenile Justice: Repairing the Harm of Youth Crime.* Monsey: Criminal Justice Press: 45–74.

Beccaria, C. [1764] 1995. *'On Crimes and Punishments' and Other Writings*, edited by R. Bellamy. Cambridge: Cambridge University Press.

Bottoms, A. 2008. The Relationship between Theory and Empirical Observations in Criminology. In R.D. King and E. Wincup, eds. *Doing Research on Crime and Justice* (pp. 75-116). Oxford: Oxford University Press.

Bottoms, A. and J. Tankebe. 2012. Beyond Procedural Justice: A Dialogic Approach to Legitimacy in Criminal Justice. *Journal of Criminal Law and Criminology* 102(1): 119-170.

———. Police Legitimacy and the Authority of the State. Mimeo.

Braithwaite, J. (1989). Crime, shame and reintegration. Cambridge: Cambridge University Press

Braithwaite, J. (2002). *Restorative Justice and Responsive Regulation*. Oxford: Oxford University Press.

Brodeur, J.-P- and C. Shearing. 2005. Configuring Security and Justice**.** *European Journal of Criminology*, 2(4): 379–406.

———. 2004. Restorative Justice and De-Professionalization. *Good Society* 13(1): 28-31.

Corsaro, N., E. D. Hunt, N. Kroovand Hipple, and E.F. McGarrell. 2012. The Impact of Drug Market Pulling Levers Policing on Neighborhood Violence: An Evaluation of the High Point Drug Market Intervention, *Criminology and Public Policy* 11(2): 167-199.

Christie, N. 2000. *Crime Control as Industry: Towards Gulags, Western Style*, 3rd edn. London: Routledge.

Clear, T.R. 2007. *Imprisoning Communities: How Mass Incarceration Makes Disadvantaged Neighborhoods Worse*. New York: Oxford University Press.

Clear, T.R. 2007. *Imprisoning Communities: How Mass Incarceration Makes Disadvantaged Neighborhoods Worse*. New York: Oxford University Press.

Cohen, M.A. 2005. *The Costs of Crime and Justice.* London: Routledge.

Cohen, S. 1972 [2002]. *Folk Devils and Moral Panics: The Creation of the Mods and Rockers*, 3rd edn. London: Routledge.

———. [1979] 2016. Some Modest and Unrealistic Proposals. *New Society*, March 29: 731-734. Reprinted in T. Daems, ed. *Outside Criminology. Selected Essay by Stanley Cohen* (pp. 79-87). London: Routledge.

Council of the European Union. 2009a. Council Conclusions on Model Provisions, Guiding the Council's Criminal Law Deliberations. 2979th Justice and Home Affairs Council Meeting. Available at: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/jha/111543.pdf.

———. 2009b. Council Decision Establishing the European Police Office (Europol), *Official Journal of the European Union* L121: 37-66.

Department of the Army, Marine Corps, Navy, and Air Force. 2001. “Risk Management: Multiservice Tactics, Techniques, and Procedures,” FM 3-100.12, MCRP 5-12.1c, NTTP 5-03.5, and AFTTP(I) 3-2.34. Air Land Sea Application Center.

Dorn, N. 2009. The End of Organised Crime in the European Union. *Crime, Law and Social Change,* 51: 283-295.

Dorn, N. and H. van de Bunt. 2010. *Bad Thoughts: Towards an Organised Crime Harm Assessment and Prioritization System*. Rotterdam: Erasmus University.

Duff, R.A. 2011. Responsibility, Restoration and Retribution. In M. Tonry, ed. *Retributivism Has a Past: Has It a Future?* (pp. 63-85).New York: Oxford University Press.

Duff, R.A. 2007. *Answering for Crime: Responsibility and Liability in the Criminal Law*. London: Hart.

———. 2010. Perversions and Subversions of Criminal Law. In R.A. Duff, L. Farmer, S.E. Marshall, M. Renzo and V. Tadros, eds, *The Boundaries of the Criminal Law* (pp. 88-112). Oxford University Press.

———. 2013. Theories of Criminal Law. In E.N. Zalta, ed., *Stanford Encyclopedia of Philosophy*. Available at: <http://plato.stanford.edu/archives/sum2013/entries/criminal-law/>.

Duff, R. A., and S. E. Marshall. 2014. ‘Remote Harms’ and the Two Harm Principles. In A.P. Simester, A. du Bois-Pedain, U. Neumann, eds, *Liberal Criminal Theory: Essays for Andreas von Hirsch.* (pp. 205–224). London: Hart.

Durkheim, E. [1893] 1997. *The Division of Labor in Society*. New York: Free Press.

Economist, The. 2016. Bobbies on the Spreadsheet: A New Way to Count Crimes Could Reduce the Amount of Harm They Cause. September 3rd.

Eser, A. 1966. The Principle of Harm in the Concept of Crime: A Comparative Analysis of Criminal Protected Legal Interests, *Duquesne University Law Review* 4: 345–417.
ECOSOC, UN Economic and Social Council. 2002. ECOSOC Resolution 2002/12 Basic Principles on the Use of Restorative Justice Programmes in Criminal Matters.
Europol. 2013. *SOCTA 2013: EU Serious and Organised Crime Threat Assessment*. 's-Gravenzande: Deventer.
———. 2017. *SOCTA 2017: Crime In The Age Of Technology*.
Fattah, E.A. 2010. The Evolution of a Young and Promising Discipline: Sixty Years of Victimology, a Retrospective and Prospective Look. In S.G. Shohan, P. Knepper and M. Kett, eds, *International Handbook of Victimology* (pp. 43–94). Boca Raton: CRC Press.
Feinberg, J. 1984. *Harm to Others*. New York: Oxford University Press.
———. 1985. *Offence to Others. The Moral Limits of the Criminal Law*. New York: Oxford University Press.
Garland, D. (2002). *The Culture of Control: Crime and Social Order in Contemporary Society*. Chicago: University of Chicago Press.
Greenfield, V.A. and F. Camm, *Risk management and performance in the Balkans support contract* (Santa Monica, CA: rand, 2005).
Greenfield, V. A. and Paoli, L. 2012. If Supply-Oriented Drug Policy Is Broken, Can Harm Reduction Help Fix It? Melding Disciplines and Methods to Advance International Drug Control Policy. *International Journal of Drug Policy*, 23: 6–15.
———. 2013. A Framework to Assess the Harms of Crime. *British Journal of Criminology* 53(5): 864-885.
Greenfield, V.A., L. Paoli and A. Zoutendijk. 2016. The Harms of Human Trafficking: Demonstrating the Applicability and Value of a New Framework for Systematic, Empirical Analysis. *Global Crime* 17(2): 152-180.
Hall, J. 1960. *General Principles of Criminal Law.* Indianapolis: Bobbs-Merill.
Harcourt, B.E. 1999. The Collapse of the Harm Principle. *Journal of Criminal Law and Criminology*, 90(1): 109-194.
Hart, H.L.A. [1968] 2008. *Punishment and Responsibility. Essays in the Philosophy of Law*. Oxford: Oxford University Press.
Hillyard, P., C. Pantazis, S. Tombs and D. Gordon, eds, 2004. *Beyond Criminology: Taking Harm Seriously.* London: Pluto Press.
Hillyard, P. and S. Tombs. 2007. From 'Crime' to Social Harm? *Crime, Law & Social Change* 48: 9-25.
Hulsman, L.H. 1986. Critical Criminology and the Concept of *Crime*. *Contemporary Crises*, 10(3–4): 63–80.
Husak, D., 2007. *Overcriminalization: The Limits of the Criminal Law.* New York: Oxford University Press.
Ignatans, D. and K. Pease. 2015. Taking Crime Seriously: Playing the Weighting Game. *Policing*, 10(3): 184–193.
Kopp, P. and F. Besson. 2009. A Methodology to Measure the Impact of Organised Crime Activities at the EU Level. In E. Savona, ed., *Organised Crime in the EU* (pp. 301–320). Rotterdam: Erasmus University.
Lappi-Seppälä, T. 2007. Penal Policy in Scandinavia. In M. Tonry, ed., *Crime, Punishment, and Politics in Comparative Perspective* (pp. 217-295). Chicago: The University of Chicago Press.
Letschert, R. and J. van Dijk, eds. 2011. *The New Faces of Victimhood*. Dordrecht: Springer.

Levi, M. and J. Burrows. 2008. Measuring the Impact of Fraud in the UK. *British Journal of Criminology* 48: 293–318.
Lippke, R.L. 2012. Anchoring the Sentencing Scale: A Modest Proposal. *Theoretical Criminology* 16(4): 463-480.
MacCormick, N. (1982), *Legal Rights and Social Democracy: Essays in Legal and Political Philosophy*. Oxford: Clarendon Press.
MacKenzie, D.L. 2006. *What Works in Corrections? Reducing the Criminal Activities of Offenders and Delinquents.* Cambridge: Cambridge University Press.
Maltz, M.D. 1990. *Measuring the Effectiveness of Organized Crime Control Efforts.* Chicago: Office of International Criminal Justice.
Mill, J.S. [1859], 1978. *On Liberty*. Edited by E. Rapaport. Indianapolis: Hackett.
Moore, M. 1997. *Placing Blame. A Theory of Criminal Law*. Oxford: Clarendon.
Mueller, G.O.W. 1955. Tort, Crime and the Primitive. *The Journal of Criminal Law, Criminology, and Police Science* (46): 303–332.
Nussbaum, M.C. 1997. Capabilities and Human Rights. *Fordham Law Review* 66: 273-300.
Office for National Statistics. 2016. Research Outputs: Developing a Crime Severity Score for England and Wales Using Data on Crimes Recorded by the Police. Available: https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/researchoutputsdevelopingacrimeseverityscoreforenglandandwalesusingdataoncrimesrecordedbythepolice/2016-11-29.
Office for the Victims of Crime. 2017. Overview of Crime Victims' Rights. Available: https://www.ovc.gov/rights/overview_rights.html
Paoli, L., 2014. How to Tackle (Organized) Crime in Europe? The EU Policy Cycle on Serious and Organized Crime and the New Emphasis on Harm. *European Journal of Crime, Criminal Law and Criminal Justice* 22: 1–12.
Paoli, L., A. Adriaenssen, V.A. Greenfield and M. Coninckx. 2016. Exploring Definitions of Serious Crime in EU Policy Documents and Academic Publications: A Content Analysis and Policy Implications. *European Journal on Criminal Policy and Research* DOI: 10.1007/s10610-016-9333-y.
Paoli, L., T. Decorte and L. Kersten. 2015. Assessing the Harms of Cannabis Cultivation in Belgium. *International Journal of Drug Policy* 26(3): 277–289.
Paoli, L. and V.A. Greenfield. 2015. Starting from the End: A Plea for Focusing on the Consequences of Crime. *European Journal of Crime, Criminal Law and Criminal Justice* 23: 87-100.
Paoli, L., V.A. Greenfield and A. Zoutendijk. 2013. The Harm of Cocaine Trafficking. Applying a New Framework for Assessment. *Journal of Drug Issues* 43(4): 407-436.
Presser, L. 2013. *Why We Harm*. New Brunswick: Rutgers University Press.
Ratcliffe, J. H. 2015. Harm-Focused Policing. Issue 19 of *Ideas in American Policing*. Washington DC: Police Foundation.
Rothe, D. and D. Kauzlarich, eds. 2014. *Towards a Victimology of State Crime*. London: Routledge.
Roxin, C., 2006, *Strafrecht Allgemeiner Teil*, 4th edn, vol. 1. Munich: CH Beck.
Rubin, E.L. 1999. Introduction: Minimizing Harm as a Solution to the Crime Policy Conundrum. In E.L. Rubin, ed., *Minimizing Harm: A New Crime Policy for Modern America* (pp. 1–33). Boulder: Westview.
Sen, A. 1987. The Standard of Living: Lecture I, Concepts and Critiques and The Standard of Living: Lecture II, Lives and Capabilities. In G. Hawthorn, ed. *The Standard of Living—*

the Tanner Lectures, Clare Hall, Cambridge, 1985 (pp. 1–38). Cambridge: Cambridge University Press.

———. 2009. *The Idea of Justice*. Cambridge: Harvard University Press.

Sheptycki, J.B., H. Jaffel, and D. Bigo. 2011. *International Organized Crime in the European Union*. Note prepared for the European Parliament Directorate General for Internal Policies, Policy Department C: Citizens' Rights and Constitutional Affairs. Available at: http://www.europarl.europa.eu/document/activities/cont/201206/20120627ATT47775/20120627ATT47775EN.pdf.

Sherman, L. 2007. The Power Few: Experimental Criminology and the Reduction of Harm. The 2006 Joan McCord Prize Lecture. *Journal of Experimental Criminology* 3(4): 299-321.

Sherman, L.W., D. Gottfredson, D. MacKenzie, J. Eck, P. Reuter and S. Bushway. 1997. *Preventing Crime: What Works, What Doesn't, What's Promising*. A Report to the United States Congress. Washington, DC: National Institute of Justice.

Sherman, L., P.W. Neyroud and E.C. Neyroud. 2016. The Cambridge Crime Harm Index (CHI): Measuring Total Harm from Crime Based on Sentencing Guidelines. *Policing* 10(3): 171-183.

Simester, A.P. and A. von Hirsch. 2011. *Crimes, Harms, and Wrongs: On the Principles of Criminalisation*. London: Hart Publishing.

Smith, A. [1790] 1976. *The Theory of Moral Sentiments.* Oxford: Clarendon Press.

Sullivan, C. & O. Su-Wuen. 2013. Justice Sector Seriousness Score (2012 revision). 13 December. Available at: https://www.justice.govt.nz/assets/Documents/Publications/justice-sector-offence-seriousness-score-faq.pdf.

Statistics Canada (2009). Measuring Crime in Canada: Introducing the Crime Severity Index and Improvements to the Uniform Crime Reporting Survey. Ottawa: Minister of Industry.

TFEU, Consolidated Version of the Treaty on the Functioning of the European Union. 2008. *Official Journal of the European Union*, C115: 47-199.

Tonry, M. 2011. Can Twenty-First Punishment Policies Be Justified in Principle? In M. Tonry, ed. *Retributivism Has a Past: Has It a Future?* (pp. 3-29). New York: Oxford University Press.

Travis, J., B. Western and S. Redburn, eds. 2014. *The Growth of Incarceration in the United States: Exploring Causes and Consequences*. Washington, DC: National Academies Press.

Tusikov, N. 2012. Measuring Organised Crime-Related Harms: Exploring Five Policing Methods. *Crime, Law and Social Change* (57): 99–115.

Tyler, T.R. 2006. *Why People Obey the Law*. Princeton: Princeton University Press.

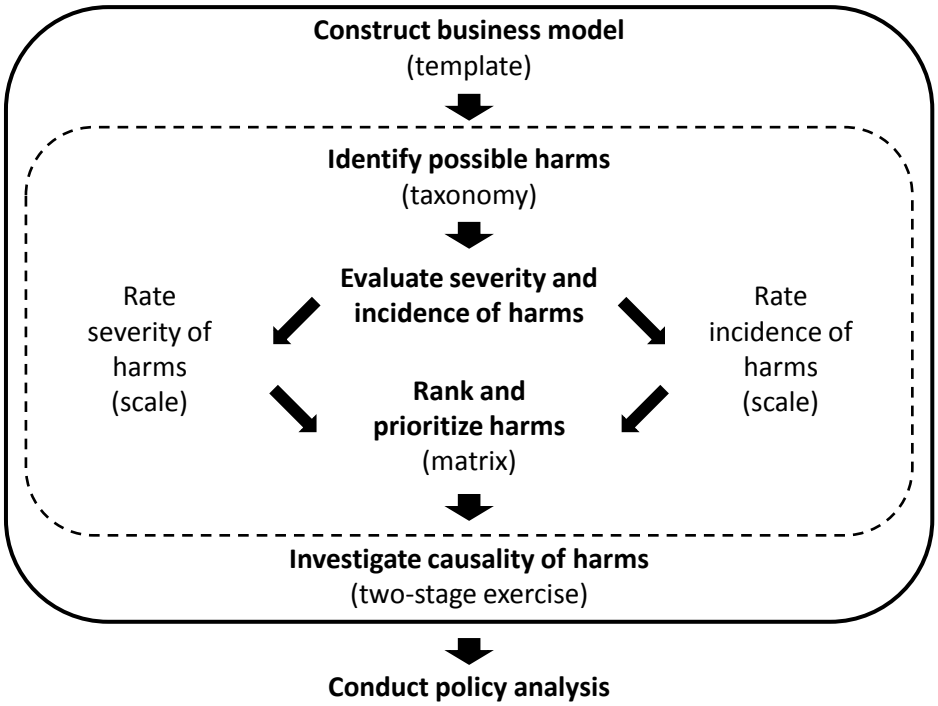
United Nations General Assembly, 1985. Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power. A/RES/40/34.

Van Ness, D.W. 2003. Proposed Basic Principles on the Use of Restorative Justice: Recognising the Aims and Limits of Restorative Justice. In A. von Hirsch, J.V. Roberts, A.E. Bottoms, K. Roach and M. Schiff, eds. *Restorative Justice and Criminal Justice: Competing or Reconcilable Paradigms?* (pp. 157–176). London: Hart.

Von Hirsch, A. 1986. *Doing Justice: The Choice of Punishments*. Boston: Northeastern University Press.

———. 2011. Punishment Futures: The Desert-Model Debate and the Importance of Criminal Law Context. In M. Tonry, ed. *Retributivism Has a Past: Has It a Future?* (pp. 256-273). New York: Oxford University Press.
Von Hirsch, A. and N. Jareborg. 1991. Gauging Criminal Harm: A Living-Standard Analysis. *Oxford Journal of Legal Studies* 11(1): 1–38.
Wacquant, L. 2009. *Punishing the Poor. The Neoliberal Government of Social Insecurity*. Durham: Duke University Press.
Waelkens, L. 2015. Amne adverso. Roman Legal Heritage in European Culture. Leuven: Leuven University Press.
Walgrave, L. 2003. Imposing Restoration Instead of Inflicting Pain. In A. von Hirsch, J.V. Roberts, A.E. Bottoms, K. Roach and M. Schiff, eds. *Restorative Justice and Criminal Justice: Competing or Reconcilable Paradigms?* (pp. 61–78). London: Hart.
———. 2011. Investigating the Potentials of Restorative Justice Practice. *Journal of Law & Policy*, 36: 91-139.
Walklate, S., 2007. *Handbook of Victims and Victimology.* Cullompton: Willan.
Weber, M. 1960. Rechtssoziologie, ed. by J. Winckelmann. Neuwied: Luchterhand.
White, R., 2011. *Global Environmental Harm: Criminological Perspectives*. Portland: Willan.
Yar, M. 2012. Critical Criminology, Critical Theory and Social Harm. In S. Hall and S. Winlow, eds. *New Directions in Criminological Theory* (pp. 5-65). London. Routledge.

Figure 1. The harm assessment process



Source: Authors' adaptation of Greenfield and Paoli (2012) and Paoli et al. (2013).

Table 1. Harm taxonomy

	Class of bearer			
	Individuals	**Private sector, including businesses and NGOs**	**Public-sector, including government**	**Environment, including social and physical**
Interest dimension				
Functional integrity	X[a]	X[b]	X[b]	X[c]
Material support	X	X	X	n/a
Reputation	X	X	X	n/a
Privacy and autonomy	X	X	X	n/a

Source: Authors' adaptation of Greenfield and Paoli (2013) and Paoli et al. (2013).
Notes: X = applicable; n/a = not applicable.
a. Functional integrity refers to physical, psychological, and intellectual integrity.
b. Functional integrity refers to operational integrity.
c. Functional integrity refers to physical, operational, and aesthetic integrity.

Table 2. Matrix for prioritizing harms

Severity	**Incidence**				
	Continuously	Persistently	Occasionally	Seldom	Rarely
Catastrophic	VH	H	H	H/M	M/H
Grave	H	H	H/M	M/H	M
Serious	H	H/M	M/H	M	L
Moderate	H/M	M/H	M	L	L
Marginal	M/H	M	L	L	L

Notes: VH = Very high priority; H = High priority; M = Medium priority; L = Low priority
Sources: Authors' adaptation of Greenfield and Camm (2005: 48), drawing from Department of the Army et al. (2001) and other military doctrine, and Paoli et al. (2013).