

# In Search of Donald Campbell

## Mix and Multimethods

**John Braithwaite**

*Australian National University*

A comprehensive assessment of corporate crime deterrence is long overdue. Natalie Schell-Busey, Sally Simpson, Melissa Rorie, and Mariel Alper (2016, this issue) have been diligent and systematic with a tricky meta-analysis. Corporate crime scholars will be surprised at how many useful studies they have discovered on the effectiveness of corporate crime deterrence even if they have limits for most tests in the meta-analysis. In a domain like business regulatory research, high-quality empirical studies by government agencies around the world usually do not find their way into the academic literature. It is an underestimated service of meta-analyses like this to organize and display that data.

Within the considerable limitations of the systematic data available, the conclusions reached by Schell-Busey et al. (2016) are credible. This policy essay will contend that they become even more persuasive if criminologists think laterally about studies not included that are arguably relevant to the inferences at issue. Donald Campbell shines as a light on the hill guiding how such lateral moves might improve the science.

Increased regulatory inspections seem particularly important in driving strong detection-driven deterrence in this meta-analysis. Mixing regulatory interventions—with an enforcement quiver containing diverse arrows of deterrents and remedies—also works in reducing corporate crime:

Our results suggest that regulatory policies that involve consistent inspections and include a cooperative or educational component aimed at the industry may have a substantial impact on corporate offending. However, a mixture of agency interventions will likely have the biggest impact on broadly defined corporate

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The author is thankful for comments on the essay by Ian Ayres, Peter Grabosky, Neil Gunningham, and Hai Wu. Direct correspondence to John Braithwaite, Regulatory Institutions Network, Australian National University, Fellows Rd, ACT 2601 Australia (e-mail: John.Braithwaite@anu.edu.au).

crime. . . . Single treatment strategies . . . have minimal-to-no deterrent impact at the individual and company levels. However, studies examining multiple treatments produce a significant deterrent effect on individual- and corporate-level offending. . . . Based on our results, we determine that a mixture of agency interventions is apt to have the biggest impact. (Schell-Busey et al., 2016)

What kind of mixture and exactly how to combine punishment and persuasion are questions put on the research agenda by this finding.

### **Being a Criminologist Can Be a Bad Thing**

One mundane, seemingly uncontroversial, conclusion is that more “consistent measures of corporate crime” are needed: “Simpson and Yeager (2015: 12) observed that the first step toward solving these problems is to have a sensible, commonly understood, and culturally shared definition of the phenomenon” (Schell-Busey et al., 2016). Is this really sage advice? I doubt even Schell-Busey et al. (2016) think so, as evidenced by their useful discussion of how their conclusions about the efficacy of regulatory inspection are affirmed by studies beyond their meta-analysis that support an association between inspection and reduced injury or accident rates (definitely not measures of “corporate crime” even though these studies sometimes show convergent validity in correlations between compliance rates and injury rates).

In “normal” criminologies of homicide or armed robbery, for example, what interests the policy maker and the criminologist are reduction in, or explanation of, the incidence of homicide or robbery. With environmental crime, in contrast, the interest of both policy makers and criminologists is in improving compliance with environmental laws as a means to reduced environmental degradation. Policy makers are not as interested in compliance with occupational health and safety laws for their own sake as they are in lower levels of workplace death, disease, and injury. Policy makers and scholars alike are less interested in law enforcement that reduces the incidence of subprime mortgage fraud than in law enforcement that succeeds in preventing such abuses from cascading to a global financial crisis.

Corporate crime is an important subfield of criminology in that it can be shown that the corporate crimes of even one industry can cause greater losses of lives and property than all kinds of common crime combined (Dukes, Braithwaite, and Maloney, 2014). That is without even considering the health impacts of mass unemployment after financial crises that corporate crimes might help induce. Yet corporate crime is a methodologically deviant subfield. Corporate criminologists can reasonably be methodologically focused on outcomes like saving the planet from greenhouse gases, preventing the next global financial crisis, and saving lives from hazardous products more than on reducing corporate crime. The paradox is that we need more corporate criminologists, but we need

them to be less methodologically criminological in the sense of focusing on crime as a consistently defined dependent variable.

### **Which Donald Campbell?**

There is also a methodological rationale for rejecting calls for consistency in defining the dependent variable in studies of corporate crime enforcement effectiveness. Here, we can be inspired by the second face of Donald Campbell. Campbell's first face is familiar to criminologists as the Campbell who inspired the most influential collection of meta-analyses in applied social science, the Campbell Collaboration. This first Campbell is the methodologist of iterated, aggregated experimental evaluations: the "Godfather" of meta-analysis. His second face is the Campbell who "rejects definitionism but not operationalism in scientific method" (editor's comment in Campbell, 1988: 28). Operationalism is vital for Campbell in the sense that for each method to measure each construct, the measurement steps or operations must be specific and precise. Yet Campbell was opposed to "operational definitions"; he wanted to separate operationalization from definition (Campbell, 1988). For this second Campbell, science is more valid when it uses a series of imperfect definitions rather than a singularly imperfect definition. The quantitative Campbell shares surprising common ground with the ethnographic Donald Levine (1985) in his critique of the compulsion to flee ambiguity: Levine advocated a social science that cultivates moments of both analytically strategic ambiguity and strategic disambiguation. Campbell believed in qualitative cross-cultural research because of his pursuit of convergence in the face of "a heterogeneity of irrelevancies" (Hunt, 1986: 10–11).

With corporate crime, definitional consistency is particularly undesirable because reliability and validity in the measurement of the variable of ultimate policy interest with corporate crime is often superior to reliability and validity in the measurement of corporate crime itself. Consider tax fraud by multinational corporations through artificially shifting profits to tax havens. The courts find it monumentally difficult to decipher when profit shifting that reduces tax liabilities to zero is legal, illegal but not criminal, or criminal fraud. This is sometimes expressed as the difficulty of deciphering when profit shifting is tax evasion, avoidance (aggressive tax planning to avoid the spirit of the law), or legal tax planning. The deciphering difficulty is profound for quantitative researchers who lack the resources to do months of accounting and legal research into the criminality of every "offender" they code.

Therefore, in this domain, the best approach, at least theoretically, is to assign a random sample of multinational companies that have reduced their reported profits to zero through transfer pricing (or other profit-shifting strategies). Different companies in the sample are assigned to different law enforcement strategies. Then criminologists can measure whether the companies targeted with a particular law enforcement strategy start paying significant amounts of tax, and how much. With the cooperation of a national tax authority, this can be measured with near-perfect reliability and validity. Tax fraud cannot. Indeed, the most

sophisticated forms of tax fraud are so sophisticated that the smartest criminologists have not yet woken up to what they are!

Unfortunately, no one has managed to persuade a tax authority to randomly assign multinational corporations to responsive regulatory enforcement, although some of us persist in attempts to do so. Australia has, however, introduced responsive regulation and the kind of mixture of enforcement strategies found by Schell-Busey et al. (2016) to improve corporate crime compliance. Although the research design was weak compared with the randomized controlled trial advocated, it found that enforcement mix organized into a pyramid dramatically increased the tax paid by multinational corporations active in profit shifting (Braithwaite, 2005b). Indeed, this research concluded that for every million dollars spent on the responsive regulatory enforcement program, an extra billion dollars in tax was collected.

If we apply a Campbell and Fisk (1959) multitrait–multimethod approach to corporate crime research, we can add depth and dimensionality to Schell-Busey et al.'s (2016) meta-analysis by complementing it with narrative reviews of studies of law enforcement impacts such as corporate tax payments. We will never achieve depth of understanding with studies narrowed to corporate compliance with transfer pricing laws or profit-shifting laws.

Donald Campbell produced no more influential publication than “Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix” (Campbell and Fiske, 1959). It has 15,000 Google Scholar citations. Campbell and Fiske (1959) employed a correlational analysis of multiple traits (constructs) and methods for measuring those constructs in search of convergent results that enhance the belief that conclusions are not a methodological artifact. The idea that convergence suggests increased validity was the reason for Campbell and Fiske's (1959) influence. It was later picked up across the social sciences to justify mixed methods, triangulation, and much more.

In contemporary social science, this includes convergence of valid variance across mixed qualitative and quantitative methods. Campbell and Fiske (1959) did show openness to qualitative, multiconstruct, multimethod data when they argued we should have more confidence in the conclusions of historians when they have numerous sources of maximally different and independent kinds that converge on the same conclusion. The Donald Campbell idea of discriminant validity is that different-construct, different-method correlations should not be too high, especially relative to same-construct, different-method correlations. This idea is equally relevant to mixed qualitative and quantitative literature reviews. So is the idea of assessing whether method variance (variance resulting from the nature of the measure as opposed to from the nature of the construct) can be detected by observing the different-construct, same-method correlations to be stronger than the different-construct, different-method correlations. Construct validity for Campbell was the result of a combination of discriminant validity and convergent validity. Convergent validity is the degree to which there is agreement among different attempts to measure the same construct.

The evidence across the social sciences is now considerable that common methods can inflate correlations among variables traversed in literature reviews because of shared error variance, as Donald Campbell warned (Doty and Glick, 1998; Podsakoff, MacKenzie, Lee and Podsakoff, 2003). In criminology, we might therefore hope to find that self-report items to measure a type of offending, like drug use, might have more than just higher correlations with other drug-use items compared with nondrug self-reported crimes (as in Braithwaite and Law [1978] and as in confirmatory factor analysis that affirms a drug-use factor). We might also hope to find that such a convergent self-report measure would correlate with police arrest for drug use and with ethnographic observations of business executive drug use at corporate parties. Corporate crime convergent and discriminant validity would mean that qualitative data on the modus operandi of bribe payments by corporations might reveal some positive associations with regulatory data on corporate bribery (as it does in Braithwaite, 1984: Chapter 2) without strong evidence emerging from these data that executives involved in bribery are also more likely to be drug users, burglars, or bank robbers (as it does not).<sup>1</sup>

The particular kind of Donald Campbell point here about Schell-Busey et al.'s (2016) meta-analysis is about studies that reach similar conclusions using dependent variables that do not measure "corporate crime." If their dependent variables share content validity with corporate crime in that they represent facets of that construct—outcomes that corporate criminal law is designed to secure—then we should be more confident about those conclusions.<sup>2</sup> An outcome that environmental law is meant to secure—reduced pollution—is more highly correlated with environmental crime than it is with other kinds of crime like armed robbery. If so, then we are on Campbell's road to convergent and discriminant validity by including in our literature review impacts of corporate enforcement on pollution reduction. This will be particularly so if outcomes of compliance like reduced pollution can be measured more reliably and with larger, more random, samples than corporate compliance itself.

### **Example: The Time-Series Weakness in Schell-Busey et al. (2016)**

Schell-Busey et al. (2016) show that all the studies indicating a significant deterrent effect for multiple sanctions, at both the individual and corporate levels, were cross-sectional. Sensitivity tests revealed no evidence of publication bias at either level of analysis. Although in general, in Schell-Busey et al.'s results, more rigorous studies found lesser deterrent impacts and sometimes more iatrogenic results, the reverse was the case with the impact of

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1. Of course, some criminologists do not discriminate between the correlates of "white-collar" and all other crime (Hirschi and Gottfredson, 1987), but corporate crime experts universally find empirical fault with this conclusion (e.g., studies cited by Pratt and Cullen, 2000: 934).
  2. Campbell and Fiske (1959: 83) quoted Cronbach and Meehl (1955: 295) in seeing this as a point about construct rather than about content validity: "Numerous successful predictions dealing with phenotypically diverse 'criteria' give greater weight to the claim of construct validity than do predictions involving very similar behavior."

multiple treatments. So even though the effect sizes for multiple treatments are not large, there is encouragement in the pattern of results:

Our most consistent finding (and least subject to publication bias and poor methodological design) is that *multiple treatments*, at the individual and company levels, produce a significant deterrent effect. We cannot unpack, however, whether this effect is a result of the unique contribution of regulatory actions (nonpunitive interventions), which is mixed in with other treatments, or whether deterrence is achieved via the layered multiprong approach of the enforcement pyramid. (Schell-Busey et al., 2016)

On the negative side, from the perspective of multimethod convergent validity, it is a considerable weakness that all the studies contributing to this effect are cross-sectional. Schell-Busey et al.'s (2016) meta-analysis can be saved from this weakness by making the second Campbell move from a multimethod approach to a multiconstruct ("multitrait") approach. Time-series analyses of the impact of multiple treatments on the outcomes that corporate criminal law are designed to secure have long been available and are supportive of Schell-Busey et al.'s multiple treatments conclusions.

Braithwaite (1985) reviewed early evidence of time-series impacts for coal mine safety enforcement. One classic study was published by Lewis-Beck and Alford (1980) in the *American Political Science Review* and therefore widely ignored by criminologists. Consistent with results from Schell-Busey et al.'s (2016) review, Lewis-Beck and Alford (1980) found an extremely strong time-series correlation between the size of the U.S. federal government's coal mine health and safety enforcement budget and mine fatalities. Their interrupted time-series analysis from 1932 to 1976 also supports Schell-Busey et al.'s (2016) multiple treatment result. Lewis-Beck and Alford (1980) found coal mine health and safety law reform always followed major disasters in which more than 70 miners perished. At these historical moments, regulatory reformers could pull proposals from their top drawer for new suites of regulatory tools and enforcement budget increases that had previously failed to garner support from pro-business legislative coalitions (that were "coal-itions"). Lewis-Beck and Alford (1980) showed that when legislative coalitions succeeded in watering down new laws to "symbolic" reform or regulatory ritualism (Braithwaite, Makkai, and Braithwaite, 2007), there was no impact on mine fatality rates. However, the law reforms that substantially increased enforcement budgets, enforcement tools, and enforcement action—"multiple treatments" deterrence—sharply reduced mine fatalities per million employee hours across all coal mines in the United States. Perry (1981) replicated the Lewis-Beck and Alford (1980) result by using different time-series techniques over a longer period. I am not aware of any studies that have used pooled time-series, cross-sectional data to confirm the impact of multiple treatments on coal fatalities. This reduces the *n* of mines and workers, but it can increase the *n* of policy change points, and is another fertile multimethod, multiconstruct move. Leslie Boden (1985) of Harvard University did confirm Schell-Busey et al.'s

(2016) result on the efficacy of increased regulatory inspection, finding for 535 coal mines in a pooled time-series, cross-sectional analysis that after controlling for seam thickness, mining technique, mine size, unionization, and whether the firm was a “captive” (owned by another firm that used its output) that increased inspection markedly reduced both fatalities and injuries.

More recently, Choi, Chen, Wright, and Wu (2016) set out to test the deterrent effectiveness of the historical construction between 1992 and 2006 of the Australian Securities and Investment Commission’s (ASIC) responsive regulatory pyramid. The Choi et al. (2016) analysis showed that as successive regulatory crises and law reform surges progressively equipped ASIC with new layers of more varied arrows in its law enforcement quiver, the effectiveness of ASIC enforcement progressively increased. A difference-in-difference analysis with the impact of New Zealand securities and financial market regulation as a control reinforced this result. From a Campbell convergent validation perspective, the Choi et al. result could not be more elegant in its multiconstruct, multimethod validation because its dependent variables could not be less criminological. From the perspective of Choi et al.’s disciplines of economics and accounting, and their provenance in business schools, they were interested in the effectiveness of securities regulation in making markets more transparent to investors and therefore more efficient and hopefully less prone to artificial bubbles that burst. The ASIC outcome of concern was whether the market was fully informed. Did regulation produce an improved information environment and market liquidity? Hence, Choi et al. measured the impact of the Australian and New Zealand financial disclosure regimes by variables such as reduction in financial analysts’ forecast errors, forecast dispersion, bid–ask spread, and increase in the turnover rate from the market liquidity test. The ASIC budget and enforcement intensity (measured by prosecution counts) helped analysts to reduce forecast errors for future profits. The responsive regulation effect more strongly increased predictive accuracy over and above those impacts on the integrity of markets. The leverage in such data was formidable with an Australian sample of 148,498 firm-month observations (with each observation based on the median for a number of analysts) and a New Zealand sample of 116,585.

The Choi et al. (2016) research has the strength of a multiconstruct, multimethod move to a pooled time-series, cross-sectional analysis of all major corporations in an economy on an outcome that securities enforcement is designed to deliver, combined with a difference-in-difference analysis of two whole economies. It delivers a larger *n* of observations than research in the criminological paradigm.

Of course, the pooled time-series is far from the most neglected method in the methodologically individualist mentality of literature synthesis in the Campbell Collaboration tradition. A clearer example of a neglected method shift is to a more systematic, cross-national comparison as illustrated by Clarke and Evenett (2003) with respect to the vitamin cartel: a candidate for the most shockingly persistent, large, and global cartel in the recent history of capitalism. Clarke and Evenett (2003) found for 90 countries that vitamin prices increased

less in countries where cartels were prosecuted and where fines and other sanction types were enforced.

### **Meta-analysis and the Big Picture**

When Braithwaite (1985) set out to understand coal mine safety regulation, his intent was not to test any theory. The discovery of responsive regulatory theory had nothing to do with his theoretical insight, nor that of his subsequent co-author, Ian Ayres, who invented the term “responsive regulation.” Responsive regulation was something qualitatively observed among master practitioners of mine safety when they turned around unsafe mines. As is common, if there was insight, it was in regulatory practice that was in advance of theory. All Ayres and Braithwaite (1992) added was to dress up master practitioner enforcement insights with some passing theoretical coherence. The method point here is that theory constructed from robust ethnographic data has a validity that is more likely to be confirmed by quantitative meta-analysis three decades on than theory constructed from an armchair. Ethnographically grounded theory has independent validity claims.

It is challenging to plug into a meta-analysis the kind of synthesis in Braithwaite (1985) of quantitative insights in studies such as Lewis-Beck and Alford (1980), in qualitative diagnoses of official reports on the causes of 39 mine disasters in five countries; in qualitative observation of coal mine inspection practice cross-nationally; and visits to coal mines, safety departments, and corporate headquarters of five corporations with the best safety records (and more recent syntheses in this qualitative–quantitative tradition; Gunningham and Sinclair, 2012). Equally, it is difficult to plug into a meta-analysis the considerable complexity of nursing home regulation quantitative and comparative ethnographic research (Braithwaite et al., 2007) that was also mostly published before Ayres and Braithwaite (1992). It also made inductive contributions to refining regulatory mix—again from the wisdom of master practitioners who were occasionally having massive impacts on the quality of care received by the frail aged.

This is a pity because the qualitative–quantitative synthesis in this body of empirical work on safe nursing homes is important in ways unachievable in the criminological paradigm. The observational data of encounters between inspectors and lawbreakers and of inspectors doing detection work was at a level of comparative depth and extensiveness across time and space that is difficult to find in policing ethnographies. The quantitative data in the nursing home research are far in advance of Braithwaite’s (1985) responsive mine safety research in a Campbell construct validation sense. Braithwaite et al. (2007) were able to conduct factor analyses of 31 measures of corporate compliance for 410 nursing homes; surveys of stakeholders with a 93% response rate; various studies of convergent and discriminant validation; and a reliability study that established high reliability when different inspection teams entered the same nursing home to rate their compliance independently with the 31 measures. The quality of the reliability and validity of this nursing home data on compliance with quality of care standards—the size of the coefficients—were far in advance



of any measure of “crime” in the literature, be it corporate crime or common theft. This was no testimony to the researchers: It was a testament to a Campbell lateral move.

The quantitative work on nursing home compliance had some findings that are relevant to how to build on Schell-Busey et al.’s (2016) meta-analysis. Praise by inspectors when some aspect of compliance improved was a far more important predictor of further and wider compliance improvement than various measures of deterrence. In public policy terms, this is a significant result because informal praise by government inspectors is so cheap compared with law enforcement. Deterrence is important to a regulatory mixture that works, but it is far from the most important ingredient. In future multimethod, multiconstruct work, obvious candidates for discriminant validity will be positive sanctions like praise, which can be distinguished from negative sanctions like deterrents, which can be distinguished from incapacitation (e.g., closing nursing homes), and which can be distinguished from neutral remedies of diverse kinds like retraining, reformed compliance systems, managerial restructuring, and inducing a sense of civic duty (and combinations of these as in Kagan, Gunningham, and Thornton, 2012). The conclusion returns to the question of what kinds of further analyses Schell-Busey et al. might undertake in light of such prior research results.

More than improved construct validity for quantitative theory testing is accomplished by broadening the construct to embrace measures such as whether mines or nursing homes increase death or “pain” (one of those 31 nursing home outcome standards based on patient interviews and medical record reviews). The most important strength of qualitative–quantitative syntheses of data on successes and failures across time in improving corporate crime control is that they have a chance of catching the impact of transformative enforcement changes. One weakness of Schell-Busey et al.’s (2016) meta-analysis is that its overwhelmingly cross-sectional character does not capture the impact of the New Deal. A reading of the historical literature on the New Deal in combination with reading scholarship of that era by the likes of John Maynard Keynes in his general theory might warrant an inference that capitalism was dramatically more secure from corporate crime, and much more secure from economic crisis, than it was before New Deal regulatory reforms. How limited is a form of empirical scholarship that measures the impact of tiny regulatory enforcement changes while ignoring the impact of historically massive ones like the New Deal? This is not a criticism of this or any meta-analysis; it is a critique of putting meta-analysis on a methodological pedestal.

Well after the New Deal, an equally stupendous change in the safety of air travel occurred. During the first half of the 20th century, flying through the air from A to B was, unsurprisingly, massively more dangerous than moving across the ground from A to B. At some point during the 20th century, surprisingly, the reverse became true; it became much less dangerous to fly through the air than by car across the ground or by ship across the sea, even though cars and ships also had huge safety improvements, thanks to paradigmatic regulatory shifts motivated by the likes of Ralph Nader (1965). Rail travel at some moment near the year 1900 had a similarly massive shift from being a

catastrophically unsafe enterprise run by robber barons, killing hundreds of people every year in single U.S. states, to become a serenely safe form of travel (Braithwaite, 2005a). Has our research community tackled empirically the question of whether there were corporate safety enforcement changes that made the planes and the trains safe, and how? No (although see Hodges, 2015: 576–598).

Why would criminology be so narrow-minded as to focus its energy on studying the impacts of marginal shifts during periods when little changes on the enforcement front and ignore structurally big changes that totally transform outcomes? The nature of regulatory capitalism is that there are big turning points, often associated with crisis, that infrequently produce chunks of change. Gloom-and-doom nihilism persists among corporate crime scholars only because they focus on uneventful enforcement histories of the here and now. This is especially true if one considers the even sharper paradigmatic improvements Japanese corporate regulation could deliver with respect to the auto industry (Mikler, 2009) or river and air pollution reduction after 1970 (Broadbent, 1998; Iwami, 2005; Rosenbluth and Thies, 1999; Wakamatsu, Morikawa, and Ito, 2013). But the big shifts are also found in Anglo-Celtic societies such as the United States with the New Deal, nuclear power becoming 23 times safer (with comparable improvement globalizing) after Three Mile Island (Braithwaite and Drahos, 2000: 302; Rees, 1994), the impact of Rachel Carson's (1962) *Silent Spring* on U.S. pollution enforcement, and the impact of Ralph Nader's (1965) *Unsafe at Any Speed* on auto safety (Braithwaite and Drahos, 2000: Chapters 12 and 18).

We can see this with more disaggregated regulatory impacts as well. When I first observed U.S. nursing home inspections in 1988, I encountered a woman in a Chicago nursing home. Both of her wrists were tied to the arms of her wheelchair, her waist was restrained to the body of the chair, and each ankle was restrained to a leg of the chair. In a moment alone comforting her, she pleaded with me, weeping, to untie her. She and management both explained that she was considered a troublemaker because she had pulled down a curtain. After 1990, I ceased to observe such terrible sights in any U.S. nursing home across the 26 states where I observed inspections. This happened through an "Untie the Elderly Campaign" of the National Citizens' Coalition for Nursing Home Reform that transformed inspection practice to insistence on reduction in the levels of physical and chemical restraint. It is hard to believe today that in the late 1980s, 42% of U.S. nursing home residents were physically restrained. By the end of our research in 2005, that was below 4%, and falling, yet still higher than in the United Kingdom and Australia. Chemical restraint had also dramatically declined, which was the reverse of displacement from a decline in physical restraint to an increase in chemical restraint (Braithwaite et al., 2007: Chapter 2).

Coal mine safety is another domain where the decline in fatality rates has been stupendous and where empirical studies of corporate enforcement, such as Lewis-Beck and Alford (1980), have revealed how this has been accomplished. Australia, the world's largest exporter of coal, has had several recent years with zero coal mine deaths, which is a stark comparison

to various years early in the 20th century when the United Kingdom and France each had 1,000 deaths, as well as a contrast to years when the United States had 3,000 coal mine deaths. China is possibly beginning to experience the same dramatic declines in corporate killing of coal miners that Britain saw in the decades after World War I. Is there a single corporate criminologist who is interested in studying this contemporary shift as it unfolds? (We do see the work of distinguished University of Chicago political scientist Dali Yang and his colleagues on renationalization and reregulation of Chinese coal mines as paths to lower coal mine fatality rates [Wang, 2006; Yang and Jiang, 2012: 50–54]).

The third field in which I have attempted to develop holistic and broad understanding of regulatory enforcement in a single industry—pharmaceuticals—paints a different picture. In the early 1990s, I (Braithwaite, 1993) believed that the pharmaceutical industry and its regulation were improving. I have now been proven wrong as I have been about prospects for improvement by some 1980s corporate criminals from other industries. Corporate crime in the pharmaceutical industry is more deadly and more financially rapacious in the current decade than in the late decades of the 20th century (Dukes et al., 2014).

My conjectures, therefore, are first that Schell-Busey et al. (2016) reach conclusions that are correct. Second, these conclusions can be buttressed by broadening the lens through a Campbell multimethod, multiconstruct validation. Third, Schell-Busey et al.'s conclusions are nevertheless prey to massive understatement of the enforcement mix effect sizes because of definitional and method constriction within the meta-analytic frame. Meta-analysis cannot grapple qualitatively–quantitatively with histories of particular industries that might reveal when regulatory enforcement reform is designed to be ritualistic, in comparison to when it is transformative. It is hard not to be fooled in the way I (Braithwaite, 1993) was with pharmaceutical regulatory reform. It is easy to be so worldly wise and cynical about the efficacy of good corporate law enforcement that one cannot distinguish corporate sheep that comply from goats that defy. Historical impacts can be sharp and massive because Foucauldian shepherd-flock governmentalities (Dean, 2010: 90–94) do at times lever pastoral power over Keynesian herding of “animal spirits” in markets. This can lead an entire corporate flock to a new space. Former Occupational Safety and Health Administration leader Adam Finkel, now a leader of the University of Pennsylvania regulation program, has an evocative presentation picturing our struggle in the academy to distinguish sheep in wolves' clothing from wolves in sheep's clothing.

### **Virtue in Being Distinctively American**

What is the big picture regulatory story of American history? Abraham Lincoln understood what it was in the Gettysburg Address and in his Second Inaugural Address (Meister, 1999). Nelson Mandela similarly understood what it was to be a South African in his Presidential address. The greatness of both presidents was to renarrate what it was to be a South African, an American. To be a South African, Mandela intoned, whether Black or White, was to be a victim of a particular institution and the violence it engendered—apartheid. To be an

American, said Lincoln, North or South, Black or White, was to be a victim of a particular institution that caused tumultuous, resilient violence—slavery.

To be an American criminologist is to be a scholar of slavery as clearly as to be an Australian criminologist is to be a student of transportation to create a convict society by dispossession of an indigenous society. As great a contributor to American criminology as Thorsten Sellin realized this. The book of his old age was on slavery (Sellin, 1976), about how abolition was followed by using the penal system to lease Black prison labor to work plantations, to build railways for the robber barons, and to toil in the most dangerous coal mines. Only in the United States could both slavery and anti-slavery be so cherished as to shape both the political history and the history of violence in a society. Corporate crime scholarship is at its best when it connects the big historical story of the corporate violence of a society to local acts of violence in little places like Ferguson, Missouri. Meta-analyses miss the big national picture, and the bigger global ones, that matter most to criminology.

A profound paradox in American history is that the same corporation—the Virginia Company—was so democratic in its corporate decision making that it planted a colony in Virginia from which sprouted such fertile political seeds of global democracy as Thomas Jefferson, James Madison, George Washington, and John Marshall (who served as Chief Justice of the Supreme Court during six early presidencies). At the same time, the Virginia Company did more than create these founding fathers as slave owners; the ultimate point and purpose of the Virginia Company charter was implicitly to employ plantation slaves traded to it by the Royal African Company. Although Massachusetts micro-farms required less slave labor than Virginia tobacco plantations, a similar story can be told of the second trading company to shape American destiny, the Massachusetts Bay Company. This is so much so that Davis (1961: 201) could say: “The constitution of the colonial trading company was therefore perpetuated to a large extent in the State and Federal constitutions of the United States.”

It seems peculiar that lessons learned from the transformative effectiveness of enforcement to end corporate slaving is not a huge topic in the American criminological curriculum. What could be a more instructive contribution for criminology to make than help young minds comprehend the strengths and weaknesses of their still unusually violent society? What great essays they could be writing on the Virginia Company as a crucible of American democracy, American slavery, and American violence.

The big picture of corporate crime enforcement against slavery seems clear enough. A global anti-slavery movement grew among progressive British churchgoers, especially the Quakers. It spread from there to churches in its American colony. The anti-slavery activism of these White churches encouraged slaves and their descendants to embrace European church institutions, creating Black churches that became hotbeds of civil rights activism, peaking in the 1960s churches where Martin Luther King preached. American democracy at its best and most nonviolent in these churches also triggered violent defiance by elements of civil society such as the Ku Klux Klan.

Neither the civil society vibrancy of the anti-slavery movement nor resistance to it was as strong in other 19th-century societies. Only the United States had a civil war focused on slavery as an institution; it was among the most brutally deadly conflicts the world had ever seen. Anti-slavery movements like Amis des Noirs did seed in countries like France, but because they were less vibrant, slaving corporations continued to capture public policy outside the British empire. Other colonial empires did not follow the lead of the British to ban the slave trade. British capital then concluded that it was suffering a strategic trade disadvantage in competition with other plantation economies that continued to expand through slave trading. The British state responded to the call from British capital to fix this problem by a mixture of regulatory measures that ranged from diplomatic appeals to the Christian values of other states to a not-at-all-benign big gun at the peak of its enforcement pyramid. The British Navy blew recalcitrant slaving ships out of the water at locales like Rio harbor.

This alliance of social movement activism and hegemonic state enforcement ended the 19th-century slave trade out of Africa (and in various other places). Braithwaite and Drahos (2000) argued that this was a common kind of regulatory enforcement transformation grounded in an alliance between a social movement that wins in a progressive metropole and then gives a hegemonic state and its corporate elite a strategic trade interest in globalizing their reform. An example was the way Ronald Reagan became one of the most transformative environmental presidents because he inherited a law that green groups had secured to ban ozone-depleting substances. Dupont, as a result, became the global chemical corporation most advanced on safer substitute technologies. Dupont and Reagan saw the strategic trade advantage in forcing the rest of the world (including corporate China) to follow the American lead in banning ozone-depleting substances through the Montreal Protocol. The data are impressive that high levels of global corporate compliance (even among Chinese whitegoods manufacturers [Zhao, 2005]) were achieved. The overwhelming majority of ozone-depleting substances were substituted globally, and the ozone hole was substantially closed (Canan, Andersen, Reichman, and Gareau, 2015).

### **Pulling Levers**

Whether the challenge is regulating corporate slave-traders or the liberation of the aged from even deeper domination (slaves at least have the mind and muscle to organize, riot, and rebel), the lesson seems banal. Should we be surprised that a coalescence of informal social control in civil society driven by an emancipatory social movement politics that captures variegated levers of state enforcement can decisively transform corporate conduct? The banal message of responsive regulatory theory is that if the state has both a strong mandate from citizen movements that opens a path to the conquest of corporate power, and a sufficient multiplicity of regulatory levers it can pull, it will be able to cover the weaknesses of one enforcement tool with the strengths of another until corporate conduct changes. With slave trading, the British state first sought to coax and caress compliance with gentle

diplomacy, but when this proved weak, it could and did escalate as far as incapacitating slavers by sinking them. With tying up nursing home patients, inspectors first sought to cajole and praise progress in loosening the bonds; yet it became clear that noncompliers would be bankrupted by withdrawal of Medicare and Medicaid funding.

It is banal to say that if the law credibly commits to business that it will keep pulling one enforcement lever after another until it finds some combination so potent as to deter, incapacitate, or reform, then corporations will either comply or crash. Is this so obvious that a meta-analysis is hardly needed? However banal, responsive regulatory theory has been controversial and almost never embraced by regulators in the United States<sup>3</sup> even if frequently adopted as government policy by regulators in the South Pacific, Canada, and Europe (Hodges, 2015; Ivec, Braithwaite, Wood, and Job, 2015). A common pushback by corporate crime scholars is that responsive regulation is too soft. Consistent deterrence that hits the corporate bottom line is the only language corporate elites understand. Responsive regulation gives corporations a “free hit” at the bottom of the pyramid; they will always take it until they are forced to comply. An opposite critique is that what works in getting corporate compliance is business–government cooperation—collaboration to solve problems, educate, persuade, and build capacity. The problem with escalating to tough deterrence when collaboration seems not to be working is that business cuts off cooperation as soon as the state gets tough. The large literature on responsive regulation has a lot to say on these questions. Evidence around these debates is not the topic of this article. The conclusion is simply that the claims for enforcement mix are not so obvious as to render meta-analysis unnecessary.

One can say the same about American criminology’s “pulling-levers policing.” Schell-Busey et al. (2016) rightly point out that pulling-levers policing has much in common with responsive regulation. Previous literature and literature reviews reached similar results about pulling-levers policing as Schell-Busey et al. reach about “multiple treatments” (Braga, 2008; Braga et al., 1999; Braga and Weisburd, 2011; Cook, 2012; Corsaro and Engel, 2015; Corsaro, Hunt, Hipple, and McGarrell, 2012; McGarrell, Chermak, Wilson, and Corsaro, 2006; Papachristos and Kirk, 2015)—promising results without consistently huge effect sizes.

There are key theoretical commonalities between responsive regulation and pulling-levers policing: having many supportive and deterrent levers to pull, and a focus on picking particular problems and fixing them as opposed to consistent enforcement of all laws. The most relevant similarity here is a shift away from passive deterrence of a kind that has been dominant in both criminology and economics. Passive deterrence means setting the sanction at levels where the expected consequences of compliance are better than those of noncompliance so that actors, especially rational ones like corporations, will comply.

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3. Although in some agencies like the Internal Revenue Service and Treasury there have been some active responsive regulatory advocates (Leviner, 2008).

Dynamic deterrence theory draws more heavily on strategic studies than on criminology or economics. The idea is that generals win wars not by having bigger armies sitting in their barracks in the homeland but by moving forward toward the enemy, even burning bridges behind their army to signal strongly that they will never retreat.

Mark Kleiman (2009: 49–67) told of the Texas Ranger who was confronted with a lynch mob and had only one bullet left to illustrate that dynamic or focused deterrence is always an option. The Ranger said that the first person to step forward would be shot dead; no one volunteered to take that bullet to satisfy their vengeance. Kleiman's theoretical work showed why dynamic concentration can help a little punishment go a long way. Real-world examples from my own data, such as military peacekeepers in the Democratic Republic of Congo (Braithwaite, 2013), also have made the point that master practitioners of law enforcement with limited resources, across diverse military and regulatory contexts, understand how to concentrate dynamically their deterrence capabilities to get a result. The pulling-levers theorists have added some important insights about the dynamic concentration of deterrence that are not grasped as clearly in the responsive regulation literature, and vice versa.

The idea of having “multiple treatments” or multiple levers to pull is also common across policing, business regulatory inspection, and United Nations peacekeeping at its best. And of course it is utterly basic for any defense strategist: A state will not prevail in international armed conflicts if the only lever it can pull is diplomacy even though diplomacy more frequently wins good outcomes than force. States will not prevail in international conflicts if the only lever they can pull is to fire a nuclear weapon because that involves costs that could only be borne for exceptional conflicts, if any. Every general craves variety for the arrows in their quiver so they can adroitly, proportionately, adapt the weapon to the problem at hand. Likewise, an interesting inference from the literature on nonviolent citizen resistance to state military power is that campaigns of nonviolent resistance are more likely to succeed when they “readily suggest the use of a diverse array of nonviolent sanctions” (crippling the regime's economy by targeted and general strikes, paralyzing governability by mass mobilizations on the streets of the capital, denuding regime security by campaigns to cascade desertions from the military and police, and more; Ackerman and Krueger, 1993: 24).

To return one last time to Campbell's convergent and discriminant validation in science, searching for convergence in the nature of deterrence mechanisms across seemingly disparate regulatory contexts helps criminology to contribute to bigger social science insights. We have traveled little distance in the project of mutual learning from differences that discriminate and similarities that converge toward a more general social science of deterrence, persuasion, self-regulation, enforced self-regulation, and reintegration. Until convergent and discriminant engagement across different domains of enforcement are joined, criminology is doomed to produce few future Donald Campbells.

## Conclusion

The thrust of this policy essay has not been to critique Schell-Busey et al. (2016) but to place their narrow results within broader patterns of data. Like the American corporate crime academy generally, Schell-Busey et al. do elsewhere engage with historical questions like the regulation of slavery; they represent the broadest and best of criminology from a stellar criminology program. This essay cautions that the corporate crime academy must be careful not to send the message to the mainstream that it wishes to be admitted to the club of true believers in the Campbell Collaboration frame of meta-analysis. The belief is widespread in criminology that a Campbell Collaboration style of meta-analysis delivers the most accurate possible assessment of the status of theoretical claims. Corporate criminology has not “arrived” with the first of this kind of meta-analysis. Yet, it is hugely enriched by it. The reading of the literature in this essay is that meta-analysis has systematic tendencies to get effect sizes wrong. In this case, my reading of that literature is that Schell-Busey et al. actually get them right but far too low for methodologically systematic reasons that can only be grasped qualitatively and historically.

Schell-Busey et al.’s (2016) initial search terms included “compliance programs,” “training,” “prevention,” and studies on internal corporate sanctions, organizational climate, and informal sanctions. These constructs were narrowed to deterrence. Now that this narrowed analysis has revealed that it is breadth of enforcement tools that best explains compliance, a return to Schell-Busey et al.’s wider frame is commended. Theoretically, deterrence plus much more is also what pulling-levers policing, responsive regulation, smart regulation, conversational regulation, meta-regulation, pluralist regulation, and new governance theory commend. A first step is a qualitative diagnosis of the set of studies Schell-Busey et al. have assembled in search of dynamically sequenced combinations of remedies (deterrent and nondeterrent) that prove effective. Search of the accounting and finance literature for studies with more finance-attuned search terms—“market efficiency” rather than “compliance,” for example—could help during this qualitative phase.

Perhaps an initial cull of strategies might eliminate some that are counterproductive. It would be unwise to eliminate single strategies that have no effect because Schell-Busey et al. (2016) found that ineffective strategies on their own can become effective when combined in a regulatory mixture. A wider meta-analysis could test whether any four strategies are better than any three, any two, any one, rather as in Gibbs and Simpson’s (2009) “total (informal and formal) sanction count.” Then that analysis could move on to explore which specific clusters of strategies show more promise in combination or become counterproductive in combination. Gunningham, Grabosky, and Sinclair’s (1998) work on complementary versus incompatible combinations of strategies could provide some theoretical guidance for such analyses.

Step-wise deletion of strategies whose loss does not reduce the effectiveness of a mixture is one path. To understand why caution is needed in step-wise deletion, it would be best



first to code whether programs that deploy a regulatory mixture have a more passive or a more dynamic/escalating/focused deterrent strategy. The hypothesis would be that there would be little loss from deletion of many tools that passively increase deterrence. There would be more frequent losses from deletions of dynamic deterrent arrows that spend most of their time in the quiver. To illustrate, if Pakistan, North Korea, or any nuclear power were stupid enough to have a policy of nuclear attack on any country that frustrates its objectives, and repeatedly reminded its adversaries of this, they would achieve less compliance through their diplomacy. That is different from the proposition that North Korea is less vulnerable than Serbia, Afghanistan, Iraq, Libya, and Syria to the NATO bombing campaigns they suffered. The difference is that dynamically North Korea probably would deploy nuclear retaliation as a last resort in response to systematic bombing. NATO would not dare bomb North Korea in the way it bombed Libya. The difference arises because North Korea has a dynamic focus for when it would deter through nuclear weapons; it has kept its nuclear deterrent far from use or threat as a Sword of Damocles.

This example raises another problem. In the real world of concentrated power, deterrence is endogenous rather than exogenous. North Korean generals say they cling to their nuclear deterrent because they saw what happened to Saddam and Gadhafi's "rogue states" after they gave up their nuclear weapon programs. Deterrence endogeneity is why the Australian Tax Office would not allow us to randomize responsive regulation away from controls: Multinationals were handing over too much money under responsive sanctions in the pilot (Braithwaite, 2005b). Ian Ayres, an experienced law and economics experimenter and IRS consultant, commented on a draft of this essay that the challenge is bigger: "There aren't enough Fortune 100 companies to do credible randomized testing over three different enforcement regimes . . . especially since it will not be a double blind study and firms can rig results to ensure a less effective regime wins" (I. Ayres, personal communication, December 2015). The extreme levels of deterrence endogeneity at the big end of town may be better studied by the more qualitative, scenario-gaming approaches to understanding that are more maturely developed in strategic studies than in corporate criminology.

The community of corporate crime scholars must complement overly cross-sectional meta-analyses with a search for the historical shifts that in short spaces of time effect transformative change. To illustrate, there is reason to hypothesize that the Chinese state at this point in history has a superior capacity to effect rapid regulatory change than Western states. Chinese President Xi Jinping committed in the Paris Climate Conference to tackle China's status as the largest carbon emitter. This implies a ripe, critical research opportunity. What are the enforcement tools the Chinese state employs from 2016 to reduce carbon emissions? How do inspectors implement them on the ground? Some Chinese firms are already facing the courts over failure to comply with aspects of their regime of economic incentives to reduce global warming. How is the Chinese state responding to fraudulent reporting of emission levels, to corruption and capture of the program? Most critically, will

the whole package achieve a transformative contribution to saving the planet from global warming?

Regulatory enforcement histories are not continuous; they are sharply episodic. So any meta-analysis will detect little of the impact of regulatory enforcement that matters most. Even if the meta-analysis stumbles upon one study of enforcement that at one point in history cuts a safety impact from many hundreds of deaths a year to zero, that would be a massive outlier. It would be best diagnosed qualitatively. More to the point, a more historically diagnostic search strategy is required to find, for example, a Vietnamese government report that detects such a transformation. Searches of English-language databases will not do the job. If the example seems fanciful, bear in mind that for Vietnam there was a historical moment when air travel shifted from a highly dangerous activity to one with near-zero fatalities most years, remarkably a shift that seems almost as dramatic for developing countries as for Western ones. We know nothing about if, when, and how enforcement assisted that transformation in Vietnam. What we might learn from Vietnamese regulatory history could well be that the conclusions of Schell-Busey et al. (2016) are correct but hugely understated because of systematic failure of their method to detect the historical transformations that matter most. Were he alive, Donald Campbell might counsel us to vary the construct (including the historical frame), vary the method, and keep searching for discriminant and convergent validity.

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**John Braithwaite** is a professor at Australian National University and a founder of the Regulatory Institutions Network (RegNet) at that university.