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Corruption and the Governance of Disaster Risk

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Summary and Keywords

This article considers how corruption affects the management of disaster mitigation, relief, and recovery. Corruption is a very serious and pervasive issue that affects all countries and many operations related to disasters, yet it has not been studied to the degree that it merits. This is because it is difficult to define, hard to measure and difficult to separate from other issues, such as excessive political influence and economic mismanagement. Not all corruption is illegal, and not all of that which is against the law is vigorously pursued by law enforcement. In essence, corruption subverts public resources for private gain, to the damage of the body politic and people at large. It is often associated with political violence and authoritarianism and is a highly exploitative phenomenon. Corruption knows no boundaries of social class or economic status. It tends to be greatest where there are strong juxtapositions of extreme wealth and poverty.

Corruption is intimately bound up with the armaments trade. The relationship between arms supply and humanitarian assistance and support for democracy is complex and difficult to decipher. So is the relationship between disasters and organized crime. In both cases, disasters are seen as opportunities for corruption and potentially massive gains, achieved amid the fear, suffering, and disruption of the aftermath. In humanitarian emergencies, black markets can thrive, which, although they support people by providing basic incomes, do nothing to reduce disaster risk. In counties in which the informal sector is very large, there are few, and perhaps insufficient, controls on corruption in business and economic affairs.

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Corruption is a major factor in weakening efforts to bring the problem of disasters under control. The solution is to reduce its impact by ensuring that transactions connected with disasters are transparent, ethically justifiable, and in line with what the affected population wants and needs. In this respect, the phenomenon is bound up with fundamental human rights. Denial or restriction of such rights can reduce a person's access to information and freedom to act in favor of disaster reduction. Corruption can exacerbate such situations. Yet disasters often reveal the effects of corruption, for example, in the collapse of buildings that were not built to established safety codes.

Keywords: disaster, vulnerability, corruption, undue influence, bribery, black market, organized crime, governance, politics, power

Introduction

This article begins by defining corruption; examining the history and evolution of the term; and providing a contextual frame for it, including an explanation how it fits in with theories of society and disaster. Next, there is a discussion of what corruption reveals about the relationship between power and disasters, and how the powerful exploit disasters in corrupt ways. This leads to an investigation of how corruption can be seen as an artifact of organized crime, and how criminal organizations take advantage of disaster situations to extend their corrupt influence and profit by adversity. Corruption is thus seen as both an ad hoc phenomenon and a highly organized one, depending on the circumstances. Corruption and poverty are the subject of a further analysis, and one that is extremely important as the two phenomena enjoy a devilish symbiosis. The following section deals with the ways in which corruption affects the supply of humanitarian aid in international disasters, and how in the aftermath of such events, black markets and the "alternative" or "informal" economy are fertile ground for corruption to breed and thrive. Finally, the conclusions to this article draw together the threads and summarize the concept, phenomenon, and manifestation of corruption in relation to the risk and impact of disaster.

What is Corruption?

In origin, the word "corruption" (from the Latin verb *corrumpere*) refers to destruction, dissolution, and spoilage. The modern concept probably stems from the Aristotelian idea of *generatio* and *corruptio* (or γένεσις and φθορά), which the elements of life constantly alter in positive and negative manners (Adams, 1938, p. 17). The word "corruption" began to appear in English writing around 1340, and it rapidly assumed several variants, leading to the eventual 18 definitions in the modern Oxford English Dictionary. Of these, two are particularly relevant to the present discussion: (1) "Perversion or destruction of

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integrity in the discharge of public duties by bribery or favour; the use or existence of corrupt practices, esp. in a state, public corporation, etc.”; and (2) “The perversion of an institution, custom, etc. from its primitive purity; an instance of this perversion.”

Following Aristotle, the stem definition of the term is physical, involving disintegration or decomposition with attendant unwholesomeness. Moral and social definitions create an analogy with the physical process. This was effected in the 1300s in theology, the 1500s in jurisprudence, and the 1600s in politics (see *corruption*, Oxford English Dictionary). In essence, corruption is a negative phenomenon caused by a deliberate act that creates imbalance, unfairness, destruction, moral lapse, and their wider consequences. It tends to require an ethical framework against which to measure the negativity; and in this sense it often betokens the absence or betrayal of a moral, political, or humanistic principle. As noted in the first definition reproduced above, pecuniary advantage is often the motivation or means of corruption, involving bribes or partiality. Corruption is easily associated with hunger for power and moral unscrupulousness in public or private dealings. Hence, the phenomenon usually involves private gain through public loss and disadvantage.

Interpreted as “the abuse of entrusted power for private gain,” corruption has been classified as “grand,” “political,” and “petty,” depending on the amounts of money involved and the scale at which it occurs (Transparency International, 2016A). Petty corruption may “grease the wheels of bureaucracy,” but it is more likely to stifle initiative. Grand corruption takes away the fundamental resources that could be used to mitigate disaster risk.

It may be that in the strictest ethical terms corruption, or more properly freedom from corruption, is an absolute concept. If that were not so, then there could be no attempts to map corruption globally (Transparency International, 2016B). However, in pragmatic terms, the definition, and therefore the acceptance or rejection, of corruption is heavily constrained by cultural factors and social conditions. Therefore, it depends on people’s value systems (Arbabzadah, 2009). The geographical scale of corruption can vary from a single room to a global concern. The significance, importance, and depth of the phenomenon can be highly variable. In part, this depends on how resistant society and economy are to its effects, which is a function of the power and rectitude of institutions and leaders. But whether or not a society is resilient, basic ethics dictate that corruption is never a good and acceptable trait. Hence, corruption is no less reprehensible when it has not been exposed than when it has.

Corruption is notoriously difficult to gauge or measure. Direct investigation can be hazardous, as the researcher could easily find himself or herself interfering with the affairs of ruthless people who would use both legal and illegal methods to defend their interests, perhaps even by resorting to physical violence. Therefore, corruption is estimated, rather than measured, on the basis of its effects or through the perceptions of those who have experienced it directly or indirectly, or who have known of it. In order to estimate corruption a value system must be imposed, and there may be disagreement over what values are legitimate or appropriate. In part this is a question of whether or

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not rigorous moral and ethical standards are employed. It also reflects what people are prepared to tolerate in order to “get business done” and what they regard as normal, exceptional, and intolerable. In any case, there is a large “gray area” between what is universally acceptable and what is unacceptable according to the moral codes of specific individuals or groups of people. In this, their awareness and understanding of corruption, and of its pervasive direct and indirect consequences, may determine the extent to which they tolerate it. This may affect Transparency International’s “internal perceptions” but does not remove the phenomenon or the issue.

Despite the difficulties involved in subjecting corruption to a scientific analysis, it is a very important issue in disasters. Empirical work by Escaleras et al. (2007); Ambraseys and Bilham (2011); and Escaleras and Register (2016) suggests that, at the national level, degree of corruption has a very strong correlation with the incidence and seriousness of disasters, particularly earthquake catastrophes. This is because corruption may weaken construction standards and thus lead to more widespread collapse, with further damage and casualties (Transparency International, 2005). Although correlation does not prove causality, the link is consistent enough for one to state with confidence that corruption is one of the main underlying causes of seismic disasters. This is because it can weaken the promulgation, application, and enforcement of safety standards. At the present time, in order to strengthen our understanding of why disasters occur, root causes are finally receiving the attention they deserve (Oliver-Smith et al., 2016). Corruption is undoubtedly one of the root causes.

Earthquakes demonstrate that corruption is most easily seen in the collapse of buildings that were not built to conform with safety standards and codes. Indeed, such collapses *reveal* corruption, which otherwise would be occult, concealed by its perpetrators. However, many of corruption’s worst effects are not so visible. For example, through its effect in concentrating power, it is a prime instrument of social dominance and control. Seldom is this used in a benign way to “force” people to live safer and more productive lives. Concomitantly, corruption does not allow the benefits of power to be shared, for example, in the form of equal rights to safety and security.

How the Concept of Corruption is Framed

According to Soliman and Cable (2011, p. 736), “Corruption is widespread in global society, but is considered particularly troublesome in developing nations.” This statement reflects a widespread view that may be anything but accurate. Governance, the provision of “due process,” with checks, balances, accountability, and transparent decision making, may be weak in the world’s poorer countries. Power structures may be unobtrusive and democracy may be suppressed, such that the people cannot successfully demand that their leaders be fully accountable, but are conditions any better in the rich countries? Several recent

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books (e.g., Cockcroft & Wegener, 2017; Whyte, 2015) have put forward the hypothesis that corruption is, if anything, greater in countries such as Britain and the United States, because there are more resources to feed it.

These works rest their thesis on a framing of the concept of corruption that partially decouples it from illegality. Some forms of corruption are patently illegal, such as when they result in the theft of funds from corporate accounts. Others may be illegal but may not be adequately pursued by the guardians of the law, such as manipulation of the value of shares. Yet in most cases the peddling of influence is not strictly illegal. Studies of lobbying have shown that it is economically valuable in a variety of ways (Cockcroft & Wegener, 2017, ch. 3). Whereas on the face of it, lobbying is the legitimate representation of interests to decision makers, it has grown to be a vast and lucrative industry on the basis of donations and contracts. Lobbying is tied in with the funding of political parties and causes, and with the distribution of contracts for public works and services. Access to politicians can thus be “bought” and relationships can be forged that are prejudicial to the public good and beneficial to individuals and corporations.

This leads to the concept of “disaster capitalism” (Loewenstein, 2015). In Part 5 of her exposé of neoliberalism, *The Shock Doctrine* (Klein, 2008), Naomi Klein debunked the myth that disasters are entirely a matter of destruction and losses. She argued instead that certain companies, particularly multinational corporations, have a powerful opportunity to exploit disasters for their own benefit. People, governance, democracy, and livelihoods are weakened by disaster, and this leaves them vulnerable to exploitation. Here, lobbying comes into play. Contracts may be awarded through mechanisms that betoken undue influence. In the chaos and disruption of a disaster aftermath, it may be easy to pass laws or other measures that are exploitative. One hopes instead that laws that must be passed after disaster, such as those that help resettle survivors, are formulated, enacted, and implemented in a fair and transparent manner. The collusion of a corrupt government and an unscrupulous company can intensify the level of exploitation.

During the Cold War, much was made of the “military-industrial complex” (Peterson, 1991), usually in the context of the United States, as this is where it grew biggest, although the term has also been applied to other countries, such as Pakistan (Siddiqa-Agha, 2001). To sustain the production of armaments in ever larger quantities, politicians would simultaneously emphasize the production of materiel as a source of employment, a stimulus to the national economy, and a way of projecting the country’s might and influence abroad. There have been many scandals about international arms sales, which on numerous occasions have been greater than concomitant sales of non-military goods to the same countries. As Bermeo noted (2010, p. 76), there have been periods in recent history when military aid outweighed aid for building democracy by more than an order of magnitude.

After the fall of the Berlin Wall, for a brief period, perhaps about three years, military spending stalled, giving rise to a so-called peace dividend, in which sums of money were apparently diverted from military spending into the support of democracy and civilian

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projects (Mintz & Stevenson, 1995). However, by 1996 the military-industrial complex had regrouped and the relentless rise of military spending had resumed. The simple situation with two opposing blocs which had prevailed before had gone, and in its place was what Klein (2008, p. 283) called the “Homeland Security bubble.” Klein argued (p. 306) that Homeland Security should be regarded as more than a government organization, more than an industry: it is an economy and should be analyzed as such.

In the year in which Klein’s book came out, 2008, northern hemisphere countries were affected by the worst recession since the Wall Street crash of 1929. It had no effect on the world armaments trade, which continued to flourish (Kinsella, 2012). Feinstein (2012) noted that the arms trade is highly corrupt, and the efforts to conceal the corruption seriously compound the felony, as well as distorting markets, polluting the business environment, distorting the political process, and compromising the functioning of the state.

Although there is an obvious parallel in the pursuit of the two objectives *safety* and *security*, it is remarkable how little has been written about the effect of the arms trade on disaster relief and disaster risk reduction. In part, this is because natural and technological disasters are only sporadically seen as security issues, and when they are, this may imply high or excessive levels of government control of populations. Examples of this can be seen in the aftermath of Cyclone Nargis in Myanmar, in which the government response was restrictive, authoritarian, and, frankly, lethal (McLachlan-Bent & Langmore, 2011). In a parallel manner, there is evidence that both the tsunami and the earthquake that occurred five years later in Padang, Sumatra, were used to promulgate what Klein (2005, p. 31) described as “radical social and economic engineering” (Alexander, 2012, p. 4). The importance of the armaments trade is that force of arms has contributed much to the enforcement of corrupt agendas, and the restriction of human rights and democracy.

Anyone who is familiar with the military-industrial complex in its present reincarnation will know that it is actually a military-industrial-*academic* complex, as scholars, particularly eminent ones, have been co-opted to be its apologists. From this we have the burgeoning literature on *security*, and the arguments that more and more of it is needed (*cf.* Alexander, 2011). The paradox here is that there has been so little analysis of how corruption in the arms trade meets corruption in governance and in disaster relief, yet these issues are intimately linked (Polman, 2010).

Power, Corruption, and Disasters

In order to reduce the impact of disasters, society must forego some of the benefits of development and increase the price of others. For example, it is better not to build homes and business premises in areas that are subject to frequent flooding, as this is cheaper than either building defenses or paying out periodically for the cost of damage and repair. If there are cogent reasons to build in such hazard zones (for example, there is a lack of alternative sites), then physical protection measures must be created and paid for. Virtually all cost-benefit analyses give positive ratios for prevention and mitigation works when set against the value of damage and losses, although the actual values of the benefit can vary substantially according to the assumptions and methods that underlie the calculation (Mechler, 2016). Providing it is at least moderately sensible, prior action to reduce future disaster losses is invariably bound to save money in the long run. It is thus almost universally axiomatic that disaster risk reduction saves money, even if calculations and estimates of how much can give variable results (Shreve & Kelman, 2014).

Why, then, are disaster losses perpetually increasing, and why are the same mistakes repeatedly made? To experts in disaster vulnerability, the likelihood that failure to mitigate will lead to avoidable losses is self-evident, but it is something that is often only revealed to non-experts when disaster strikes and the losses occur. To invest in the reduction of future disasters is to exercise prudence in the face of risks that are usually calculable, or estimable; to do no such thing is to gamble, and as with all gambling there are winners and losers. To a considerable extent, the process is driven by *moral hazard*, in which actions to further the interests of one party cause changes that are detrimental to other parties (Baker, 1996). The subset of this is *charity hazard*, in which, rather than invest in mitigation measures, people expect that government handouts will follow disaster (Raschky & Weck-Hannemann, 2007). For politicians, failure to mitigate disaster risk is a gamble. It saves money if disaster does not occur during their terms of office. If instead it does happen, the tendency is to blame the previous officeholders for not doing enough and perhaps also to plead ignorance, or argue that fate intervened and little could have been done to avoid the worst consequences of the disaster. Political largesse to survivors encourages charity hazard, but it is a common phenomenon because it is often seen as a way of encouraging people to vote for the politicians who provide it (Schwarze & Wagner, 2007; Shugart, 2006).

Natural hazards insurance in the United States provides an interesting example. It has had a checkered history. Earthquake insurance is available state by state but has had a poor uptake. Flood insurance is supported by a federal scheme, the National Flood Insurance Program. The NFIP is dogged by the problem of repeat claimants—that is, policyholders whose property is flooded continually (Knowles & Kunreuther, 2014). It also suffers from both moral hazard and charity hazard (Knowles & Kunreuther, 2014) and unevenness in the ratio of premiums to pay-outs from state to state (Michel-Kerjan, 2010). Both earthquakes and floods are subject to federal legislation that prohibits pay-outs to

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citizens who have not made the stipulated efforts to reduce their propensity to incur hazard damage. In reality, the reimbursements flow nonetheless. The victims of disaster are voters, and in many cases their votes are bought by “forgiveness money,” or in other words the government subsidies that enable them to recover from disaster in such a way as to continue living with high levels of avoidable risk, rather than to reduce the risks. There is always a “back door,” by which ingenious mechanism payments can be made, whether or not the process flirts with illegality. Researchers have confirmed the tendency. Garrett and Sobel (2003) argued that nearly half of Federal disaster assistance is politically motivated, and Gasper (2015) showed that this tendency has endured, despite the fact that there are various clauses in the Stafford Act that expressly forbid politically motivated use of funds (e.g., Section 203, n. 2) or partiality in their disbursement (e.g., Section 309a). In other countries as well, such as Japan, it has been found that disaster relief fosters corruption. In one instance, relief funds were subverted to projects for which they were not allotted, mainly those that had strong political connotations (Yamamura, 2014). More importantly, some scholars regard corruption of the regulation of nuclear safety in Japan as having been a major contributor to the Fukushima Dai’ichi meltdown and radiation release because it weakened safety measures and their oversight (Wang & Chen, 2012).

Predicaments of this kind demand interpretation from the point of view of what is or is not corruption. They prompt the question of where a distinction can be made between “vagaries of human nature” and corruption. The answer probably resides in the degree of calculation that lies behind the policies, decisions, and actions. The handmaiden of corruption is ignorance. Some of it is simulated and some willful. Even when ignorance is coupled with innocence, there are often grounds for arguing that the policy maker should have been better informed, or should have acted with greater probity.

An interesting case in point is the magnitude 9 earthquake of March 11, 2011, which caused the tsunami that overwhelmed the nuclear plant at Fukushima Dai’ichi in northeastern Japan. The tsunami defenses of the plant had been built to withstand a tsunami generated by a magnitude 6.8 earthquake. Given how extensive knowledge of the likelihood of a larger event was, how is one to characterize the underprotection of the plant, as negligence or gambling with people’s well-being, if not their lives? Collusion between high officials of the Tokyo Electric Power Company (TEPCO), the regulatory authority, and the Japanese Government restricted and distorted the information about the nuclear disaster that was given out in the early days of the emergency, which led to a drastic fall in the level of trust in the authorities held by the Japanese public (Kushida, 2012).

Examples such as the Fukushima case raise the question of where ineptitude ends and willful misbehavior begins (*cf.* Diet of Japan, 2012). Incompetence is not corruption. However, the result of both phenomena may be very similar, and it may therefore be difficult to attribute the root causes to one or the other.

We will now consider corruption at a much higher level than that which can easily be confused with ineptitude, namely, the proliferation and operation of organized crime, which is both an artifact and a cause of corruption in public life and commerce.

Organized Crime

Organized crime is one of the greatest sources of corruption (Sandu & Nitu, 2013). Mafia-style organizations exist in many countries, with greater or lesser degrees of definition, articulation, and influence. The most highly organized of them are international crime syndicates that thrive on the proceeds of extortion, corrupt business activities, and undue political influence. The most successful mafias operate on two levels: direct criminal activity and a front of apparently legitimate business. Crime can generate vast revenues that are then amplified by being invested. As they are free from such irritations as taxation and regulation, mafias can draw upon immense liquidity and can thus undercut non-mafia businesses in tendering for contracts (Savona, 2010). Business ownership can be masked by registering companies in any of the world's 78 tax havens, with a predilection for those which are least open to scrutiny by outside forces. The use of shell companies and holding companies can do much to hide the origins of businesses and can help to launder illicitly obtained proceeds (Holmes, 2016).

The construction industry is the basis of much mafia activity (Saviano, 2006). Literally as much as figuratively, concrete is its foundation. Modern mafias are run by people who are shrewdly calculating. They will obtain undue influence by infiltrating governments, paying bribes, and doing what they can to ignore or avoid regulation and taxation. In the most extreme cases, anyone who represents serious opposition to their activities faces assassination. Concerted opposition may be countered with armed intimidation and terrorist activities, such as planting bombs or selective killings (Glenny, 2009). When participating in reconstruction after disaster, it is usually not in the interests of organized crime to pay much attention to building codes, quality assurance, or the ethics of recovery (Transparency International, 2005). As a result, mafias are responsible for propagating or regenerating vulnerability, not reducing it. In reconstruction, they tend to negate the lessons that could be learned from disaster. Their political influence may guarantee them freedom from scrutiny and prosecution (Green, 2005).

The recovery from the 1980 southern Italian earthquake (magnitude 6.8) involved a large area that was under the influence of the Camorra, the Naples mafia, which is estimated to have a turnover of 90 billion euros a year and to be the largest and most successful domestic business organization in Italy (Saviano, 2006). Where mafia influence on the reconstruction was reckoned to be substantial, funds disappeared, leading to a parliamentary inquiry whose conclusions were as scathing as they were pessimistic (Italian Parliament, 1991). New accommodation for homeless survivors was built without adequate anti-seismic design or construction methods. Quarries for cement were

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operated without adequate environmental safeguards, cement was mixed with marine sand that contained salt in concentrations able to corrode steel reinforcing bars, building codes were ignored, and urban planning regulations were bypassed. The results of this will be revealed, panoramically, when the next earthquake of similar size to that of 1980 happens, and vulnerability is converted into impact.

In the midst of the earthquake reconstruction, another disaster afflicted the area, in the form of volcanic dislevelment (“bradyseisms”) in the Campi Flegrei caldera at Pozzuoli, west of Naples. Convection of a body of magma (although without a surface eruption) led to swelling and deflation of the ground and hence to the destruction of many buildings in Pozzuoli, a city of 84,000 inhabitants. Some 57,000 people had to be evacuated permanently and the Italian Government took the decision to move them to Monteruscello, 7 km to the north of Pozzuoli. The land for the new settlement was granted by the branch of the Camorra based in nearby Mondragone, in return for government protection for some of its other activities.¹ The evacuation plan was unsustainable but it went ahead, to the general enrichment of those who had positioned themselves to gain by it (Erbani, 1998, pp. 101–103).

Organized crime tends to look upon disaster as an opportunity. Reconstruction usually involves a building boom, which attracts mafia interests in the construction industries. Often, the process is not well regulated, in part because the desire to complete the process quickly prevails over the need to work methodically (Lewis, 2008). Mafias can activate their contacts in government and public administration to expedite their involvement. Besides involvement in reconstruction, the disruption of society may allow them to increase their activities in people trafficking, abduction, modern forms of slavery such as forced prostitution, and propagation of the drug trade (Bales, 2007). Apparently, the earthquake that struck Bam, southern Iran, in 2003 had this effect. Bam is situated on the drug trafficking route from the Makhran of Pakistan to the west. Commerce in narcotics is a significant part of the local economy. After an initial decrease in trafficking during the immediate aftermath of the disaster, the post-earthquake situation apparently stimulated such activity, to the detriment of legitimate recovery efforts. Among the survivors, heroin addiction affected 50% of men and 15–25% of women, which sapped the will to recover. The Iranian Government’s response was to impose a “top-down” reconstruction plan in such a way as to meet the social problems head-on, but not necessarily to satisfy the aspirations of the residents of Bam who were critical of the strategy (Tait, 2006).

The problem of corruption is probably worst in those countries that are low income, frequently afflicted by disaster, and possibly unstable in a socioeconomic and military sense. Hence, the next section will consider how poverty and development, or the lack of it, intertwine with problems of corruption and disaster.

Development, Poverty, Vulnerability, and Corruption

There is a pervasive feeling that the poorer a country is, the more corrupt it is. There is some truth in this, as poor countries are often in thrall to many forms of political and economic exploitation, stemming both from within and from abroad. Moreover, they may lack the resources to create strong, robust institutions that should fight corruption. However, the counterargument is that rich countries have the resources to be corrupt in a more lavish and spectacular manner than countries that have limited wealth and resources. Thus, some authors (e.g., Cockcroft & Wegener, 2017; Whyte, 2015) have argued that Western countries, and in particular Britain and the United States, are the most corrupt. Nevertheless, corruption is a serious issue in the world's poorest nations.

The Transparency International corruption perceptions index (Transparency International, 2016B) demonstrates a considerable correlation, at the national level, between poverty and corruption. The poorest countries have the highest indices. Critics of the index have argued that it represents only one way of viewing corruption, and moreover that it is highly biased by developed country perspectives (De Maria, 2008). Others have argued that the "measurements" are not useful indicators of how to tackle corruption (Urra, 2007). Nevertheless, capital flight has an immense and disproportionate impact on poor countries. Excessive power, milking state assets, authoritarian responses to critics, lack of transparency, massive bribery, and so on reduce incomes of the majority who are unable to benefit from these things. There is also less money for risk reduction (Lewis, 2011). Lewis (2017) pointed out that corruption exists in most societies. Poverty is, of course, not only present at the national scale; it can be found even in the richest countries. This is a vicious circle, as it is clear that corruption feeds upon poverty as well as creating it.

A particular problem experienced by many poor countries is their susceptibility to illicit financial flows, particularly in terms of the flight of capital to one or other of the world's 78 tax havens. At the global scale, the World Bank estimates that the value of stolen assets is about 30 times greater than the sum of all foreign aid (Lewis & Kelman, 2012). In addition, a vicious circle has been identified and termed the "poverty-repression-militarisation cycle." In this the purchase of arms and luxury goods by a ruling elite is financed by production for export in order to earn hard currency from abroad. This leads to shortages in domestic consumption and popular unrest that is brutally repressed in order to keep the system functioning (COPAT, 1981). In 2014, using public funds, the president of Mali acquired a Boeing 737 for his personal use, building upon a long history of the purchase of luxury items by the country's governing elite (Freedom House, 2017).

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A good example of the relationship between the flight and misuse of capital and poverty is given by Nicaragua. It is one of the 15 countries most at risk of disaster (UNU-EHS, 2016), it ranks 124th in the global resilience index, and occupies an analogous position on the UNDP human development index (UNDP, 2016). On December 23, 1972, a magnitude 6.2 earthquake struck Managua, the capital city. Some 6,000 people died, 20,000 were injured, and 250,000 were left homeless (Kates et al., 1973). Studies show that the country's small middle class, with access to capital and insurance, rebuilt within a matter of months after the earthquake. Among some of the poorest groups in society, rebuilding never occurred. Aid flooded into the country, but it was plundered by President Anastasio Somoza Debayle and his Liberal-Conservative Junta. One indirect consequence was the Sandinista Revolution, which in 1978–1979 toppled the Somoza dictatorship, but led to a proxy war between the great powers through the FSLN (Sandinista National Liberation Front) and the Contras.

In none of the three periods of recent Nicaraguan history (the Somoza dictatorship, Sandinista-Contra civil war, and post-Esquipulas peace agreement) were human rights strictly observed (Gomez, 2003). Indeed, they were frequently and very seriously violated. The importance of this to disaster risk reduction is evident (Da Costa, 2015). To begin with, deprivation of basic human rights reduces people's freedom of action and control over their own destiny, which restricts their options in terms of reducing disaster risk. Secondly, human rights abuses restrict people's access to the information they need in order to face up to hazards. Third, the repression that deprives people of their rights often increases their vulnerability to disaster. This may be because organizing to fight disaster risk, for example, by forming civil protection volunteer corps, can be seen by suspicious and authoritarian governments as a politically motivated act that must be suppressed. At the least it is likely to be regarded as a sign of grassroots democracy that a dictatorial government may wish to suppress.

Marginalization, poverty, and suppression of basic rights can lead to other serious or chronic problems. For example, poor countries are often the center of attention with regard to child trafficking. Some scholars have suggested that it increases during the disruption of a disaster aftermath, or at least that there is a strong risk of this (Gupta & Agrawal, 2010). However, while not denying the existence of such a risk, Montgomery (2011) argued that the association of child trafficking with disaster in poor countries is usually more of a myth than a reality. Nonetheless, there is clearly concern, as a consortium of charities reported: "Children face heightened protection risks during disasters, including psychological distress, physical harm, trafficking, exploitation, child labour and gender-based violence." (World Vision, 2015).

James Lewis concluded an excellent review of the relationship between poverty and corruption with the following words: "A question that remains is not 'can resilience exist in contexts of corruption?' but rather, 'would the inducement of resilience be less necessary in non-corrupt contexts?'" (Lewis, 2017, p. 7). In either case, there needs to be

an incentive to change the system—those who fight corruption or exhibit rectitude in their personal dealings should not feel that they have been disadvantaged as a result, or that their efforts have been futile.

Humanitarian Aid and Corruption

Along with neutrality, impartiality, compassion, and independence, incorruptibility is a founding principle of the modern humanitarian movement. When Jean-Henri Dunant founded the Red Cross movement, after his experiences tending for the wounded on the battlefields of northern Italy in 1859, he helped create a model that is still respected and current, even though conditions have changed enormously (Weiss, 1999). Some of the worst humanitarian emergencies occur in places in which the mechanisms to control corruption do not exist or do not function (Transparency International, 2014). The situations that have come to be known as “complex emergencies” involve the breakdown of social, economic, and military security, often coupled with disasters of natural environmental origin, such as earthquake, hurricane, or drought. In such events, there are few of the checks and balances of good governance that would ensure freedom from corruption. Thus the arrival of aid often represents an opportunity to practice corruption (Breau & Carr, 2009). Moreover the aid dilemma is that agencies seek to spend every penny that is donated to them on the needy, but at the same time they need to spend resources on maintaining accountability in order to ward off corruption (Walker, 2005, p. 11).

Humanitarian aid is and always will be an approximate process. It is usual to find that 10% of goods supplied to a disaster area are wasted in some manner, whether they are pilfered, sold on, or left to rot. Higher percentages betoken misuse or misappropriation. In areas of extreme political and military polarization, either side may deny aid to supporters of opposition forces and thus violate the principles of neutrality and impartiality on which such aid is usually given (Polman, 2010). Indeed, some protagonists of humanitarian aid see neutrality as more of a hindrance than a principle to uphold (Rieffer-Flanagan, 2009). In cases where governments must be circumvented in order to supply aid to their people, irregular dealings are seen as something that is needed in order to ensure the greater good. This may or may not be true, but in the modern world moral absolutism does not easily achieve good results.

Haiti illustrates some of the twists and turns of humanitarianism and corruption. The colonial history of this small Caribbean island nation is redolent with exploitation, including the fact that from 1804 until 1947 Haiti was forced to pay France a total of 90 million gold francs in exchange for its independence and freedom from slavery. The country’s political fortunes have fluctuated wildly. For a period of more than 30 years ending in 1986, the presidency of the Duvaliers, father and son, was a period of enhanced and growing corruption, in which state resources were systematically plundered and

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poverty went hand in hand with violence. The five years before the 2010 earthquake were a period of stabilization, in which attempts were made to reduce the levels of violence and undue influence in order to permit a resumption of development through intensive peacekeeping (Muggah, 2010). Much of the good work was undone by the earthquake of January 10, 2010, which killed between 46,000 and 240,000 people. It also devastated the organs of government by killing officials, destroying infrastructure, and leaving the public administration with few resources (Quigley, 2014).

Much of the international aid supplied to Haiti after the earthquake was recycled back to the countries of origin. Still more of it was inappropriate and inefficiently provided (Fatton, 2011). As only 0.38% of donated funds went to strengthen the Haitian government (Farmer, 2012), we can concur with Fatton's observation (2011, p. 172), that "It is true that state corruption is a problem. But to attribute the impoverished condition of the country to state corruption is mistaken because for decades only a very limited amount of foreign assistance has in fact ended up in governmental hands." Countries and organizations that supply international disaster aid in fully packaged form do much to limit the involvement of local beneficiaries in the process, and to ensure that expenditures are firmly based in the country of origin, not the destination place. They also deprive local people of choice and autonomy, which in effect means that the putative solution to their problems marginalizes the people. In addition, in Haiti certain NGOs were there to be seen as much as to do useful work. Once again in the words of Fatton (2011, p. 173), "NGOs can be as corrupt and inefficient as the state."

Black Markets

People evolve ingenious ways of coping with the situations described in previous sections, which may mean resorting to black markets. These are forums for buying and selling commodities that exist outside the reach of government regulation. They provide no taxes and evade regulation of the products that are traded, which might include armaments, drugs, or monetary currencies. Black markets are the point of reference for the informal economy although this can also exist within the confines of legitimate trade, simply by evading taxation and the regulation of work and working practices. Although many disadvantaged people derive sustenance for participating in black markets, these are easily associated with poverty, and they do not necessarily ameliorate it (Bahmani-Oskooee & Goswami, 2005).

When disaster strikes, the disruption of normal methods of commerce, and of the ways in which they are regulated, offers fertile soil for the growth of black markets. There may be excessive quantities of donated goods, organized crime syndicates may be seeking to gain from the chaos, and people who have lost employment may be looking for alternative ways of making a living. Black markets are unregulated forums for the sale and purchase of goods and services. Prices cannot be controlled and tax revenues cannot be gained

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from them. Some goods, such as narcotic drugs, may be illicit. Others, such as currency, may be workaday. Profit is the *raison d'être* of a black market, and, along with the lack of regulation and oversight, this often goes hand in hand with exploitation. Hence, black markets stand as the opposite of welfare. However, scholars' opinions are divided as to whether black markets represent malfeasance, or whether they also have some beneficial functions (Handmer, Coate, & Choong, 2006).

Studies of the black markets that functioned in areas affected by the 2004 Indian Ocean tsunami suggested that they were useful in providing employment where none would otherwise have been forthcoming (Handmer & Choong, 2006). This is also why organized crime thrives in areas of high unemployment. In a sense, both mafias and the black market operate a welfare function. The criminals who lead both kinds of enterprise have often been generous to the poor and needy, as this is a way of ensuring the survival of their illegal activities. Does this mean that black markets are not a product of corruption? They may indeed be a reaction to a corrupt official state, which fails to share enough of its wealth with ordinary citizens when they are desperately in need. But no, black markets are not the antidote to corruption and they may well be an artifact of it. Corruption is the enemy of legality, probity, transparency in dealings, and welfare. Rather than coexisting with these phenomena, it corrodes them and saps their strength. Black markets are more likely to create imbalance in local economies, rather than restore their functionality. Illegal sales of goods and services can ruin legitimate providers, while at the same time providing none of the revenue that enables the state to offer public services.

By subverting or removing the opportunities for positive change and hazard mitigation, and by contributing to the suppression of fundamental rights, corruption has a strong negative effect on sustainability, sustainable recovery, sustainable disaster mitigation, and sustainable development (Ziervogel et al., 2017). One example of this concerns the interaction of gangs, political power, and measures to combat floods and landslides in San Salvador, capital of El Salvador. Residents are resigned to the fact that physical measures of disaster reduction will be installed in the areas where power is manifest, not in places of greatest need, where instead marginalization, deprivation, and violence prevail along with the "natural" hazards (Wamsler et al., 2012).

Conclusion

In this article, I have taken a broad view of what corruption is. Its interface with incompetence, ignorance, inequity, and exploitation is not easy to define. Nevertheless, what is judged to constitute corruption depends very much on one's cultural standpoint, one's morals and ethics, and possibly one's zeal in seeking to expose the practice. Corruption strongly implies a level of personal responsibility, and therefore culpability. Where it is illegal, individuals can be prosecuted, although where it is not they may get away scot free with acts that are immoral, if not against the law. As corruption is commonly hidden carefully beneath a veneer of legality or respectability, there are certain key moments when it is revealed. These may occur at the end of a long, painstaking investigation, but they are just as likely to happen when a disaster strikes and the consequences of corruption are suddenly, panoramically revealed. For example, after the February 6, 2016, earthquake in Taiwan, the Weiguan Jinlong Building in Tainan collapsed, causing 105 deaths and 104 serious injuries. In order to save on building materials, the reinforced concrete structure was found to have been packed with old oil cans (Zaldivar, Canga, & Deogekar, 2016, p. 7). While bypassing laws in order to cut "red tape" and deliver relief efficiently and effectively may be a laudable practice, illegality is more commonly associated with abnormally high levels of risk.

Corruption is an insidious problem that affects all societies, rich or poor. It defies easy characterization and direct measurement, yet it can have very clear, concrete effects. These are mainly of four kinds:

- (a.)** failure to observe rules, laws, regulations, and standards that relate to safety and protection of the public;
- (b.)** exploitation and lack of protection of vulnerable members of the public;
- (c.)** propagation of vulnerability to hazards through failure to take appropriate risk reduction measures, or weakening of existing measures; and
- (d.)** undermining representation of the people, human rights, and community cohesion.

From this it can be seen that there are sins of both omission and commission. Failure to protect the public is one of the former, while exploitation of people and undermining of standards are examples of the latter. Overall, corruption turns a public good into an individual or corporate one. It is usually based on opportunism.

Not all corruption is illegal, especially as the phenomenon tends to be propagated by people who are endlessly inventive, and countries may not have a legal framework that is adequate to tackle it. It could be argued that all corruption is immoral, but any absolute judgment of this kind would have to be free of conditionality of the kind that occurs when one has to choose "the lesser of two evils."

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Corruption can subvert money from risk reduction strategies and thus weaken them. Corruption in the construction industry and in building inspection encourages people to ignore building codes and thus allow structures to be prone to collapse or avoidable damage (Lewis, 2005). Corruption weakens institutions by making them susceptible to undue influence, usually to the benefit of individuals or oligarchies, rather than the public at large (Kenny, 2012).

Corruption is difficult to measure and thus has many “gray areas,” “fuzzy boundaries,” and overtones of moral relativity. For this reason, its influence on disaster risk is hard to gauge. However, the phenomenon is as insidious as it is widespread and there is no doubt that its effects on risk are profound. One of the main problems in identifying corruption is its occult nature, as it thrives upon lack of transparency in transactions of all kinds. Another problem is that it interfaces with incompetence. The difference between the two resides in the degree of volition: Incompetence is accidental, whereas corruption is deliberate. However, there is such a thing as “willful ignorance,” in which learning and its application are deliberately given low priority.

An illustration of this can be found in a study of homeowners’ attitudes to landslide hazard in those parts of metropolitan Cincinnati in which slopes are most unstable. By and large, householders were aware that there was a risk, that measures existed to tackle it, and that their homes were in areas subject to the measures (and the hazard). However, they did not prioritize landslide risk reduction nor consider that the problem related to their own properties (Green, 1992). The contrast between the existence of a serious hazard and the nonchalance of those who incurred it was so strong that it seemed to go beyond cognitive dissonance and the “syndrome of personal invulnerability.” One could not easily call the result corruption, but one could certainly call it willful ignorance.

Last, corruption is not merely a national or local issue. It is also an international one. In this respect, through the globalization of business, political and economic power, and influence, corruption that starts in one country can easily have consequences in another. For example, one could argue that the rapacity of multinational fashion retailers in Europe and North America was a strong contributory cause of the 2013 Rana Plaza factory collapse in Bangladesh, which killed 1,134 people and injured 2,500 (Ansary & Barua, 2015).

The antidote to corruption in all its forms and consequences is a combination of information, transparency, and fundamental rights. Transactions, policies, and decision making processes need to be open to public scrutiny. All people need to be informed and to have the opportunity to contest decisions that are not in the public interest.

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Notes:

(1.) For reasons of confidentiality, I am unable to reveal my source of information for this, although I guarantee that it is reliable. In any case, the story is partially written up in De Stefano (2016).

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