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Corporate characteristics and anthropological disasters

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Abstract. Critical infrastructure is business. All critical infrastructure is managed by companies, whether state, public, or joint companies. These companies have owners (stockholders), again private and/or state entities, and employees (managers and workers). If we are to understand how an operationalisable behaviour such as whistleblowing works in relation to critical infrastructure vulnerability we must first analyse the wider level relationship companies/corporations have with society, particularly in terms of human health and safety and the environment. We therefore look at corporate accidents, characteristics, dangers, and accountability. The aim is to offer a background on which we can identify what makes a company behave ethically.

Keywords: *corporate accidents, whistleblowing, corporate dangers, corporate responsibilities, business ethics, critical infrastructure*

1. CORPORATE ACCIDENTS

Did you ever expect a corporation to have a conscience, when it has no soul to be damned, and no body to be kicked?' Baron Thurlow (1731-1806), Lord Chancellor of England, (Coffee, 1981).

There is an increasing awareness and expectation of the health and safety responsibilities and duties of large corporations. Advancements in technology have bettered our lives but have also changed the nature of disasters making them far costlier than in the past. Corporations are in a position which enables them to identify the risks flowing from their operations and take steps to avoid such disasters.

Before we even consider discussing organisational misbehaviour we must first deal with the wider, and only apparently more benign, issue of human error. Human errors in corporate operations can be traced back to defective systems – technological or procedural. The root causes can be found at what Whittingham (2008) calls the 'workface', or the interface between the worker and the work environment. Most errors are active, in that their effects are immediately observable. A train conductor not noticing a signal and derailing the train is an active error. However, what we usually notice is that this is not the root cause of the crash. The root cause is in defective systems, for example management allowing operations despite being aware the signal is obstructed. The point here is that the cause is not the driver but the system he relies on to operate in a safe manner. If fault is to be assigned, then it should go to the person responsible for the defective system.

Latent errors are errors whose effects are not immediately observed. Consequences can take effect at a later time and different place from that where the error took place. This makes them insidious and difficult to spot. Unless detected and corrected soon after they occur they generate the 'accident waiting to happen' type of scenario. We typically think of maintenance tasks not being carried out properly when considering latent errors yet the most far reaching latent errors are those at management level. Generally, management errors are latent errors.

To better understand the root causes of management errors we need to look at common cause failures (CCFs). CCFs are 'external mechanisms which have a common effect on two or more activities or items of equipment' (Whittingham, 2004). The concept is widely used in

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reliability analysis to model combinations of events. The idea is that the probability of two or more independent failures happening at the same time is very small. However, this only holds if the events are completely independent of each other. In industrial or corporate systems this situation hardly exists (Perrow, 2011). A common cause will tend to produce multiple failures at a higher rate than what probabilistic theory would lead us to expect from independent failures. Strategies to prevent corporate accidents include: 1) Safety culture, 2) Understanding risk, 3) Safety regulation, 4) Safety management, 5) The learning organisation, and 6) Corporate social responsibility.

The word corporation is derived from the Latin *corpus* or body, here referring to a body of people. Interestingly, the Oxford English Dictionary defines it as a 'group of people authorised to act as an individual'; thus introducing the theme of corporate personality. Definitions will vary depending on the country's legal system. We also notice preferences for the inter-changeable 'company' in countries such as Romania and the UK. The meaning is the same and the key points are that this entity has the capacity to act as an individual and, unlike an individual, potentially live forever.

We can trace companies to at least Ancient Rome and many of the original characteristics can still be found today. Their existence is state sanctioned, they have stockholders who invest money in a joint enterprise for a specific purpose, and are more than the sum of their members. The modern company began its life in seventeenth century England during the Enlightenment. Single ownership or partnerships, before this time, had been limited in their ability to raise capital. When joint stock corporations were formed, capital started pouring in. Between 1825 and 1849 the capital raised to build railways in England went from 200,000 pounds to 230 million pounds (Whittingham, 2008).

Gradual acquisitions and mergers led to large transnational companies. Often their main operations are located in other countries than the host country. Some of these transnational companies have total turnovers larger than the gross national product of the countries they operate in. Combine the negotiating power this brings about with regulation not as strict as that of the host nation and the potential for serious impact on health, safety and environmental conditions is greatly increased.

2. CORPORATE CHARACTERISTICS

'As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the publik interest, nor knows how much he is promoting it. By preferring the support of domestik to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the publik good.' Adam Smith (1723-1790), The Wealth of Nations, IV.2.9.

Although Adam Smith's invisible hand would correct for shortages he also had something to say about letting the mechanism unchecked and the distortions this brings to society. In regard to government oversight he wrote:

Whenever the legislature attempts to regulate the differences between masters and their workmen, its counsellors are always the masters. When the regulation, therefore, is in favour of the workmen, it is always just and equitable; but it is sometimes otherwise when in favour of the masters. Adam Smith (1723-1790), The Wealth of Nations, I.10.121.

Under this *laissez-faire* model employment reaches equilibrium based on supply and demand. After the second world war, the ideas of J. Maynard Keynes were adopted by most western governments leading to government borrowing for job creation programmes. The idea is that governments can

GeoPatterns

control unemployment through public spending and reduced taxation thereby adjusting demand (Keynes, 2010). In recent decades, partly due to the influence of economists such as Milton Friedman, there has been a return to previous thinking across the leading market economies (Friedman, 2007). Crises and disasters generate pressure for tighter regulations and the periods of calm in between bring company-driven pressures for deregulation.

3. CORPORATE DANGERS

a. Cost externalization

Most critiques of the capitalist system will tend to include some of the following: 1) workforce exploitation, 2) resource extraction – particularly from poorer countries, 3) environmental damage, 4) imposing risk on workforce and public through activities. All of these can be summarised as ‘externalising costs’. Any cost that can be externalised is a cost the company doesn’t have to pay and as such its profits increase. Milton Friedman (1912-2006) succinctly defines externality as ‘the effect of a transaction between two individuals on a third party who has not consented to, or played any role in the carrying out of, that transaction’ (Bakan, 2004).

Business sees regulation as a ‘dead hand’ (Wilson, 1971) weighing heavily on efficiency, entrepreneurialism and profitability. The response comes in the form of intensive lobbying to reduce business restrictions (Hojnacki and Kimball, 1998). Some companies simply factor in fines and penalties as part of their operational costs. The cost of the fine is less than the saving achieved through externalisation.

b. Limited liability

Limited liability was first introduced to the UK in 1851. In contrast to previous arrangements, where stockholders could face personal bankruptcy should the company go in to liquidation, this new type of ownership meant the stockholders were only liable for the value of shares held in the company, irrespective of its fortunes. Directors were also exempt liability for debts, except for cases of fraud or personal guarantees (Easterbrook and Fischel, 1985). Limited liability is relevant in the disaster management context for obvious reasons. When a corporate accident occurs we will generally look at the managers for responsibility. However, the financial penalties are not borne by the managers, as they are employees, or by the owners, as they have limited liability. It is the company itself which is liable which means we must look more carefully at the relationship between companies and their accountability.

4. CORPORATE ACCOUNTABILITY

Companies have evolved over the past two centuries from small family owned businesses to massive transnational behemoths which actively shape society and culture. Technology has improved wellbeing but has also increased the potential for harm (Perrow, 2011). We often refer to companies in anthropomorphic language. This is not necessarily surprising given that when a company is registered it becomes a legal entity, with rights and obligations of its own, and which are separate from that of its founders. We refer to a company as being good or bad depending on how we perceive its relationship with society. The precedent which created this artificial person under the law was in the UK in the case of Salomon v A. Salomon and Co. Ltd. (1897). When creditors to the company tried to enforce their debs on Mr. Salomon himself the court found he was not personally liable and so separated the company’s identity from that of its owners. This is called the ‘veil of incorporation’ (Easterbrook and Fischel, 1985) and allows companies to own subsidiaries without being responsible for many of their liabilities.

Though companies can be brought to court there are a number of laws which simply cannot be applied to them. For example, it is extremely difficult to prosecute a company for murder as this implies intent and it is held that companies do not possess a state of mind. Corporate manslaughter charges have been attempted but there seems to be a

GeoPatterns

shift towards statutory legislation directed specifically at the corporate body. This is again partly because of the impossibility to prove *mens rea* or guilty mind under common or civil law.

Prosecuting individuals within the company is seen as greater deterrence or retributive justice when a company causes harm to natural persons because of: 1) limitations with penalties, mostly fines, and which are seen as disproportionate to the damage done, 2) a perception of relative impunity for the crime-committing company together with perceived lack of accountability for managers, and 3) the inability of a company to manifest regret. Victims will want to know that the individuals in the company which are responsible for the accident are identified and made to answer personally for their failures.

The corporate desire to increase profits and share value might seem to come in to conflict with the intention to mitigate risks. The conflict is superficial as it has been shown that safe companies tend to be successful in the long run. Short-termism will however in practice obscure the need to operate safely. Profit or compliance with regulation will provide insufficient incentive for companies to become robust and safe. Avoiding disasters is a long-term strategy and past performance does not guarantee future results (Taleb *et al*, 2009). We then step in to the field of business ethics.

‘If a builder builds a house for a man and does not make its construction firm, and the house which he has built collapses and causes the death of the owner of that house, that the builder shall be put to death. Hammurabi, the king of righteousness, on whom Shamash has conferred right (or law), am I. My words are well considered; my deeds are not equalled; to bring low those that are high; to humble the proud, to expel insolence.’ Code of Hammurabi, c. 1800 BC.

Companies will have a natural tendency to externalise costs. There are two major forces opposing this process: regulations and the company’s desire to project an image of ethical business practices. We now focus on the latter. Business reputation is a good motivator for companies to appear to act ethically (De Castro *et al*, 2006). We begin by looking at ethics in general, then corporate ethics, and finally at the roles the various human actors play in influencing corporate ethical behaviour.

The word ethics comes from the Greek *ethos* meaning ‘character’. Historically most societies have developed ethical codes and many of aspects covered have made it in to modern law where they punish various crimes. Ethics is different from morality in that morality defines the standards while ethics defines the behaviours which support these standards. A workable definition of ethics is ‘a code of behaviour considered correct, especially that of a particular group, profession or individual’ (Collins Dictionary). Three perspectives on ethics are briefly discussed next: virtue ethics, utilitarianism, and duty ethics.

Virtue ethics, as studied by Aristotle, holds that virtues are moral characteristics that encourage human development (e.g. perseverance, compassion). Behaviour should be virtuous and aim for common good (Hursthouse, 1999). To define a behaviour as virtuous we need to observe if the consequence of that behaviour was positive for that individual or group and for society. The limit of virtue ethics is that as it does not provide rules or codes it cannot provide adequate guidance nor resolve some moral dilemmas (e.g. honesty is a virtue yet compassion might require a lie).

Utilitarianism, as proposed by Jeremy Bentham, simply states that behaviour is to be judged based on its consequences, mainly their ability to produce the greatest happiness for the greatest number (Bentham, 1983). The issue here is that it is quantitative, and although attempts have been made, there is no accepted way of measuring the greatest happiness. Another limit is that by only looking at the consequences the motivations are ignored, thereby allowing for the question: can one behave morally wrong to bring happiness to many? This is addressed by duty ethics.

Duty ethics, as though of by Emmanuel Kant, is an ethical system based on reason and not utility. If behaviour is to be ethical the imperative behind it must be categorical and not conditional. As such, ethical behaviour is an end in itself and not a means to an end (Alexander and Moore, 2007). There is a distinction between perfect duty, which we should do all the time (e.g. not harming others) and imperfect duty, which one should do when possible

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(e.g. charity). Yet again there is the limit that conflicts of duty are not easily resolved.

Beside these three theories there are many branches of ethics such as meta-ethics (Goodwin and Darley, 2008)., normative ethics (Manners, 2008) and applied ethics (the study of specific, perhaps controversial, moral issues). Here we are mainly concerned with applied ethics in the field of business ethics in relation to corporate entities.

We have discussed earlier the idea of a company being an artificial person under the law. Given this it now makes sense to look at ethics in the context of individual, human, behaviour, before we move on to corporate ethical behaviour.

Modern democracies aim to allow individuals sufficient freedom so that they may pursue their interests without detriment on the freedom of others to do the same. Society limits liberty through the consensus of laws and regulations. Generally, people will accept these limitations of their freedom by governments. There are also inalienable freedoms such as freedom of speech or of assembly which push back on how much constrain we allow government to impose onto us. For less serious matters informal consensus is usually sufficient and there is little need to legislate. To be a citizen, these obligations, though not encoded in law, need to be observed, which brings to the fore the issue of morality and ethics.

What determines people to act ethically? We will in another article discuss this in more detail and in relation to misbehaviour at work but for the moment we briefly cover the first two of three groups of determinants: concern for others, concern for self, and personality. Concern for others is driven by empathy, the ability to put ourselves in someone else’s place, imagine how that person is feeling and the urge to make them feel better (Davis, 1983). Governments will sometimes legislate this either in the form of making it an offence not to stop and provide assistance should one witness a road accident, for example, or by offering tax breaks on charity. The aim is the same, to encourage caring responses counter the individualistic tendency to look after one’s own interests. The opposite motivation for ethical behaviours is concern for self, particularly the fear of stigma and punishment.

Apart from these negative motivations there is also the motivation to improve our image within society by acting, or seeming to act, ethically. Utilitarian ethics clearly allows for this motivation as what is important is the translation of concern in to ethical behaviour, irrespective of underlying motive.

5. CONCLUSION

Critical Infrastructure is, as any business or complex system, liable to accidents. There is growing awareness and expectation of the health and safety responsibilities which the operators, the large corporations, of this infrastructure have. Yet human errors, active or latent, will manifest and impact vulnerable systems, particularly those with high exposure to CCFs. Though companies are, to certain extent, treated as individuals we observe two corporate dangers: cost externalisation and limited liability. These dynamics are opposed by outside intervention in the form of regulation and societal pressure and interior dimensions such as empathy and concern for self. To understand the way managers perceive whistleblowing in their organisations, we must observe which of these drivers matter most in order to expend effort where it will have the largest impact on corporate safety.

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