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Accounting for Human Rights: Doxic Health and Safety Practices – the accounting
lesson from ICL

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Abstract

This paper is concerned with a specific human right – the right to work in a safe environment. It sets out a case for developing a new form of account of health and safety in any organisational setting. It draws upon the theoretical insights of Pierre Bourdieu taking inspiration from his assertion that in order to understand the “logic” of the worlds we live in we need to immerse ourselves into the particularity of an empirical reality. In this case the paper, analyses a preventable industrial disaster which occurred in Glasgow, Scotland which killed nine people¹ and injured 33 others. The paper unearths the underlying structures of symbolic violence of the UK State, the Health and Safety Executive and capital with respect to health and safety at work in the case. While dealing with one specific country (Scotland) and arguably an anomalous event we contend that Bourdieu’s objective of constructing a special case of what is possible can equally be used to question health and safety regimes and other forms of symbolic violence across the globe.

¹ Among the dead were Tracey McErlane, 27, a receptionist from Possilpark, Glasgow, who left behind a seven-month-old son, Ryan; Ann Trench, 34, a computer operator from Colston, who was to due to end 15 years of service with ICL with her last shift; Margaret Brownlie, 49, from Strathaven; Peter Ferguson, 52, from Renfrewshire; Annette Rosina Doyle 24, of Crowhill St., Glasgow; Thomas McAulay, 41, from Glasgow; Kenneth Murray, 45; Timothy Smith, 31; and the chief executive of the company, Stewart McColl, 60, whose daughter, Sheena, had her leg amputated after she was crushed by falling masonry.

Bourdieu (1998, p 2) “My entire scientific enterprise is indeed based upon the belief that the deepest logic of the social world can be grasped only if one plunges into the particularity of an empirical reality, historically located and dated, but with the objective of constructing it as a “special case of what is possible,” as Bachelard puts it, that is, as an exemplary case in a finite world of possible configurations.

This paper deals with a very specific human right – the right to work in a safe environment. The scale of the abuse of this human right is profound. While it is impossible to know exactly how many people are killed and injured each year at work, the International Labour Organization reports that 2.2 million workers were killed in 2005 by occupational accidents and work-related diseases, another 270 million suffered non-fatal accidents, and 160 million were hit with occupational diseases.² These deaths and injuries are not confined to the economic south. For example, in Canada, official statistics suggest that there are in the region of one million workplace injuries a year although many work-related deaths do not appear in the official statistics, because they were not accepted as such by Workers Compensation Boards, or resulted from occupational diseases not yet recognized as having roots in the workplace.

In this paper we will set out a case that if we are to take the notion of accounting for human rights seriously we will need a radically different form of accounting. While it is possible for the abuse of workers’ human rights to take many forms, in this paper, without demeaning all forms of abuse, we concentrate solely on the right to a safe working environment. This concern forms part of the Charter for Fundamental Rights of the European Union Article 31 “Fair and Just Working Conditions - 1. Every worker has the right to working conditions which respect his or her health, safety and dignity” (European Community, 2000; 15).

The paper develops its proposed way of accounting for human rights through an in depth analysis of an industrial disaster which occurred on 11 May 2004 at the ICL Plastics plant in Grovepark Mills in Maryhill, Glasgow which killed nine people and injured 33 others. This was the worst health and safety incident in Scotland since Piper Alpha in 1988 when 167 lives were lost, and the worst on mainland Scotland since the 1960s. ICL produced plastic goods for everything from the meat trade to hospitals. In addition, it specialised in producing protective equipment for the police, such as riot shields and leg guards. The factory operations involved dangerous gases and chemicals. On 11th May 2004, 66 people worked on the premises. The explosion was caused by a corroded pipe which carried liquefied petroleum gas (LPG)³ from a tank in the yard into the factory building. The pipe went into the basement of the factory. The pipe leaked LPG into the basement, creating an explosive atmosphere. The explosion occurred somehow (probably when an electric

²[http://www.peoplesvoice.ca/articleprint16/01\)_DEATH_IN_THE_WORKPLACE__A_GLOBAL_EPIDEMIC.html](http://www.peoplesvoice.ca/articleprint16/01)_DEATH_IN_THE_WORKPLACE__A_GLOBAL_EPIDEMIC.html)

³ Also called GPL, LP Gas, or autogas

light was switched on) when a worker, Kenneth Murray, went into the basement to collect materials stored there. Kenneth Murray died in the basement of injuries consistent with his having been at the point of the explosion. Blood samples showed that he had inhaled propane gas before the explosion.

On 17th August, 2007, ICL Tech Limited and its parent ICL Plastics Limited pled guilty to statutory breaches of Health & Safety Work Act of 1974 (see Crown Office and Procurator Fiscal, 2007). A review of the information available from Company's House records (3 types of filings: un-audited abbreviated accounts, current appointments reports, and 363S annual returns) reveals that ICL Plastics had £897,511 in cash holdings at the end of November, 2003, (for further detail see Beck et al, 2007). Both companies were subsequently fined £200,000 (Crown Office and Procurator Fiscal Service, 2007).

The disaster marked the first joint UK Public Inquiry between the Scottish Government⁴ and UK representatives in Westminster. The empirical insights in the paper are drawn from the documentation of the Public Inquiry, and the financial returns of the company lodged at Companies House. The Research Team also took copious notes throughout the ICL trial and used 'action research' methods, based on the participation of a group of seven ICL workers and ex-workers representative of different sections/functions in the plant. Both 'risk mapping' and 'body mapping' exercises were used whereby workers provided unrivalled evidence of working conditions, potential hazards and symptoms of ill-health. In-depth worker interviews provided further invaluable data.

Historically the hidden cost of capitalist development has been human lives – the industrial revolution in Victorian Britain saw the death rate increase dramatically. As Marx (1976) highlighted, aspects of the working environment that we would now deem unacceptable such as child labour were core to industrialisation. We see this mirrored today as both a cost in the developing world and a cost of greed among the more developed (Centre for Corporate Accountability, 2008; Smith et al., 2006; Watterson, 2000; Tombs, 1999; Pearce & Tombs, 1998). However, in the so-called developed world we argue that there is an expectation that our employer and the infrastructure 'regulating' our society will act in our interest and protect us: we have legal systems and regulatory frameworks of elected agencies to "protect" us. Thus workers's subjectivities are constituted as "protected western employees"; these mental structures are reinforced by the objective structures of the State – the Health and Safety Executive, juridical procedures and so on.

The theoretical perspective in the paper draws from the work of Pierre Bourdieu. Bourdieu's theoretical work sets forth a dialectical relationship between agency and structure which transcends the apparently irreconcilable perspectives of objectivism

⁴ Since 1999, Scotland has had a devolved government. The Scottish Government is responsible for most of the issues of day-to-day concern to the people of Scotland, including health, education, justice, rural affairs, and transport. However, the Scottish Government does not have fiscal autonomy from Westminster (the UK government). Fiscal restraint restricts the ability of the Scottish Parliament to address the very serious problems in health, education, housing, poverty and jobs.

and subjectivism (Mahar et al 1990) and thus is key to enabling an understanding of health and safety practice in the UK which workers, employers and health and safety inspectors each with their various subjectivities (and habitus) act within particular institutional settings. Bourdieu was concerned with both the social genesis of mental structures⁵ and the objective structures which unconsciously act to orient and constrain social practice. The conformity between mental and objective structures is called *doxa* in Bourdieu's account (Mahar et al, 1990).

However, the relationship between mental and objective structures is not totally arbitrary, Bourdieu's work takes a class/power perspective in which the point of view of the dominant is imposed as the universal point of view. Our mental structures are strictly controlled by preconceived thematics which to a large extent are imposed by a broadly defined state. The thematics portray a particular non-neutral vision of reality which serves to uphold the interests of the most powerful. Meaning (reinforced by objective structures) is imposed upon individuals, groups and classes in a manner which both obscures power relations and legitimates them. Bourdieu described this process as *misrecognition*, a process, "whereby power relations are perceived not for what they objectively are but in the form which renders them legitimate in the eyes of the beholder" (Bourdieu, 1977b, p xiii). The imposition of systems of symbolism and meaning which hide objective power relations in a form which renders them legitimate is described by Bourdieu as *symbolic violence*. This paper unearths the underlying objective structures of "symbolic violence" which frame the subjective health and safety expectations of workers in ICL (and in the UK generally). Symbolic violence is in some senses more powerful than physical violence, in that it is embedded in the very modes of action and structures of cognition of individuals and imposes the vision of the legitimacy of the social order. We argue that UK State symbolism and its representative vehicle the Health and Safety Executive is violent in the sense that their power over categorisation is as, if not more, constraining on workers than physical violence and is used to maintain social domination.

The theoretical insights of Pierre Bourdieu used within the paper take inspiration from his assertion that in order to understand the "logic" of the worlds we live in we need to immerse ourselves into the particularity of an empirical reality. Indeed Bourdieu's concepts are flexible and must be examined by the researcher in an empirical setting rather than being seen as a set of categorical boxes to which the data must conform (Mahar et al 1990). In this case we analyse the ICL disaster with the objective of constructing, in Bourdieu's words "a special case of what is possible" (Bourdieu, 1998, p 2).

While we deal with one specific country (Scotland), and arguably an anomalous event, we contend that Bourdieu's explanation of symbolic violence can be used to analyse health and safety regimes across the globe. In this sense the ICL disaster is not anomalous. Rather, as will be seen from the case study, it is possible by analyzing the disaster, to draw out the deepest logic of the symbols and structures of

⁵ Although Bourdieu's structures are different from those found in Levi-Strauss.

the economic and political systems that influence our sense of safety when we go to work; an understanding of which add insights into the millions of industrial deaths and injuries which occur throughout the globe every year.

The paper is structured as follows; the next section reviews research on accounting for workers and their human rights before turning to highlight the (mis)use of accounting information in the legal prosecution of ICL for breaches of health and safety legislation. Looking through the lens of social domination and symbolic violence offered by Bourdieu we seek to make visible ICL's formal accounts and the role which they play in the symbolic violence inherent in this case. In order to fully appreciate the extent of abuse of the workers' rights to health and safety it is necessary to consider the role of the State and its agents, namely the Health and Safety Executive (HSE), as complicit in the social system of domination in which ICL is only one part. The paper ends with reflections on the accounting lesson from ICL. We argue that by viewing the human right to work in a safe environment through the lens provided by Bourdieu we can craft a radical form of accounting for human rights.

Extant accounting for workers and their human rights

Accounting research on corporate social accounting and accountability has considered the human rights of employees in many guises. A simple distinction can be drawn between the 'rights' of workers to receive information (reporting to employees) and a more inclusive approach on the 'rights' of others to receive information about workers (reporting on employees/ employee-related accounting and reporting). More traditional approaches to both reporting to and reporting on employees use financial and management reporting frameworks in a hierarchical, functional form to hold owners and managers within the corporation socially accountable to stakeholders (see for example O'Dwyer & Unerman; 2007; Spence & Gray, 2007; Everett; 2003).

The historical perspective on accounting for human rights at work varies. Gray et al.'s (1996) comprehensive review of reporting to and on employees in its many guises recognises the practice of what they refer to as employee-related reporting (about employees) was rooted in the 1940s. In the 1970s, perhaps reflecting the mind-set of the period, the Accounting Standards Steering Committee's production of the "Corporate Report" (ASSC, 1975) added political legitimacy to the identification of employees as 'special' stakeholders with a right to financial information in the form of specific purpose employee reports including a Value Added Statement which tried to set out the amount of profit distributed to shareholders, employees and government. Since then, divergent views have been expressed on the extent to which reporting to workers raises their awareness of important work issues and provides a useful educative role versus the extent to which reporting is used as a tool to discipline workers.

The role of accounting in the struggle on the economic field between capital and labour over the allocation of surplus value has also been considered. Taking into account the potential collective bargaining power of employees a number of research studies have considered the potential for employee-related reporting to contribute to trade unions and management decision making in times of disputes over what constitutes fair pay (Cooper & Essex, 1977; Foley & Maunders, 1977; Cooper, 1984; Jackson-Cox et al., 1984; Cooper & Sherer, 1984; McBarnet et al., 1994). One approach, perhaps best exemplified in Pope and Peel (1981) suggests that since accounting information is “neutral”, it could play a positive role in thrashing out fair pay settlements. This approach perpetuates the state (and economic capital) sanctioned categorisation of accounting reports as neutral and useful for decision making purposes. Sikka (2008) perceptively recognises that the growing symbolic interactions (in the form of academic literature, reports, government debates, and so on) surrounding “corporate governance” participate in the perpetuation of symbolic violence in the sense that they set up the debate as if corporate governance is concerned with fairness. Thus corporate governance serves to legitimate the status quo. Whereas academic work on corporate governance ignores workers and leaves no space for rendering income and wealth inequalities visible. Other research has demonstrated how accounting information can be manipulated to favour the position of management. For example Berry et al’s (1985) study of the National Coal Board accounts found that management accounts did not form an adequate basis for decisions about pit closures. This research showed that it was likely that pits were being closed for political rather than economic reasons. Overall, critical research suggests that in a capitalist system of domination, capital will continue to neglect labour in favour of profit (Dey et al., 1994; Cooper, 1995; Dey, 2007; Owen, 2007) and that accounting can be used to promote the interests of the most powerful.

The difficulties involved in putting “human assets” into financial statements has long been discussed by academics. This type of accounting has recently coalesced around the question of accounting for intellectual capital. It has been argued that the vast majority of papers in the intellectual capital field are focused on reporting how organisations struggle with accounting for, i.e. measuring and reporting, intellectual capital. To a significant extent, this work is unquestioning of the practices themselves, as well as the thinking that underpins them (Mouritsen & Roslander, 2009).

The inclusion of workers’ and other stakeholder group’s interests set out in the 1975 “Corporate Report”, has shifted significantly over the past 35 years to a situation where contemporary financial reports are designed to serve the needs of shareholders and other providers of capital (IASB and FASB, Conceptual Framework) and as such are concerned with measuring and reporting the efficient production of profits by employees. The effacing of workers needs in financial reports means that they are antithetical to accounting for human rights. Since Charles Medawar’s seminal work in 1976 there has been a growing body of work challenging the production of useful accounts by corporate managers. This work sets out a case for the production of reports by alternative commentators (Cooper, 2005b; Gray 2002).

Recent research on accountability has looked at how the provision of alternative forms of information could input into accountability relations and systems of accountability (see Milne et al., 2008; Ball, 2007; Owen, 2007; Shenkin & Coulson, 2007; Dey, 2007; Cooper, 2005; Dey, 2003; Everett, 2003; Owen et al., 2000; Gray et al., 1997). These include, for example, conceptualisation and re-presenting internally derived information on which companies are “silent” and external “shadow” accounts reflecting on the performance of the company (see for example, Dey, 2003; Gray 2002; 1997).

The production of shadow accounts and social audits is becoming common among campaigning non-governmental organisations (NGOs) such as War on Want. NGOs have attempted to prise-open the legal organisational form and have questioned the accounting entity and formal units of account as the appropriate accountable entity by taking alternative supply chains and issues approaches. For example, the Friends of the Earth review of the source of finance behind Asia Pulp and Paper’s human rights abuse and environmental degradation includes the financing of their subsidiaries, related companies and their supply chain (Matthew & Willem van Gelder, 2002). Other issues based studies include, for example, student finance (Cooper et al, 2005), water footprinting, and accounting for war (Cooper & Catchpole, 2009). Much of this research recognises that despite living in “the audit society”, human rights violations and abuses continue. New forms of accounting research seek to make them visible.

NGO initiatives have sometimes merged with trends in academic ‘activism’ in efforts to add legitimacy to ‘accounts’. Owen (2007) analyses trends among critical accountants to engage directly with groups such as trade unions as a counter to corporate capture through engagement (see also Neu et al., 2001; Owen et al., 2000; Cooper, 1995). However, in the UK at least, as corporate funding for research increases, the problem of corporate capture is difficult, if not impossible to overcome. Mechanisms for engagement have arguably gone further with Shenkin & Coulson (2007) suggesting that informal, ethnographic methods of information provision may well be better suited to discharging a more social accountability, which necessarily provokes critical reflection on and in everyday life (see also Dey, 2002).

In other research settings, similar notions of a more 'socialising' form of accountability have been applied to the complex sets of relations between corporations, public institutions, community groups, trade unions, and activists, as well as between different sets of workers within organisations (see Richter, 2001, Negri et al., 1999; Munro, 1996 Roberts, 1996; 1991). For example, Roberts (1996) discusses a reciprocal duty to every right that we want fulfilled, as it is ‘bound up’ with everyone else. In some senses this idea of reciprocal duties is State doxa. Workers “willingly” go along with the legality of employers making money out of their labour and in return labour expects certain legal rights (for example not to be unfairly dismissed, the right to belong to a trade union and that workers will be protected by State health and safety legislation). However, the unequal distributions

of the various forms of capital mean that Capitalists' needs are privileged over labours'.

One of the key challenges in accounting for human rights is the macro-meso-micro level management from universal principles of human rights to particular abstraction in everyday practice and conflicts of interest in social system where the means of abstraction serves to reinforce systems of domination. As Ignatieff (2001) writes "everyone's universalism ultimately anchors itself in a particular commitment...the problem is that particularism conflicts with universalism at the point at which one's commitment to a group leads to countenance of human rights violations toward another group," (p. 9) Neu and Graham (2005), highlight the need to consider the "intersection of accounting and the public interest in a variety of settings" and the "multi-faceted nature of the nexus between accounting technologies, policies, practices, and society" (p. 589)⁶. Reflecting Bourdieu's theoretical work, Neu and Graham (2005) unearth systems of social domination. Focusing on the universal denies the nature of individual difference and ignores the influence of systems of social domination (including symbolic violence) which creates and maintains human rights abuses. Accounting for human rights needs to consider at a minimum the interests of the economic field alongside the dominant role of the State in maintaining economic capital and financial 'narratives' of legitimation that represent the interests of capital and neglect workers.

Overall, research on accounting to/about employees, research on employee accountability and research on human rights, is focussed, in the main, at the macro or broadly theoretical level. This paper attempts to consider these issues from a macro perspective in that it seeks to explore the societal structures at play while also grounding itself at the micro level in the empirical reality of the ICL tragedy. Our purpose is to build on an emerging trend in academic accounting to analyse the scope and potential for political action geared towards social change (for example, Cooper, 2005; Everett, 2002; Neu et al., 2001). As our opening quote recognises, in many ways, Bourdieu strived to strike a balance between developing scholarly research that addressed deeply complex theoretical and methodological issues, and embarking on activities geared solely towards intervening in the public realm. In order to more fully develop the micro-level function of accounting and its emancipatory potential, the next section considers the role played by ICL's financial statements after the explosion.

Accounting and ICL

On a micro level accounting information formed the basis of the fine in the ICL criminal case for health and safety violations. On the last day of the Hearing in which

⁶ The degree to which accounting academics, under the banner of *public intellectuals*, are able to play a mediating role in social structures and institutions, has been analysed previously and to considerable depth in the accounting literature (see, for example, Neu and Graham, 2005; Lehman, 2001; Neu et al., 2001; Sikka and Willmott, 2005; Sikka et al., 1995; Sikka et al, 1991, 1989; Willmott et al., 1993).

ICL pleaded guilty to two health and safety charges, the defence QC handed the judge what appeared to be a single sheet of unaudited figures prepared by the company which set out the size of fine which the companies involved could afford to pay without their business interests being affected. Several weeks later⁷, Lord Brodie, the sentencing judge, sentenced ICL Plastics and ICL Tech to each pay a fine of £200,000⁸ (See Crown Office and Procurator Fiscal, 2007). The, albeit unaudited, abbreviated accounts which had been lodged by the company at Companies House demonstrated the cash holdings were £897,511 (30th Nov 2003); £455,187 (30th Nov 2004); and £749,950 (30th Nov 2005).

Research has shown that fines are also often very small when taken in comparison to the profits of the companies they seek to penalise (Beck et al., 2007) and do not reflect the gravity of the harm caused. A number of accounting based suggestions have been put forward to try to redress this imbalance. The Centre for Corporate Accountability (2008; 2002) has proposed a formula for a unit fine that would take account of the gravity of the offence and ability to pay. In this formula, the courts would set the fine percentage at a level that would reflect the seriousness of the offence. This percentage would then be applied to an average of either the turnover or the profit of the firm over three years in order to determine the level of fine. Such a system would be an obvious way to bring fines into line with the purpose of imposing punishments that are proportionate to the offence and to the offender's ability to pay. However, because fines are levied on the organisation generally, rather than targeted at a particular group within the company, those costs can be absorbed by the organisation as it sees fit, this could include passing the costs to workers in the form of wage cuts or adverse changes in working conditions. A better (and non-accounting) solution would involve custodial sentences. This could involve senior management carrying on working for the organisation during the day but going to prison in the evening, overnight and at weekends. The use of custodial sentences may provide a stronger deterrent than fines since individual actors would face prison.

In terms of transparency, at best the accounts of ICL showed that the fine could have easily been paid by ICL out of its cash holding. In the accounts, land and property were valued on a historic cost basis, and had been written down to almost negligible levels. It was estimated that the site at Grovepark Mills, where the explosion occurred, had an insurance value of £2.2m. This information was made available to the Court, yet despite this, Lord Brodie made it clear that "it would be inappropriate for the Crown to present an independent valuation of the accused companies" (Court of Session statement, 27th August). The court deemed that sufficient information was available to determine the fine, roughly equal to £44,000 for every life lost in the explosion and without any accounting for those seriously injured.

⁷ 28th August, 2007

⁸ This fine could be compared to a fine of £121.5m imposed by the OFT and \$300m (£150m) by the US department of justice in 2007 on British Airways for colluding over the setting of fuel-surcharges for cargo and long-haul passenger flights.

There were several financial factors which were not included in the conventional financial statements. Following the two-day hearing at the Court of Session, the companies involved received a sum of £420,000 from their insurers, enough to cover the fine. Moreover, the company still owns the land on which the factory was situated. It has been reported that the cost of clearing the land to the local authority was £1m (as far as the authors are aware, the local authority has made no attempt to recover this cost from ICL). The land is in a residential area and therefore has lucrative development potential. Thus, because of the explosion ICL stand to make millions of pounds when it sells the land.

The cash holdings of the company were fairly widely reported in the press and knowledge (albeit imperfect) of the cash holdings enabled interested parties to gauge the relative size of the fines. Thus publicly available financial information, while limited, played a part in the struggle to hold ICL accountable. However, in terms of representing and upholding the human rights of workers to health and safety at work the formal accounts of the ICL Group of companies were totally insufficient and they certainly proved to be an inadequate basis for establishing the fine. Similarly, in terms of reporting on or to employees little insight is offered as to the financial position of the group or the day to day management of ICL and risk of health and safety.

Companies are judged upon their profitability. The under (or hidden) side of this is of course worker exploitation. To fully appreciate the extent of symbolic violence in the case of ICL it is necessary, as Bourdieu, advises to consider the role of the State and its agents complicit in the social system of domination in which ICL is only one part. In so doing, this also provides us with an opportunity to make visible the full extent of information that was available regarding health and safety at ICL in the period leading up to the disaster. Thus in the next sections, we turn to the State and the Health and Safety Executive.

The State and symbolism

This section was developed from Bourdieu's clarification of the importance of the state in the symbolic "system" which he originally delivered in a lecture in Amsterdam in June 1991⁹. He explained that at a fundamental level, from its genesis, the modern State had to claim to act for everyone within its geographical boundary's (human) rights in order to achieve its aim of concentration of the different species of capital into its domain (field). Indeed, Bourdieu (1998, p 41) argues that the State is the *culmination of a process of concentration of different species of capital*¹⁰: most notably – the capital of physical force or instruments of

⁹ It was later published in 1994 (Bourdieu et al, 1994)

¹⁰ Perhaps one of the best examples of this is the capital of physical force. Before the creation of modern States, most countries had various aristocrats/clans/tribes each with their own armies. The modern State required control over all military force. In states like Britain, all forms of capital of physical force have been ceded to the State. It is beyond the scope of this paper to discuss this further but concerns have been expressed elsewhere about the use of privatized military force in Iraq.

coercion (army, police); economic capital; cultural (or better) informational capital; and symbolic capital (see Bourdieu, 1986). It is this concentration which constitutes the State as the holder of a sort of meta-capital granting power over other species of capital and over their holders. The concentration of the different species of capital¹¹ led to the *emergence* of a specific, properly statist capital which enabled the State to exercise power over the different fields and over the different particular species of capital, and especially over the rates of conversion between them (and thereby over the relations of force between their respective holders). In the creation of modern States, there were battles and struggles over which capitals would dominate. For example, in the UK the capital of physical force does not play the same dominant role as it does in other States (for example Israel)¹².

Assuming the mantle of acting in the “public interest”, a key function of the modern State is to bring about, *theoretical unification*. Asserting that it is taking the vantage point of the whole, of society in its totality, the State claims responsibility for all operations of *totalisation* (especially census-taking and statistics or national accounting) and of *objectivization* (through cartography). The State further contributes to the unification of the cultural market by unifying all codes, linguistic and juridical; through classification systems (especially according to sex and age) inscribed in law; through bureaucratic procedures; and through educational structures and social rituals. In short, the State moulds *mental structures* founded upon the belief (however untrue) that it will protect the human rights of its citizens while at the same time imposing common principles of vision and division (e.g. male/female; solvent/insolvent; employed/unemployed; graduate/non-graduate and so on).

Thus, the State symbolic system performs three distinct functions: cognition (knowledge), communication (instruments of knowledge/codes), and social differentiation (integration/ structuring structures). Swartz (1997, p 89), recognised that, “for Bourdieu, symbolic power legitimizes economic and political power but does not reduce to them” due to misrecognition and complicity. This reinforces the importance of revealing symbolic power as well as economic power when examining domination and, as Swartz notes (1997, p88), stressing the primacy that legitimating (or consent) plays in enabling domination. In particular, the active role played by taken for granted assumptions or preconceived thematics in the maintenance of power relations.

Bourdieu believed that theories of the genesis of the State have failed to consider the importance of the concentration of a symbolic capital of recognised authority within the State as the condition of all other forms of concentration of the different

¹¹ This proceeds hand in hand with the construction of the corresponding fields

¹² Bourdieu did not see the State as “the dominant field”. To Bourdieu, the construction of the State proceeds apace with the construction of a *field of power*, defined as the space of play within which the holders of capital (of different species) struggle *in particular* for power over the State, that is, over the statist capital granting power over the different species of capital and over their reproduction. Bourdieu argues that their reproduction take place particularly through the school system

species of capital. Symbolic capital is any property (any form of capital whether physical, economic, cultural or social) when it is perceived by social agents endowed with categories of perception which cause them to know it and to recognise it, to give it value. More precisely, symbolic capital is the form taken by any species of capital whenever it is perceived through categories of perception that are the product of the embodiment of divisions or of oppositions inscribed in the structure of the distribution of this species of capital (strong/weak, large/small, rich/poor, cultured/uncultured, educated/ignorant, modern/old-fashioned, expert/lay-person). It follows that the State, which possesses the means of imposition and inculcation of the durable principles of vision and division is the site par excellence of the concentration and exercise of symbolic power.

However, as gestured to in the introduction, to Bourdieu, in order to understand the power of the State you need both “structural” explanations as well as “symbolic” ones. The State creates organisational structures which support its symbolic ones. The contemporary symbolic order rests on the imposition upon all agents of structuring structures that owe part of their consistency and resilience to the fact that they are coherent and systematic (at least in appearance) and that they are objectively in agreement with the objective structures of the social world. It is this immediate and tacit agreement that founds the relation of what Bourdieu describes as *doxic submission*. Bourdieu introduced the term “doxa” in 1977a (p 164). Doxa refers to those schemes of thought and perception which are produced by objective social structures but are experienced as natural and self evident and therefore taken for granted. Bourdieu (1990, p20) explained doxa as-

the coincidence of the objective structures and the internalised structures which provides the illusion of immediate understanding, characteristic of practical experience of the familiar universe, and which at the same time excludes from that experience any inquiry as to its own conditions of possibility

The constituents of doxa are all those systems of classification which set limits upon cognition but also produce a misrecognition of the arbitrariness on which they are based (Mahar et al, 1990).

Doxic submission attaches us to the established order with all the ties of the unconscious. In a capitalist State, many of the objective structures are centred on serving the needs of the market. Indeed, as we discuss later, UK state classification insists that what is good for business is also good for society. This has become one of the pre-conceived thematics which control meaning. Symbolic (and consequently economic) support for the market is differentiated from support (say) for the needy¹³. We unconsciously value profit over loss. This preconceived thematic means that we unconsciously “accept” worker exploitation alongside disagreeing

¹³ One interesting example of this is that state’s advertising campaigns against “benefit cheats” which could be compared to the state’s approval of millionaire “tax cheats”. For example, Phillip Green’s use of his wife’s Monaco resident status meant that he avoiding millions of pounds in tax that would be payable if a UK resident owned the company; he was rewarded by a knighthood.

with laws which cost companies money and are described as a restraint of trade (like health and safety legislation). In the following section we analyse a field which has been granted State symbolic capital – the Health and Safety Executive (HSE). As will be clear from the foregoing discussion, the HSE can (and does) serve to reinforce the state’s claim to act in the interests of all its citizens. However, it is also an arena which is seen as problematic (especially if its existence becomes too onerous for business).

The HSE

The HSE is a UK “non-departmental public body” sponsored by the Department for Work and Pensions. As such, it is funded by public money with authority to appoint staff and allocate spending under the governance of a board of directors. It was created on 1 January 1975 by the Health and Safety at Work Act 1974, in the wake of the Robens’ Committee (1972) recommendations on Health and Safety at work reform, and forms part of a programme of British regulation dating back to the 1833 Factory Inspectorate (Factories Act 1833). While the Executive Board originally reported to the Health and Safety Commission the two bodies were merged in April 2008. Its role with, few exceptions¹⁴, is to enforce health and safety legislation in all workplaces in England, Wales and Scotland. Its State granted symbolic power aligned with UK legal structures enables the HSE to enter workplaces and if necessary take legal action against work activities which it considers to be dangerous. This symbolic power is valued, in part at least, because it is founded on the belief that it is protecting the human rights of workers. Moreover, doxa dictates that if a worker knows that unsafe working practices are taking place, their natural protector is the HSE.

Therefore, in the case of the creation of the Health and Safety Executive, despite what might happen in practice, the State can claim that it has acted in the public interest by the creation of this body (and in some senses absolve its own responsibility for health and safety at work); it can also withdraw its symbolic capital, close the HSE and set up an entirely new body. In this way the State has maintained its power while appearing to disperse it. A similar point is made by Mahon (1979) who sees the formation of such bodies as simultaneously representing and regulating. In this way the regulatory body can serve to prevent change or to act as an agent of change (Tombs, 1995; Post & Mahon, 1980).

Symbolic pre-conceived thematics surrounding the role of the state makes it “rational” for a regulatory body to be a public agency, ‘independent’ of the control of private enterprise/ capital, with resources controlled at a restricted arms length by the State. Such an apparent structural position serves to create the legitimate authority of the HSE. But what is the reality? Research has shown the HSE is under resourced, with its scarce resources employed in pursuit of collaboration with management. Despite a recorded high of 4,545 staff employed by the HSE in 1994

¹⁴ Except those regulated by Local Authorities and since April 2006 excluding the Railway Inspectorate now regulated separately by the Office of Rail Regulation.

(numbers have fluctuated, but total staff has never surpassed this high point) the HSE reported some 593 work related deaths in 2004-5 (Health and Safety Executive, 2007). Further, of a reported 4,019 HSE staff on 1st April 2004 only 1,483 of those were front line operational inspectors. Arguably, the HSE has never been granted the resources to act as any kind of police force for the UK workplace despite being the lead enforcement agency for health and safety legislation (Toms, 1990). Recent data suggests that UK-wide the HSE is indeed increasingly de-emphasising its role as a health and safety enforcement agency, with a UK-wide fall of enforcement notices from 11,335 in 2003/4 to only 6,383 in 2005/06.¹⁵ In effect the cultural capital of HSE inspectors is not seen to be serving the direct interests of business and therefore commands a low exchange rate in society (as do many “social welfare” functions). Moreover, the activities of the HSE following the State’s pre-conceived thematics, tends to represent the interests of capital over labour. In spite of this, our doxic submission means that there is a tendency to view the HSE as the protector of workers’ human rights. This is the same in both Scotland and England, however there are differences between the two countries.

The HSE in Scotland

There is a specifically Scottish habitus which has impacted on HSE activities in Scotland. Over many years the HSE has recorded significantly higher rates of fatal and major injuries for Scotland as compared to the UK as a whole. For example, between 1996/7 and 2005/6 Scottish employees have averaged 58% higher rates of fatality than the UK overall. Attempts to explain this ‘Scottish anomaly’ have failed to reach common agreement, however, explanations include weaknesses in the inspection and prosecution of safety offenders. Beck et al (2007) illustrate this point noting at the time of the Stockline disaster the HSE reportedly had only 68 inspectors to police 81,000 workplaces, in a UK-wide context where inspection has been de-prioritised.

This concerning evidence should be set within the specific structure of the legal field in Scotland. This structure has meant that Scotland’s inspectorate arguably faces a greater challenge than England. In Scotland, prosecutions for health and safety offences must be made through the Procurator Fiscal office rather than being taken directly to court by HSE staff. Research has shown that the impact of the de-emphasis on enforcement has been aggravated by significantly lower fines issued by Scottish courts than their English counterparts (Beck et al, 2007).

From a historical perspective, it appears that discrepancy in legal enforcement has always existed, particularly between England and Scotland. Marx (1976, p 401) recounts a divergence over the enforcement of a 15 hour factory day. When the home Secretary was overwhelmed by petitions from mill-owners, he instructed inspectors not “to lay information against mill-owners for a breach of the letter of the Act”. While the Scottish Inspectorate duly obliged, the English Inspectorate

¹⁵ Health and Safety Commission (2006) Health and Safety Statistics 2005/06
<http://www.hse.gov.uk/statistics/overall/hssh0506.pdf>

“declared that the Home Secretary had no dictatorial powers enabling him to suspend the laws, and continued their legal proceedings against the ‘pro-slavery rebellion’”.

Commenting on the effectiveness of the Inspectorate Marx (1976 in Capital vol. 1) further highlights the distance between inspectors and “cotton lords” of the time when he refers to regulation of child employment as “the first rational bridle on the murderous, meaningless caprices of fashion”. Yet this rigor belies a subverted strengthening of the State and capitalism through increased labour regulation. As noted by Marx (1976, p 604) as the industrial revolution in Britain advanced it was “helped on artificially by the extension of the Factory Acts to all industries”. Despite the claims by owners and managers that the cost of compliance required an unaffordable outlay of economic capital this served only to highlight that the “unlimited exploitation of cheap labour-power is the sole foundation of their ability to compete” and with the “improved method” of production regulated by the Act any initial economic outlay was absorbed (Marx, 1976, p 605). Further, regulation could often be obviated “at the expense of an enlargement of the works under the pressure of a General Act of Parliament” (Marx, 1976; p610, footnote 16). Thus Marx described how Factory Acts, while seeming to serve the public interest, in reality helped the expansion of Capital.

Thus the 19th century saw new regulation by the State which might have provided workers with individual and collective rights to health and safety at work. Instead, “laissez-faire” ideology portrayed the new legislation as a curtailment of human freedoms which would stand in the way of economic progress. The view of legislation as a restraint of (rather than an enabler of) human freedom persisted in the background throughout the 20th century and was brought to the fore by the Conservative governments of the 1980s. Margaret Thatcher’s government tenaciously set about reinforcing pro-business categorizations – private good/public bad. This has been developed to “business self-regulation good”/“government legislation bad”. Moreover, calls for increased legislation in the realm of health and safety in the 21st century are categorized as demonstrative of our overly “risk averse culture”. The trade union movement in Britain has from its inception taken an opposing view of government health and safety regulation (James and Walters, 2005). In the next section we briefly consider the role of Trade Unions in health and safety

Trade Unions and Health and Safety

Critical researchers (Carson, 1985) have pointed to legislative and regulatory weakness and the imbalance in the relationships between employers and employees as root causes of industrial injuries and illnesses. Indeed research has demonstrated that the collective involvement of workers in the monitoring and development of health and safety arrangements in the workplace is a valuable means of improving standards of worker protection. Where workers are unable to exercise their rights

and are not collectively empowered through trade unions the health and safety deficit is evident. Evidence suggests that twentieth and twenty-first century regulatory approaches to health and safety in the UK have added to this deficit, because of an implicit bias against the criminalisation of employers who commit safety offences (Beck and Woolfson, 2000). HSE research confirms the academic consensus that trade union organised workplaces are at least 50% safer than non-organised workplaces (for a discussion of this evidence, see James and Walters, 2005).

British trade unions in the 21st century possess high levels of cultural capital in terms of their training in health and safety, and high social capital in terms of their networks and connections. This aligned to the potential for unions to carry out action to disrupt the economic activities of employers give trade unions some power over the monitoring and development of health and safety arrangements in the workplace. Notwithstanding, or perhaps because of this, in the 21st century employers should benefit from the input of trade unions into health and safety processes. Academic research lends “broad support to the notion that joint arrangements, trade unions and trade union representation on health and safety at the workplace are all associated with better health and safety outcomes than when employers manage OHS (occupational health and safety) without representative worker participation” (James and Walters, 2005, p 100). Accordingly, any study of health and safety must pay attention to the adequacy of the provisions on worker representation and possible means of its improvement.

Under current legislation employers have legal responsibilities to ensure the provision and exchange of information and instructions that enable employees to be properly informed about risks and health hazards, and to provide the training to allow employees to understand information and instruction¹⁶. There are two principal sets of regulations that require workers to be consulted on health and safety matters. The Safety Representatives and Safety Committees Regulations 1977 is for workplaces where trade unions are recognised for collective bargaining purposes. Recognising the exacerbated power imbalance in non-unionised workplaces, the Health and Safety (Consultation with Employees) Regulations 1996 covers workplaces with no trade union recognition. ICL worker testimony paints a picture of ICL as being virulently anti-union. We will further see in the case study that the management of health and safety at ICL appears to have been characterised by an informality and laxity that left workers vulnerable to the vagaries of those responsible for its implementation. There was clearly no system of health and safety consultation in place that could be regarded as complying with the 1996 Regulations. And yet, extant doxa (the view of the dominant that has become taken-for granted) suggests that unions serve to hamper business and that there is too much legislation

¹⁶ Those legal responsibilities are detailed under section 2 of the Health and Safety at Work Act 1974 and are repeated in many other subsequent health and safety regulations. The Management of Health and Safety at Work Regulations 1999 specify requirements on risk assessment (see the following case study), and the information that employers are required to provide to workers from the findings of any assessment. In addition, employers have legal responsibilities to put formal mechanisms of consultation on health and safety matters in place.

in place, especially in respect of small businesses even though both of these fly in the face of the evidence.

In the next section we set out Bourdieu's theoretical explanation of how it is possible for "it to go without saying" that health and safety legislation is bad for business and thus should be minimized alongside a deeper consideration of the role which the Health and Safety Executive plays in the perpetuation of state sanctioned symbolic violence in the constitution of worker and employee subjectivities.

Symbolic Violence and Health and Safety

Through his own historical analysis of economic and social struggles, Bourdieu recognises there has been a historic move from overt violence with industrialisation to more symbolic violence¹⁷ (Bourdieu, 1977a; Swartz, 1997). For Bourdieu, there is an intelligible relation – not a contradiction – between overt and symbolic violence which "coexist in the same social formation and sometimes the same relationship" (Bourdieu, 1977a, p 191). It should not be forgotten, for example, that for many slavery was, and in some cases arguably still is, an accepted part of everyday life. However, as was explained earlier in the paper, the State does not necessarily have to exercise physical coercion in order to produce an ordered social world, as long as it is capable of producing embodied cognitive structures that accord with objective structures and thus of ensuring doxic submission to the established order¹⁸. Doxa is the point of view of the dominant, which presents and imposes itself as a universal point of view – the point of view of those who dominate by dominating the State and who have constituted their point of view as universal by constituting the State. Doxa is the breeding ground for *symbolic violence*.

Famous for rethinking dichotomies of social theory, Bourdieu's account of social violence (physical coercion) is distinct in that symbolic violence is achieved without consciousness or constraint. It is grounded in the 'choices' people make according to their specific habitus¹⁹ and their "illusio", an unconscious commitment to the logic, values and capital of a field. The nature of symbolic violence means it is not recognised or, as Bourdieu elaborates through many examples of language and education, is misrecognised. For example, such misrecognition has become a common basis for social analysis in gender studies where social behaviour is understood as "natural" or socially acceptable behaviour rather than acts or

¹⁷ Collins (2003; 116) argues Bourdieu's focus on dichotomy could be improved by the recognition of contradiction, in particular to resolve the tension with respect to language between social structural determination of verbal interaction – determinism – and a social creativity – constructivism.

¹⁸ Akin to Gramsci, Bourdieu believed that the State could control through consent (ideology) or through coercion (physical). Bourdieu argues that the use of overt physical coercion or violence to explain the stability of capitalist social relations is incommensurate with the empirically observable realities of everyday life and therefore explanation must be sought in symbolic violence and the manufacture of consent (Calhoun et al., 1993; Garnham, 1993, p 184).

¹⁹ Habitus is the internalised schemes of thoughts and action which an actor develops according to her positioning in the field.

relationships of domination. The acts - words, gestures and intonations – of domination are not recognised as such, they are misrecognised as part of the doxa. Doxa serves to distinguish the thinkable from the unthinkable, reinforced by acts of distinction that obscure domination (Bourdieu, 1990).

Part of their makeup is that acts of symbolic violence are socially established and unconsciously accepted. Within our social relationships and practice, complicity of the dominated is necessary if symbolic domination is to be realized. As highlighted by Bourdieu “the propensity to reduce the search for causes to a search for responsibilities makes it impossible to see that intimidation, - a symbolic violence which is not aware of what it is (to the extent that it implies no act of intimidation) - can only be exerted on a person predisposed (in his habitus) to feel it, whereas others will ignore it”... (Bourdieu, 1991, p 51). Bourdieu’s extensive study of education illustrates how bodies of knowledge perform a reproductive function by communicating values of meanings of the existing social order to students who become predisposed to acceptance. For example, a child with a middle class accent and extended speech patterns may be rewarded by the teacher and so come to be seen as more intelligent. Thus anything said in a middle class accent is seen by the child and her classmates to be “intelligent”. Children with working class accents will “know” that they are less intelligent. By making arbitrary cultural connection in a world where divisions and hierarchies are presented as necessary, a form of symbolic violence is enacted (see further Webb et al., 2002, p 118 on cultural arbitrary). Cultural capital (for example, competencies, skills, qualifications) can also be a source of misrecognition and symbolic violence. Therefore, working class children can come to see the educational success of their middle-class peers as always legitimate, seeing what is often class-based inequality as instead the result of hard work or even "natural" ability. A key part of this process is the transformation of people's symbolic or economic inheritance (e.g. accent or money) into cultural capital (e.g. university qualifications).

In the formation of symbolic violence there is a transmutation of economic into social capital. This occurs when the interests of the economically dominant become doxic -- when they are concealed by a socially recognised authority legitimated by the State (as in the case with the HSE). Workers in 21st century Scotland’s identities and subjectivities are in part constituted by the belief that they are “subjects” in a democratic and fair system. This view is reinforced by the existence of government agencies like the HSE and legal structures like the various Health and Safety at Work Acts. Moreover, tragedies such as Bhopal have been characterised by the UK state and the British media as “the Other” and as an example of what can happen without the proper structures and regulations which we are fortunate to have in the UK. Yet, as set out in the previous section, the “protection” offered to Scottish workers by the HSE is a kind of charade with only 68 inspectors policing 81,000 workplaces at the time of the explosion. This is why we describe Health and Safety practices as doxic.

The question maybe posed surely workers who see the charade of HSE enforcement in their workplaces cannot be so easily duped? Debate on the robustness of

Bourdieu's 'theory' of symbolic violence has centred on the extent to which workers are aware (misrecognise) and complicit in domination, and domination is illegitimate (see for example Bourdieu, 1977a; Calhoun et al., 1993 Swartz, 1997). This issue will be discussed in the case study. At this stage it is important to note that Bourdieu's theoretical position is not pessimistic, an escape lies in critical reflexivity and the historical analysis of rational thought –“to rethink the subject-object dichotomies of classical and current social theory” - not just conflict in social relations and practice. “To fight for reason, for the undistorted communication that makes possible the rational exchange of arguments, etc, means fighting very consciously against all forms of violence, starting with symbolic violence” (Bourdieu, 2008, p 222-3)...recognizing “the methodical historicization of the instruments of rational thought (categories of thought, principles of classification, concepts, etc.) is one of the most powerful means of removing them from history” (Bourdieu, 2008, p 223) People's “common sense” notions about the workings of society were reformed during the 1980s when the Conservative government set about redefining/clarifying our understandings of the State and the private sector such that the private sector was categorised as being good-for-business (and by extension everyone), efficient, free and modern, while the State was categorised as bad- for-business (and by extension everyone), inefficient, constraining, and old-fashioned. While these categorisations were not new, they were solidified. In a piece published towards the end of his life (Bourdieu and Wacquant, 2001), Bourdieu wrote that “the new planetary vulgate rests on a series of oppositions and equivalences which support and reinforce one another to depict the contemporary transformations advanced societies are undergoing - economic disinvestment by the state and reinforcement of its police and penal components, deregulation of financial flows and relaxation of administrative controls on the employment market, reduction of social protection and moralizing celebration of 'individual responsibility' - as in turn benign, necessary, ineluctable or desirable, according to the oppositions”.

The legacy of Thatcherite State categorisation is that government legislation is seen as inhibiting and damaging to “economic freedom.” In terms of health and safety, there is a symbolic belief that any further regulation of health and safety is somehow both wrong and an ineffective means of achieving desired improvements. Indeed it is “legitimate to reduce the resourcing of State regulatory activity on health and safety and replace it with exhortation and appeals to economic self interest of business to regulate itself, alongside a naïve reliance on untested notions about how the business environment provides its own levers and pressures to encourage effective self-regulation” (James and Walters, 2005, p xii). Thus, while the HSE still stands as a structure to “protect the health and safety of employees”, neo-liberal state categorisations have legitimated cuts in HSE funding.

It should be noted that at an individual level, the dominant framework of neo-liberalism, is one that values individualism, and self-responsibility (Bourdieu and Wacquant, 2001). At a subjective level this means that our “common sense” tells us to “look out for ourselves.” For those who perceive themselves as “business people”, state categorisations serve to construct their subjectivity as being “naturally

opposed to state regulation of business". It cannot be stressed enough that such beliefs are deeply held and form part of individuals strategies as the act on fields.

Putting acts of violence (our case study of ICL) into context means that it is necessary to analyse the objective mechanisms which help to establish and conceal relations of domination and also requires us to consider changes in capitals in terms of what Bourdieu aptly calls a "comprehensive balance-sheet of symbolic profits" (1977a, p181). The following section sets out a detailed account of the activities of the HSE in its dealings with ICL and its LPG gas installation. There were many important issues with regard to health and safety at ICL but we have chosen to concentrate mainly on the LPG pipes since it was a corroded LPG pipe which caused the explosion.

The Habitus of health and safety practices at ICL and the doxic HSE

The History

The ICL building was a former weaving mill which had been constructed in 1857. As will be seen from our discussions, the working environment of the 21st century workers may not have been so far removed from that of their Victorian counterparts. The old mill was situated in a busy residential area and had passed through various hands during the years before it became the home of Industrial Copolymers Ltd Plastics (now ICL Plastics), which was founded on the site in 1961 by chemist Campbell Downie and colleague Ron Cunningham. This building had undergone numerous alterations throughout the decades. It originally had an open pit partly below ground level and an adjoining basement. In 1980 the open pit area was covered by the creation of a freestanding floor. The ground floor of the building was approximately a metre above the external ground level.

The history of the use of LPG at ICL began in 1969, when an LPG tank was installed in a yard outside of the ICL factory building. The LPG gas would be used to fire ovens within the factory premises. The installation was organised by Campbell Downie (one of the founders of the company). He engaged Grieben Plant Limited to supervise the installation of the pipe. The principal of Grieben Plant was the late Frank Semple, a former marine engineer and Downie's bother-in-law. The tank was connected to an underground pipe running beneath the yard and originally rose above ground (through two 90 degree bends in the pipe) to enter the building through a bricked up window into the open pit area. At this time, the final section of the pipework rose vertically to about 0.45 metres above the original surface of the yard and was clearly visible. Internally, the pipe was also visible in the pit area of the building. However, to counter problems with flooding, the level of the yard was raised in 1973. As a result, the LPG pipework was buried at the place where it entered the building. In 1980 when the inside pit area was covered, the pipe ceased to be visible from inside the premises. (Insert fig 1 about here)

The LPG installation attracted the attention of HSE inspectors. Indeed, the evidence from the Public Inquiry demonstrates that Campbell Downie (the controlling shareholder) and other senior staff at ICL's attitude to health and safety provoked serious comment within the HSE²⁰. The Public Inquiry carefully details occasions where the HSE were given information by ICL which later turned out to be factually incorrect and in all likelihood designed to delay HSE recommendations. For example, in February 1982, the HSE submitted recommendations for improvements to the LPG tank which included the installation of a drench system. In December, 1982, Frank Stott who was the responsible officer for health and safety at ICL Tech²¹ telephoned the HSE and later wrote confirming that the drenching system had been delivered and was to be installed during the Christmas shutdown period. The Public Inquiry found that this representation cannot have been true. Twenty two years later, at the date of the explosion, no drenching system had been installed. This was not a minor oversight on behalf of a busy mid level manager. The absence of a drench system and the advice of the HSE were known to the senior management at ICL. When the issue of the drenching system was raised six year's later in April 1988, Stott responded to a memo from Downie on the significant cost of installing a drench system as follows "... we must try to talk them out of the drench but this will be difficult this time around..." (Gill, 2009, p 87). In a later memo, Stott wrote to Downie that, "...I suspect that we have reached the end of the road in side stepping their requests (since 1982)...." Downie replied ".... I am not unduly concerned with the Factory Inspectors displeasure...." The habitus of ICL was one of stalling on HSE recommendations; meticulous attention to the cost of health and safety implementation and apparently holding the HSE in low regard or perceiving the HSE activities to be a "restraint of trade".

Recommendation 11 – the potential lifesaver

Between 1975 and 1988 HSE inspections repeatedly expressed concerns about the siting of the LPG tank which was considered to be too close to the factory building. But in 1988, a key event in the history occurred when a specialist inspector visited ICL. The HSE inspector, John Ives (who had experience of Inspecting ICL since 1981), attended that visit with Alan Tyldesley²² who had recently been recruited as a Specialist Inspector, working with the Field Consultancy Group dealing with fire and explosion. Ives long association with ICL should have meant that he was aware of ICL's habitus.

It became clear during the Ives/Tyldesley visit that the siting of the tank, given its size, did not comply with the separation distances contained in HSE guidance HS(G)34. The Public Inquiry noted that this was "a problem on which Mr Stott had successfully staled for so long" (Gill, 2009, p63). The specialist (Tyldesley) stated that

²⁰ For example, on 1st October 1975, an HSE Inspector noted that "Conditions in the factory have deteriorated considerably..." In a letter to the procurator fiscal, proposing prosecution in light of ICL's failure to comply with Improvement Notices, Mr Downie was described as having an irresponsible attitude in connection with fire matters.

²¹ Frank Stott was the responsible officer for health and safety at ICL Tech until his resignation in 1998, thereafter responsibility lay with Peter Marshall until 2000 and then with Stewart McColl.

²² <http://explosionconsultancy.co.uk/>

ICL should either try to convert their ovens which used LPG to natural gas, try to rent land further away from the factory to re-site the tank or to acquire smaller tanks. In all Tyldesley made 12 recommendations. For the purposes of this paper, recommendation 11 is the most poignant—

Part of the underground pipework carrying LPG vapour into the building should be excavated. The state of the pipework and any corrosive protective coating should be examined by a competent person and any recommendations made as a result of this inspection should be carried out. A pressure test²³ of the pipework should also be carried out. (Gill, 2009, p66)

In short, in 1988 a recommendation was made that the pipework should be dug up and checked. If this had happened and the pipes had been correctly protected, it is highly likely that the explosion would never have happened. In the subsequent trial relating to the explosion it was heard that the cost of renewing the pipe would have been £405.

At the Public Inquiry, Tyldesley said that based upon ICL's lack of action regarding HSE recommendations about the installation between 1982 and 1988, he felt that co-operation from ICL on his 12 recommendations without legal enforcement action would be unlikely. Thus, his recommendations were intended to form the basis for an Improvement Notice under the Health and Safety at Work Act 1974. Ives, who had 34 years experience in the HSE had attended several LPG training courses but could not recall any discussions of pipelines, returned to ICL on 1st September, 1988, to discuss Tyldesley's report with Stott. The entry on the HSE Report on Visits form recorded that

Mr Stott opened the meeting by announcing that he was transferring his oven from LPG to mains gas which will reduce the need for the LPG store. It appears that a small tank will still be needed for the central heating system. Letter and CV (check visit²⁴) proposed to ensure that Mr Stott keeps his word. (Gill, 2009, p 68)

Ives later marked the file to cancel the check visit "as negotiations were underway". The Public Inquiry Report stated that in the meeting between Ives and ICL,

Mr Ives went through the recommendations in Mr Tyldesley's report with Mr Stott (an ICL Director) during the meeting. In relation to the pipework, Mr Stott did not think that excavating the pipe was a practical option as it would mean digging up the yard. (Gill, 2009, p 68)

The outcome of the meeting was that Stott was going to discuss the issue with a for-profit company, Calor (its LPG supplier), and would return to the HSE with a new proposal. Thus Stott made two completely contradictory statements during the

²³ A pressure test would show whether or not the pipework was leaking but would not determine the condition of the pipe.

²⁴ This was marked for November 1988

same meeting. If ICL truly intended to convert to natural gas they had no need to speak to their LPG supplier – they would have had to speak to a natural gas supplier.

Calor and the field of power

The matter effectively went into abeyance until Mr Stott discussed the matter with Calor. In effect, a specialist HSE inspector's cultural capital (his recommendations), perhaps because they were seen as "curtailing ICL's freedoms", was valued very lowly by everyone concerned (the HSE, ICL and as we shall see later, another private company, Calor). Moreover, in allowing ICL to approach Calor, the symbolic capital of Calor was deemed to be higher than that of an HSE specialist.

Stott did contact Calor. He dealt with Mr Coville. Coville and Ives knew each other well. It became evident in the Public Inquiry that it was part of the habitus of the field for companies to contact Calor if they were having difficulties with the HSE. The Public Inquiry stated that "He (Ives) and Mr Coville had had regular contact where persons with LPG installations sought guidance and where they were trying to resolve difficulties regarding such installations. When incidents occurred they would work together to try to improve practices."

Coville (a Calor employee, but on behalf of ICL) wrote to Ives on 4th January 1989 in the following terms-

... On behalf of ICL Technical Plastics Ltd and following my telephone call to you on 23rd December 1988, the attached sketch plan outlines suggested suitable remedial action, to be taken by Calor Gas Limited, in order to meet the recommendations made at paragraphs 1, 2, 3, & 4, only of your above-referenced letter... I trust you will consider the above measures to form an acceptable compromise to your recommendations...." (Gill, 2009, p 69)

In fact the Calor proposals were mainly concerned with the installation of a smaller LPG tank and the requirements for a certain distance between the tank and the building. One of Tyldesley's recommendations had been that ICL should replace the 4,000 litre tank with a much smaller one of 250kgs. It seems that Calor were unable to supply tanks of this size, and their counter proposals were concerned with installing a 2,000 litre tank. Calor as a participant on the economic field would be concerned with keeping its clients. If the HSE created too many problems for its clients, they might be tempted to convert to using another source of power. For clients, like ICL, their preference would be to expend as little economic capital as possible converting to a different system.

The Ives/Coville "counter-proposals" were referred to Tyldesley. In a memo dated 17th January, 1989, he replied to the counter proposal stating that the LPG installation would be acceptable if ICL could obtain nearby land on which to site the tank. He also stated that he hoped "that appropriate enforcement action will now be taken to ensure that the installation is improved without delay." (Gill, 2009, p 72). Tyldesley was clear that his recommendations had been a package and that it had not been a case where there could be picking and choosing. Indeed, if ICL/Calor had

decided to install a smaller tank rather than resite the tank further away from the building, this would involve halting the supply and so would be a convenient time to check the underground pipework. Tyldesley believed that Coville/Calor as “competent persons” would understand the need to check the pipework.

In the event, Ives “pulled-rank” on Tyldesley. Ives responded to Tyldesley on 20th January, 1989. We will include a long quotation since it is important to understand the habitus of the HSE—

I would remind you that enforcement policy in this matter rests with myself and I will take appropriate action as I see fit to deal with this matter. The problem that has arisen is that Calor Gas are telling the occupier and myself that they do not produce tanks for bulk LPG which meet the standards of your original report. In other words if I were to enforce the letter of your report then this site would have to cease using LPG. In those circumstances I deem it better that we try to reach a reasonable compromise and solution rather than rush into enforcement action which will backfire. In view of Calor’s claims perhaps you could confirm that it is possible for them to supply tanks of volume no greater than 250kgs.²⁵

It is clear that doxic submission to the needs of economic capital accumulation by the HSE played a key role in Ives’s actions. Ives seemed concerned that ICL would be able to continue using LPG. The actors’ strategy ensured that the needs of capital were privileged over health and safety at work. The HSE’s symbolic power derives from its claim to act to protect the health and safety of workers and yet it seems that they are able to compromise on this.

However, there was also another factor at play in Ives’s actions. Lord Gill at the Public Inquiry (Gill, 2009, p 94) stated that “it is clear from Mr Ives’ evidence about the Calor counter-proposal that his decision to accept it was influenced, in part at least, by his fear of the consequences if he should reject it. It was well known to the Inspectorate that Calor had a history of challenging HSE enforcement notices. This is the operation of the field of power. Calor’s economic capital and its ability to pay for the cultural capital of the best lawyers made it a much stronger adversary to the HSE than ICL. Gill (Gill, 2009, p 94) then writes “ Calor consider themselves to have a constructive relationship with HSE and reject any suggestion that they intimidate HSE when they occasionally seek to assist their customers to resolve any potential enforcement notice issue. I myself make no such suggestion.”

Calor had legal representation throughout the public Inquiry. They seemed very keen to assert that their counter-proposals to Tyldesley met with HS(G)34²⁶, a claim contested by other witnesses to the Inquiry. Gill wrote that (Gill, 2009, p 99), “In my view, for so long as Calor contractually accepted no responsibility for pipework beyond the vapour off-take valve, it was at least a tenable position for them to say

²⁵ Telephone enquiries to other gas suppliers indicated that tanks of 200kg and 600kg were available elsewhere (although perhaps not from Calor).

²⁶ HS(G)34 Storage of LPG at fixed installations, HSE, 1987

that the buried pipework was a matter for the user alone. But they could not maintain that position when they agreed to advise and represent ICL in its negotiations with HSE.” In effect the LPG industry is self regulating. The threat of legal action against Ives by Calor should be seen as part of the struggle by economic capital to have power over the State.

In 1989 HSE protocol was that all actions and correspondence were directed through a general inspector. This meant that Tyldesley would not have known whether his recommendations were applied or not. In the event, Ives while not pursuing recommendation 11, did pursue the resiting of the tank. This would have meant that ICL would have had to acquire adjacent land.

Stott wrote to the HSE on 25th January 1989 to say that he could “now confirm that we are in fact in control of the land out with our main factory gate...”. The letter also gave other details about relocation of parking and so on. The Public Inquiry found that Stott’s letter was plainly untruthful and designed to mislead. No ICL company, then or since has had control of the land. Colville visited ICL in December 1989 and drew up a further plan probably as a consequence of being told that ICL had control of the land. In January 1990, Colville spoke to Ives. Ives reported that the new proposal seemed satisfactory. A check visit due in March 1990 never took place. Almost eighteen months later in June 1991, Calor replaced the 2-tonne (4,000 litres) tank with two 1-tonne tanks. At the time of the explosion, some of the Ives/Coville compromise plan had not been completed.

The Audit Society and the HSE

In 1993, the habitus of the HSE changed slightly in that companies were legally obliged to appoint one or more competent persons to carry out risk assessments in the workplace. The next HSE visit to ICL in January 1992, and visits subsequent to this demonstrated the new approach to health and safety audit by the HSE. In practical terms this change served to devalue the cultural capital of HSE inspectors further, since the onus of reporting risks was removed from them and was placed on companies - a form of self-regulation consistent with state categorisation and distinction of public and private spheres. Indeed the new approach is more akin to the statistical sampling, negotiated compromise (between auditor and auditee) and light-touch of financial accounting auditing. The inspector who carried out this visit, Alistair McNab, carried out a “diagnostic inspection” which meant that he “sampled” activities with a view to diagnosing any problems with the management of health and safety. The Public Inquiry stated that the “purpose was not to check every single hazard or risk or activity in the factory, for it was impractical for him to do so and *that was in any event the responsibility of the duty holder (itals added)* (Gill, 2009, p 76). McNab concentrated on the management and on the director roles and was concerned that the company should be ready to audit itself for risk. McNab’s visit was in part to prepare ICL for its obligations to appoint one or more “responsible officers” to assist in identifying risks within the workplace and to develop measures to minimise these. These obligations were to become mandatory for employers on 1 January 1993.

Interestingly, at the Public Inquiry, Lord Gill had something to say about HSE guidance on pipes. It seems that HS(G)34 was the vaguest of them all. A witness to the Inquiry, Dr Fulham, told the Inquiry (Gill, 2009, p 95, *itals added*) that “...it reflects the general move towards a risk based approach... where you don’t give such specific detail but where you allowed a competent person (*e.g. Calor*) to use their judgement...” Given ICL’s habitus (resisting HSE recommendations), which was well known by the HSE, how could one of their senior management be deemed to be a responsible officer? This is an example of the violence involved in the move towards risk based assessments. Given ICL’s history, one would trust the HSE not to trust ICL and yet this is exactly what happened.

McNab’s visit served a dual purpose since it was also deemed to be the “check visit” to follow up on the LPG gas recommendations. McNab added a handwritten addition to his report of the visit “LPG seems to meet 1990 agreement”. In fact the agreement with Calor had not been fully implemented. After 1993, there was no further mention of the LPG installation in the HSE files. Thus it seems that recommendation 11 was effectively filed away and forgotten until the explosion. While, as we set out below, this could be seen as a “one-off” error, it is exemplary of the structure and doxa of the HSE.

It is likely that if the workers of the factory were aware of Tyldesley’s recommendations, then the pipe corroding in the ground might not have been forgotten. The social capital of workers only serves to empower worker actions against known adversaries. But in this case, the workers did not have access to the cultural capital (nor the recommendations) of Tyldesley. Indeed the risk assessment at ICL was to be carried out by a full time student without Tyldesley’s cultural capital. What this student had however was social capital.

Andrew Stott (Frank Stott’s son) a full-time university student studying Human Resource Management, was asked to carry out a self-evaluation risk assessment by his father (Frank Stott) or William Masterson. The public Inquiry seemed to think that he had made a reasonable attempt at the assessment. However, Andrew had not thought about the buried LPG pipework so the pipe did not form part of the assessment. Frank Stott however, did know about it, Tyldesley’s recommendation had been specifically discussed with him by Ives. Andrew Stott’s involvement in preparing the draft assessment finished in January 1997. The final form of assessment was dated 16th July 1997. Later risk assessments perpetuated the error of not including the buried pipework. The maximisation of profits is part of the *illusio* of the economic field. This means that leaders of organisations on this field will only be prepared to spend economic capital on health and safety if it will bring economic returns to their organisation. Thus when managers assess health and safety risks they are concerned about the risk relating to economic capital. Of course if damage to workers is economically or symbolically costly to companies (perhaps because of disruption to production) then this risk will also be considered.

The issue as to whether or not the error perpetuated by Andrew Stott’s risk assessment could have been prevented if had been carried out by someone else is

clearly one of conjecture. While not possessing the cultural capital of Tyldesley, many workers at ICL were aware of the risks associated with their work. However, as a non-unionised site they had no organised basis to petition management for information nor to protect them if they attempted to raise health and safety issues with management.

The cultural capital of workers

Workers' testimonies constitute a powerful indictment of the general approach to health and safety management taken by management at ICL. They reveal the routine disregard of health and safety legislation and statutory regulations, including serious breaches of COSHH regulations. There are many graphic examples of this negligence, of which the following complaint following exposure to chemicals is quite typical.

But I was working with this stuff [gold paint supplied by Trimate] one day – I never had any gloves on – and all this paint was getting stuck to my fingers and up my nails and in my hair. I never thought of looking at the actual tin that [this fellow worker] was using and it was only when I seen a skull and crossbow on the tin that I thought, 'There's something wrong with the stuff we are using'. So I took a closer look and I complained to Bill Masterton that I was getting a tingling feeling in my hands. I complained for weeks and weeks. Bill's like this, 'Och, it's just work, go and wash your hands every time you are finished using it. I said 'But I'm still getting the tingling sensation' [after I wash my hands]. So I read the actual thing on it and it says, 'the downside effect of this paint is if it comes into contact with your skin is that you could get a tingling sensation, which is irreversible. Irreversible on the tin! I'm like that 'I've got this and it's irreversible'. So I pointed that out to Bill. I said, 'Look at the back of that tin, you should have told me before I started even touching that paint that I had to have gloves on, or special gloves, and see the smell of this stuff'. (Beck et al, 2007, p 10)

Presaging the cause of the explosion, workers reported that they were aware of serious problems that had emerged with regard to the gas pipes.

Somebody came in and condemned the gas pipes. For about a week or two we had no gas. The thing is we were led to believe it was the Health and Safety (Executive) because I know for a fact that somebody did complain because they were having odd job men [working on them]...one of the guys actually phoned the health and safety and pointed out that they had odd job men working on the gas pipes, shouldn't it be somebody who is CORGI²⁷ registered working on the gas pipes. I'm not 100% sure if they came in, if they contacted them or what they did, but there was talk they came in around that time as well. (W2) (Beck et al., 2007, p10).

²⁷ In 1991 the Health & Safety Executive changed legislation in Great Britain relating to gas work; introducing the requirement that anyone working on gas must be "a member of a class of persons". This class of persons is defined by registration with a new mandatory gas safety scheme, which HSE asked CORGI to act as registrar of. CORGI became the "Council for Registered Gas Installers" at this time.

They built the oven themselves...And then they had to get people in for the gas burners and I think that's what it was. I think it was them that noticed that something was wrong. They condemned. They actually cut the gas off. They said, under whatever regulations they work under, that they found dangerous pipes, so they were going to disconnect them. So they disconnected them and left. Then what happened was it was like the two handy men in the place, they were called out. They started working on them to sort the leaks. So it was like a spray they got and what they did was they would put the gas on and they went along the pipes spraying it all and identifying leaks. And then they would fix them. But the pipes were never replaced (W4) (Beck et al., 2007, p10).

As stated earlier, since there was no trade union recognition agreement at ICL, it appears that the factory would fall under the Health and Safety (Consultation with Employees) Regulations 1996. Under the 1996 regulations it is the responsibility of the employer to ensure that a system for consulting workers on health and safety is in place. In such a case, the regulations allow for the company to choose between a system of consultation through a safety representative elected by the workforce or a system of direct consultation with employees. According to workers' testimonies provided by Beck et al. (2007), there was no elected representative of employee safety at ICL. This means that the company was obliged to consult directly with the workforce. This information, according to HSE guidance must include information from accident books, and any assessments that have been made under COSHH regulations. Workers' testimonies Beck et al. (2007), provide clear evidence that ICL's organisation of health and safety representation fell well short of legal compliance.

Overall, management of health and safety appears to have been characterised by an informality and laxity that left workers vulnerable to the vagaries of those responsible for its implementation. From the testimonies of staff (Beck et al., 2007), there appeared to be no system of health and safety consultation in place that could be regarded as complying with the 1996 Regulations. One worker summed up the lack of representation and adequate communication of information from management:

There was absolutely nothing [in the way of formal consultation between employer and employees] no health and safety committee...If I remember right, there was a notice on the wall about Factory Acts or something, you know, but that was about it really. If the company had a policy regards safety or [specific hazards] in all the years I was there nobody ever said to me anything about it. (Interview Laurence Connolly Snr. 16 January 2006, Beck et al., 2007)

Given the foregoing it is surprising that no legal action was taken against ICL under the Health and Safety (Consultation with Employees) Regulations 1996.

Perhaps one of the most telling employee cases is that of Laurence Connolly senior who had been a worker at ICL for 13 years. He left their employment just days before the disaster and had personal experience of inviting the HSE to investigate his concerns for health and safety at ICL. Laurence's relationship with the HSE began when he developed concerns regarding working practices at ICL which he believed were having a serious impact on his son's ill health (Laurence Connolly junior, a co-worker). Laurence pursued his own course of inquiry. He said –“I couldn't find out anything in the work so I started looking on the Internet and I started finding out some bits and pieces myself. And then when I started reading it, it became very frightening because a lot of the problems that Laurence has had and is still having, you could actually read through these data sheets on all these chemicals and it's telling you some of the effects that they can have on you. At the same time, they are telling you that you should be wearing certain types of masks, certain types of gloves, impervious overalls, and all these sort of things. We never got anything like that.” (Beck et al., 2007; P114). So Lawrence took his health and safety concerns in the first instance to ICL management as a legitimate authority for health and safety practice but when faced with at best what could be described as a lack of interest by management, Laurence doxically turned to the HSE, as a regulator of health and safety for help. He made numerous calls to the HSE, many unreturned. Indeed he felt that he was being stone-walled by the HSE.

Paradoxically, during one of their visits to ICL, a senior member of ICL introduced the HSE inspector to Lawrence only for Lawrence to have his identity exposed to ICL management as the person requesting the inspection visit. It is this act that forms a further contradiction in the case. On the HSE's official website²⁸ under “Your employer's responsibilities” the HSE draw attention to the following –

“If you think your employer is exposing you to risks or is not carrying out their legal duty in regards to health and safety, and you have pointed this out to them without getting a satisfactory response, you can contact us. **We treat all contacts in strictest confidence**²⁹.”

Laurence's account further illustrates a failing by management and the HSE to provide workers with access to official 'accounts' of health and safety and leaving them without the power to manage risks to their health and safety. This was not the end to the violence however; Laurence illustrates how the discourse of health and safety was used as a tool for control over the ICL workforce and a means of victimisation. As we describe later, the management of ICL would use the discourse of health and safety to control the workers. Eventually when Laurence's position became untenable at ICL after he was exposed by the HSE inspector as a whistleblower, he left ICL (some three weeks before the disaster). This can be viewed through the lens of Bourdieu as a voluntary alienation from a dominant system. The whole saga also exposes Connolly's relative weakness in the field of power. He has

²⁸ Further emphasis is added by a link to a section on “Whistleblowing” quoting –“the law provides them with protection if they 'blow the whistle' on their employer.”

(<http://www.hse.gov.uk/workers/whistleblowing.htm>)

²⁹ <http://www.hse.gov.uk/workers/employers.htm>

little economic capital (which could be used to mount a legal challenge to the HSE or ICL); moreover, in spite of his knowledge of ICL, he was deemed to have little of the requisite form of cultural capital in the HSE field.

Debate on the robustness of Bourdieu's 'theory' of symbolic violence has centred on the extent to which workers are aware (misrecognise) and complicit in domination, and the extent to which domination is illegitimate (see for example Bourdieu, 1977a; Calhoun et al., 1993 Swartz, 1997). This is particularly relevant to our case; disclosure of Laurence's identity by HSE inspectors to ICL management illustrates a conscious recognition of violence (dichotomy between social relation and practice) in which Laurence is no longer complicit in Bourdieu's sense of the word. This is a turning point in the case; from this point Laurence no longer adheres unquestioningly to the relations of order. In this instance violence is arguably no longer symbolic (misrecognised/ complicit) violence it now represents a more elementary form of overt economic violence (irrespective of the inspector's conscious or unconscious motive for action).

The HSE's habitus of self-protection

While the ICL explosion may be a specific case, it reflects the nomos and habitus of the field in which employers are offered advice, consultation and negotiation before enforcement action is taken. In other words, the work of the HSE is structured around a 'compliance', rather than a 'strict enforcement', model of regulation (Pearce and Tombs, 1990; Tombs and Whyte, 2007). Except in the case of the most egregious safety offences, enforcement action is invoked only where processes of persuasion, negotiating and bargaining, often over a very protracted period, have proven 'unsuccessful' and even then consequential battles on the juridical field can prolong and hamper HSE recommendations. The HSE habitus means that the law is indeed, the 'last resort' (Hawkins, 2002) when it comes to the discovery, investigation, and response to, health and safety offences. In this way the HSE is protected from doing battle on the juridical field on which it is ill equipped (in terms of its own capitals) to win.

Further, violence is enacted through the consolidation of the compliance approach by a government agenda that ensures the HSE's acceptance at a corporate level of the need to take into account regulated industries' commercial constraints and the need to balance regulatory goals with the economic 'health' of the nation (Tombs and Whyte, 1998). What arguably adds to violence in this case of ICL – entirely reminiscent of examples from Victorian Britain - is the use of regulation to exert control over labour on one hand, while on the other, systematically sanctioning breaches in regulation by capital. For example, a former worker of ICL noted an instance symbolising such an act of control, "Chemicals could lie all over the place and that wasn't a problem. But if you had a bottle of water or a bottle of Irn Bru³⁰ on your bench then that was a major health and safety issue" (Beck et al., 2007, p 20). There are therefore important symbolic and structural pressures that have acted

³⁰ A popular Scottish soft drink

to construct HSE as a body which must cooperate with and advise industry rather than as a law enforcement agency (Pearce and Tombs, 1998).

While an HSE inspector did not respect the confidentiality of Lawrence Connelly, the authors have had direct experience of HSE's rigorous concern for its own reputation. The HSE insisted that an Independent academic report on the explosion was removed from the Strathclyde University website. After the explosion Tyldesley also posted a statement on his own website but Brechin Tindal Oatts (solicitors) who acted for the HSE at the time told him to remove the web page. During the Public Inquiry Tyldesley said that "... It seems that once the legal processes start, the word "sorry" becomes very difficult to say...."

In summary, the ICL explosion was a preventable disaster. The HSE had the requisite cultural capital to understand the risks involved with buried LPG pipes which entered into enclosed spaces. Rather than simply perceiving the events which led up to the explosion as a series of "mistakes", we argue that by using Bourdieu's scientific method it is possible to discern some of the "logics" of the social world which need to be rectified to prevent similar abuses of our human rights from happening in the future.

An element of the case which demonstrates the powerful illusio (drive to make profits) of the economic field is that the concern for economic returns at the expense of health and safety endangered everyone in the company including those who knew about the pipe. Indeed Downie's son was injured in the explosion. And the Chief Executive was killed. Frank Stott allowed his son to work there. Thus the people who worked at ICL, who knew about the pipe and who were in a position to do something about it, put their own and their loved-one's lives at risk. This could perhaps be explained by their failure to recognise the danger of the pipe. But the application of Bourdieu's theoretical work suggests that deeper forces were at play. The somatic reaction to HSE inspectors by the owner and ICL management was one of hostility. Their constitution as the owner and/or managers of small businesses was controlled by preconceived thematics and these thematics were reinforced by structural changes to the Health and Safety executive. The management/owner view of "reality" meant that they failed to appreciate the danger to themselves, their loved-ones, and in the final analysis to their workforce. In this case the view of the dominant paradoxically did not serve their interests.

In this case study we have described the strategies of various actors who were involved in the ICL explosion. We have set their actions within the framework of Bourdieu's symbolic violence noting both the objective state structures and the mental dispositions of the actors. Finally we have highlighted the various capitals at play in the case. The next section considers how the theoretical and practical insights derived from the case could be used to develop a new form of Accounting for Human Rights.

Reflections on the accounting lesson from ICL- How to account for human rights

The disaster at ICL acts to highlight the failure of management, regulation and inadequacy of law to police the economic system in spite of state claims to the contrary. To 'account' for human rights we need to consider 'accounts' in their cognitive, communicative and political form - 'accounts' reside in each, formalised, legitimised and reinforced. If safe working environments and not being killed or injured at work are human rights then these rights are being abused. In order to overturn this violence we need to both understand its complex roots and try to invoke measures which would restore equality on the field of power.

One way of helping to address this imbalance would be to produce a new form of health and safety account. This account should contain several different elements.

Firstly, it should contain two documents – the unabridged HSE Inspectors' reports and the company risk assessment. Because of the potential for "negotiation and compromise" on the part of the HSE, reports should be shown to management and workers at the same time, before any discussion and negotiation takes place. The cultural capital of workers would be enhanced by HSE reports and company risk assessment. There is no question that they would be "too technical." Tyldesley's list of 12 recommendations was clear and could easily be understood by lay-people (like the authors). One can only imagine how things may have been different if recommendation 11 was known by the workforce. When self-evaluations started in 1993, the staff could have insisted that the pipe (and the fact that it hadn't been checked) was listed as a risk factor. As set out above, a director of ICL, KNEW about the risk and did not want to incur even the small cost of digging up the yard. Although Stott's son carried out the risk assessment, Tyldesley's 12 recommendations never featured in his assessment. So after 1993, no-one ever thought about the buried pipe. The symbolic violence is that the State sanctioned structures aligned to the mental dispositions of management prevented the workforce from being able to take any responsibility for this risk to their health and safety.

Under UK health and safety legislation employers must provide workers with information about risks in their workplace, how they are protected and instruction and training on how to deal with risks. Thus, providing workers access to HSE Inspectors' reports and company risk assessments as part of a human rights account is in any case consistent with the duty of management to provide health and safety information to workers and a right of workers to receive it³¹. The case of ICL demonstrates how in light of a legitimate authority to act in the public interest and uphold health and safety legislation the HSE and management are complicit in denying workers access to official 'accounts' of health and safety that could begin to

³¹ The HSE acknowledges this when quoting under "Releasing information to employees" – "Employers have a responsibility to provide information to all workers that will enable them to participate fully and effectively in any consultation about their health and safety." (<http://www.hse.gov.uk/workers/releasing.htm>)

provide them with the tools (or a basis to identify the tools) to manage health and safety risks.

We have demonstrated State doxa that the State acts for the “good of the whole of society” is flawed, and yet, it still prevails. For example, Lord Gill³² (Gill, 2009, p 94) clearly reflected this position when he stated that the “HSE represents the public interest. It must assess its requirements by reference to safety criteria and to the tests of reasonableness and proportionality. Its requirements must be uninfluenced by any commercial considerations that may affect the judgement of the owners of the site”. Yet evidence was revealed that the HSE in effect sanctioned ICL’s talks with Calor about Tyldesley’s recommendations. Calor’s economic capital was used by them to resist HSE recommendations thus demonstrating the unequal power relations in the case. With this in mind, in terms of the process of production of HSE reports, potential suppliers and existing suppliers, such as Calor, or other third parties with a potential commercial interest should not be allowed to take part in negotiating “solutions”. Thus, a condition of the account would be that no commercial supplier be involved in its production.

While it would certainly be a step forward to provide HSE inspectors’ reports as part of a health and safety account we argue that the actual report itself would be enhanced by the creation of a more broadly based team comprising relevant worker representation. Our research suggests that the workers at ICL certainly possess the requisite cultural capital to participate fully in the HSE inspection process. However, on the economic field, non unionised workers possess little of the other forms of capital to enable them to win struggles on the field. One way of addressing this would be to create a properly resourced Scottish Hazards Advice Centre which could provide representatives, and confidential advice to workers in both unionised and non-unionised organisations. Thus, we recommend a Scottish Hazards Advice Centre be created. This centre should in consultation with workers and relevant trade unions write a workers’ response to the HSE Inspectors’ report and company risk assessment. The second element of the health and safety account would be a workers’ commentary prepared with the Scottish Hazards Advice Centre and Trade Union.

The final section of the worker health and safety account should be financial. Even taking an economic perspective on the value of health and safety and workers’ lives, ICL management would have had difficulty resisting spending £405 (or slightly more in the event of business interruption) on the buried pipe to make it safe. As noted previously, in terms of representing and upholding the rights of workers to health and safety at work the unaudited, abbreviated accounts of the ICL Group of companies have proved to be inadequate. We recommend all money spent on health and safety by the company should be included in the health and safety account. Recognising the provision of expenditure alone can be misleading as low outlays can reflect either a system operating well and not in need of major

³² Arguably, the Public Inquiry and Gill’s report serves to both legitimise the giving of HSE ‘accounts’ and arguably ‘consolidate the account’ of health and safety at ICL. As analysis of the Public Inquiry is beyond the scope of this paper and will be addressed elsewhere.

improvement or a firm in which systems are poor but safety is not a priority we recommend explanatory information on the nature of expenditure undertaken and estimated costs of improvements be provided by management, workers, Hazards Advice Centre and Trade Union alongside recommendations and costings for remedying the issues raised in the HSE Inspectors' report.

Working within the current socio-economic system, we have set out a case that a new form of human and safety account should be produced by a balanced team comprising of the HSE, workers' representatives, staff from a newly formed Scottish Hazard's Advice Centre and/or Trade Union representative and a member of management. This collaboration serves to legitimise the role of information provision by actors who may normally be seen to contributing to a social audit process and bring them into the accounting function. The resulting health and safety account should contain unabridged HSE Inspectors' reports, the company risk assessment, a commentary by Scottish Hazards Advice Centre, workers and trade unions, together with a financial report containing both previous expenditure by the company on health and safety and costings of remedial work which have been highlighted in the HSE Inspectors' report and workers' response. A team approach to such collaboration will help to self-regulate the process of accounting and ensure transparency is achieved. The extent to which workers' representatives, staff from a newly formed Scottish Hazard's Advice Centre and/or Trade Union representative are empowered to police management is an issue requiring further research regarding their symbolic and structural significance.

Unsafe factories which cannot afford recommendations of this newly combined group should be closed rather than risk the lives of workers and others.

Conclusion

When a worker goes to work each day, they should feel safe in the knowledge that they will return home safe and sound afterwards. This is a basic human right. While we can all see flaws in the economic and political system, on the whole we allow the government to govern and capitalists to make profits. In return, we expect our human rights to be protected and, to some extent, we expect the State to act in our interests.

What we have found in the ICL case is that lip-service was paid to the protection of workers' human rights. The State claims to act in the interests of every citizen. But close scrutiny of the systems and structures which purportedly protect us, in fact, do not. And yet, we are told that they do; the belief that such structures exist for our benefit, is what makes us compliantly go along with the system. This is what Bourdieu called "symbolic violence". An understanding of symbolic violence is one of the aspects of Bourdieu's work which differentiates him from other social theorists.

The nine deaths and 33 injuries which were caused by the ICL explosion were preventable. The case study of the ICL disaster presented here unearths the

numerous points at which actions could have been taken to prevent the explosion. An HSE expert set out clear recommendations about the actions necessary to ensure the safety of the LPG installation at the ICL site in Glasgow. The HSE did not take the legal steps which would have forced ICL management to implement these recommendations. The State did not provide adequate resources for the HSE to carry out its work effectively. The ICL management strongly resisted implementing the recommendations. The private LPG supplier aided ICL's management in their negotiations with the HSE. Rather than management engaging with employee management took a hostile and at time indifferent approach to workers. Each of these parties is arguably complicit in the disaster by failing to act to ensure the safety of ICL workers.

Academic research has demonstrated that health and safety is improved when workers are involved in the management of health and safety. The habitus of ICL appears opposed to this. This made ICL a relatively more dangerous work environment. Better knowledge would have enabled the workers to protect themselves. With such serious failures to ensure the safety of workers, one would imagine that the full-force of the law would be used against those complicit in the disaster. Yet the punishment was very light. Indeed ICL stand to profit financially from the disaster.

Arguably, despite State policy and rhetoric to the contrary little appears to have changed with regard to state symbolic violence since workplace regulation began in Victorian Britain. This is in part because of the misrecognition of violence, including that proliferated by the new HSE. Viewing workers' human rights to health and safety through the lens provided by Bourdieu allows us to radically begin to rethink the historical methodisation of accounting for human rights. Our views are offered as a starting point for debate both in terms of engagement on Bourdieu's account of symbolic violence and its use in examining human rights and the ICL disaster. We recognise that our suggestions for change will not prevent those at the top of the economic field buying the best lawyers nor from moving to States with less stringent laws. In effect we are proposing a very slight levelling of the economic field as a starting point for theoretical debate and action.

Our recommendations for action begin with public access to a health and safety account containing unabridged HSE Inspectors' reports. In so doing, we question whether we are simply proliferating the system by arguing for worker access to the HSE Inspectors' reports. Recognising and making transparent the HSE 'accounts' are just the beginning of a quest for social change. We also recommend the health and safety account contain the company's risk assessment, a commentary by a Scottish Hazards Advice Centre, workers and trade unions, together with a financial report containing both previous expenditure and explanatory note by the company on health and safety and costing of remedial work which have been highlighted in the HSE Inspectors' report and workers' response. We realise that our recommendations for such a health and safety account is only, at best, a partial solution. Our recommendations will not alter the power structures in society and are thus reformist. However, given the state we are in, we need to fight for reforms.

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Figure 1 LPG installation after yard level was raised in 1973 and inside pit area was covered in 1980 (adapted from Gill, 2009, p22)

