COMPARING INTROSPECTIVE AND EXTROSPECTIVE FORMS OF OCCUPATIONAL SAFETY AND HEALTH STANDARDS

by Ugochukwu Orazulike

This paper provides a descriptive account of two models of occupational safety and health (OSH) regulation, the introspective perspective of OSH, and the extrospective perspective of OSH. It presents the comparative view of those perspectives of OSH standards by assessing some of the institutional roles that trade unions could play in the promotion of the highest standards of OSH legal protections which workers are entitled to, in the US and in the EU, drawing insights from Kathleen Thelen's 2014 book Varieties of Liberalisation and the New Politics of Social Solidarity. The paper also examines whether unionisation plays any significant roles in the implementation of the best institutional standards for the occupational safety, health and wellbeing of workers in their working environments. Two aspects of unionisation will guide the evaluative assessment of OSH standards in Thelen's liberalised market economy (LME) versus coordinated market economies (CMES): (i) factors attributable to unionisation in the practice of institutionally set legal OSH standards, and (ii) factors attributable to unionisation in the socio-political practice of institutional policy standards for OSH. With introspective versus extrospective OSH at the back of mind, the paper further considers the importance of unionisation/ union density in Thelen's account of industrial relation, vocational education and training (VET), and labour market policies in the LMEs versus the CMEs. In considering the standards that could be attributed to high or low union density, the paper highlights why LMEs tend to practice introspective OSH standards, whereas the CMEs have the tendency to practice OSH standards that are extrospective in nature. In summation, it is argued that constructive social dialogue, efficient

Il presente saggio fornisce un'accurata descrizione di due modelli di regolamentazione in materia di salute e sicurezza dei lavoratori: il modello cosiddetto "firm-shaped" e il modello cosiddetto "non-firm-shaped". A partire dal volume di Kathleen Thelen Varieties of Liberalisation and the New Politics of Social Solidarity (2014), l'autore presenta una comparazione dei due modelli, conducendo una valutazione del ruolo istituzionale che i sindacati possono assumere nella promozione dei più elevati standard di tutela legale in materia di salute e sicurezza dei lavoratori, negli USA e nell'Unione europea. Inoltre, il saggio si interroga sul se la sindacalizzazione giochi o meno un ruolo significativo nell'attuazione dei più elevati standard di salute, sicurezza e benessere dei lavoratori. La valutazione di tali standard nelle economie di mercato liberalizzate rispetto alle economie di mercato cosiddette "regolamentate" si fonda su due aspetti: (i) i fattori ascrivibili alla sindacalizzazione nella definizione a livello istituzionale degli standard normativi in materia di salute e sicurezza sul lavoro; (ii) i fattori attribuibili alla sindacalizzazione nella prassi socio-politica degli standard istituzionali riferiti al medesimo ambito. Tenendo ben presenti i modelli in esame, il saggio considera l'importanza della sindacalizzazione/tasso di sindacalizzazione nell'analisi condotta da Thelen sulle relazioni industriali, sull'istruzione e sulla formazione professionale, e sulle politiche del lavoro nelle economie di mercato liberalizzate rispetto alle economie di mercato regolamentate. Nel considerare gli standard che potrebbero essere ascritti a un alto o a un basso tasso di sindacalizzazione, il saggio evidenzia la ragione per la quale le economie di mercato liberalizzate tendono ad attuare il modello "firm-shaped", mentre le economie di OSH VET, and coordinated labour market policies are crucial drivers of extrospective OSH standards; and that many workers in the introspective OSH system are still far from enjoying the high OSH legal and institutional protection standards which are generally available to workers in the extrospective OSH systems.

mercato regolamentate si orientano verso il modello "non-firm-shaped". In sintesi, si sostiene che il dialogo sociale costruttivo, l'istruzione e la formazione professionale in materia di salute e sicurezza sul lavoro, nonché politiche del lavoro coordinate costituiscano gli elementi chiave di quest'ultimo modello. Si afferma, inoltre, che molti lavoratori nel sistema "firm-shaped" sono ancora lontani dal beneficiare degli elevati standard di tutela normativa e istituzionale di cui godono i loro omologhi nel sistema "non-firm-shaped".

1. Introduction

This paper compares introspective and extrospective OSH standards. But first let me explain what is meant by forms of OSH standards. By OSH standards the approach of this paper is to consider OSH in terms of (i) statutory standards, and (ii) practice standards. According to § 652 (8) Title 29 Chapter 15 U.S. Code (Title 29, 15 U.S.C.), OSH standard means, "a standard which requires conditions, or the adoption or use of one or more practices, means, methods, operations, or processes, reasonably necessary or appropriate to provide safe or healthful employment and places of employment" (see also paragraph 5 Preamble and article 1 [1] & [2] EU Directive 89/391/EEC). The statutory standards for OSH concern all the formally enacted rules that stipulate the contours of responsibilities which an employer owes workers at their workstations. The highest standards of OSH are often provided in international institutional rules and standards through ILO OSH policies, in multilateral treaties as with the case in EU OSH law, and also in national regulations, for instance, the envisaged OSH standards in US OSH law. Just like with national laws, national practices as referenced in article 1 (2) of EU Directive 89/391/EEC seek to achieve the same objective for workers, and this is namely, the guarantee of OSH protection for workers. Although national OSH practices are immanent in social, institutional, legal and political means for the pursuit of OSH goals, they may or may not produce forms of protection envisaged for workers in legal and policy rules. As indicated in my introductory sentence. the two models of OSH standards I consider in this paper are (i) the introspective perspective of OSH, and (ii) the extrospective perspective of OSH.

Before I get to the descriptive account of the introspective and extropective views, let me highlight an important point about the doctrine of OSH. OSH regulation seeks to protect workers from occupational harms. It seeks in all possible ways to protect workers from the occupational dangers of industrial activities. For workers to enjoy this goal of OSH protection in practice: (*i*) they must engage in active dialogue with employers, (*ii*) they require adequate knowledge and skills about their occupations and how to keep themselves safe and healthy on the job, and (*iii*) they should be united and organised in the use of their collective power to push for political and institutional arrangements that fulfil legal and institutional OSH standards. The three points just mentioned will be examined in the context of the accounts provided in Thelen 2014 about LMES and CMES.

The elements of my analysis that are drawn from Thelen 2014 are summarised as follows. For the purpose of carrying out the comparative assessment of introspective

and extrospective views of OSH in this paper I am precisely interested in Thelen's account of unionisation, and also her account of union density in a LME (the US) versus the CMES (Denmark, Netherland, Germany, and Sweden). I recognise that Thelen's focus was broader than, and not precisely the same as mine in this paper. My focus is to review introspective and extrospective OSH standards, in light of the roles of trade unions and the significance of union density, in contributing to the fulfilment of the goals of OSH law. It is argued that high union density and active unionisation as seen in some CMES mark extrospective views of OSH, and that low union density resulting from radical deregulation marks introspective views of OSH. That is so because of the political significance of active unionisation in promoting the concerns of workers in: (i) the relationship between workers and employers, (ii) the design and delivery of efficient VET, and (iii) the national implementation of legally envisaged OSH standards through labour market policies. Besides Thelen 2014, I mostly used comparative assessments of business OSH practices in the US, versus the EU model of OSH, in particular business practices in France, in the discourse of introspective and extrospective standards (see Orazulike, 2015).

Part 2 of the paper is a short overview of the doctrine of OSH. It is hoped that this short overview provides a crisp account of (*i*) the purpose or the conceptual aim of OSH law (protecting workers from harms caused by industrial and economic developments) (*ii*) the goal of OSH regulation (implementing the highest institutional rules and standards), (*iii*) the object of OSH regulation (the human person: the worker), and (*iv*) the nature of OSH standards required in order to fulfil the conceptual goals of OSH law (prescriptive international institutional standards).

Part 3 describes the introspective and the extrospective views of OSH. The introspective view responds to OSH issues by considering how well the issues fit into the core business interests and objectives, and whether the issues can be covered by the resources available to the organisation. The introspective perspective usually makes a determination of the extent to which it pursues any given OSH schemes, and how far the organisation is willing to go to fulfil the OSH plans. On the contrary, the extrospective view considers the fulfilment of the legal standards for OSH as the primary objective which regulation seeks to achieve. The extrospective view includes ensuring that the improvement of the workers' safety, hygiene and health should not be subordinated to purely economic considerations (see paragraph 17 Preamble EU Directive 89/391/EEC).

In Part 4 it is noted that both the US OSH law and EU OSH law share a similar regulatory objective which is namely to offer the safest and most healthful conditions to workers in their working environments. However, the social, political, and institutional approaches which the two legal regimes use to pursue OSH policy goals vary markedly. For the LME, radical deregulation and the decline of trade unions reduced the ability of workers to negotiate good terms of work with employers. In that kind of atmosphere union density diminished, and the political power of unions for influencing labour market policies through union alliances with political parties could not lead to improvements in working terms and conditions. This is especially bad for low income workers. Although American OSH law provides for "representation of workers", the effectiveness of such representation can hardly be measured as successful because of the political alienations which trade unions suffered in the US since the inception of US OSH Act 1970. Radical deregulation taking place in the US since the 1970s have also decimated the social powers that trade unions can use when in dialogue with their social partners.

The powers of trade unions are more legitimate and useful in CMEs where trade unions play important institutional and political roles at national levels ("Economia & Lavoro",

XLVIII, 2, 2014). For example, some trade unions in Germany's manufacturing sector actually contribute to VET, therefore in a good position to inculcate serious OSH concerns in that sector into the vocational training of the industry's apprentices. Trade union density in Sweden and Denmark are high, the unions are highly organised and they are actively involved in the collective bargain for terms of work (Thelen, 2014; Anxo, 2014). In these countries, the political roles of trade unions are so institutionally entrenched that the roles are legitimated by law (Bosch, 2014; Anxo, 2014).

Part 5 is the conclusion. It is argued that the legally envisaged OSH protection standards for workers are generally better fulfilled in extrospective regimes of CMEs in the EU, than the introspective regime of the US.

2. The doctrinal rules of osh

A brief overview of the doctrine of OSH is important at this point because the notion of OSH is conceptually human-centred. OSH concerns the occupational interests and wellbeing of the human person technically referred to as the employee or worker. The doctrine of OSH can only be fully expressed here by providing a cursory account of the historical root of the relationship between employers and employees, for this is necessary in helping illustrate its subtle element concerning practice standards. The historical account of OSH surely subsumes the differing logics that mark employment relationship, that is, the managerial logic versus the contractual logic, in LMEs and CMEs on one hand; and on the other, the contrastable traditions for industrial relations in LME regimes, and CME regimes. This is because OSH was an issue mostly burdening workers in the early days of industrial revolution. Its institutionalisation emerged from an unwholesome relationship between employers and employees across Europe, especially in late nineteenth century. However OSH principles per se across the CMEs are substantially hinged on co-regulation by the social partners.

In Germany, the regulation of occupational harms was based on a notion of corporatism thus can be traced to the combined roles of employers and employees in Germany's Industrial Accident Insurance Act (Unfallversicherungsgesetz) 1884. That form of partnership in the regulation of occupational harms has ever since been the cornerstone of the German model for regulating OSH. More so, the view that industrial relations should be cooperative rather than conflictual was famously articulated by Pope Leo XIII in late nineteenth century. The notion of corporatism in the regulation of labour relations, namely, the coordination of the interests of the social partners – the employer and the employee, and the State, was strongly embedded in the pivotal Papal encyclical Rerum Novarum: de conditione opificum, issued by Pope Leo XIII on 15 May 1891. According to that encyclical, social partners as well as the government have differing but concerted roles to play in the resolution of problems which burden the society, such as, the appalling conditions of ordinary working people. The philosophy of a co-operative paradigm for dealing with conflicts between employers and employees, that is, of viewing a productive relationship between employers and employees as residing in cooperation rather than conflict, and for dealing with the fundamental conflict of interests between employers and employees, eventually permeated the political rhetoric of Christian democratic movements for addressing the concerns of workers in some countries of mainland Europe.

Historically also, the relationship between employers and employees is as well founded on corporatism in the Scandinavia (Crouch, 1994). This is similarly corporatism as

described above, but that of the social democratic model. Corporatism can be traced to the so called Septemberforlighet in Denmark on 5 September 1899. Denmark is in fact the first country in Europe to create a bipartite national institutional structure for industrial relations by the turn of the twentieth century (Crouch, 1994). In Sweden as well, corporatist form of labour relations namely, the coordination of the interests of the employers and the employees was by some measure introduced into the so called decemberkompromissen of 1906. This agreement is of great significance in terms of the partnership model of industrial relations that was subsequently cemented through it in Sweden, particularly the Saltsjöbadsavtalet of 20 December 1938. In the Netherlands, corporatism emerged in the historical development of the Dutch model of industrial relations as well, and a fair assessment of that development could be rightly credited to some if not major impacts of the rhetoric of the Christian democratic movement in the Netherlands (Crouch, 1983). The Netherlands currently shares a form of flexicurity with broad similarities with Scandinavia (Thelen, 2014).

The same form of partnership between employers and employees cannot so to speak be said of the historical relations between employers and employees in LME traditions (see McKinlay, 2011; Crouch, 1994). The historical account of OSH under the common law presents it as a concept that originally evolved from work relationships between a master, and a servant. The common law model of OSH evolved from the notion of employment relationship between the master and his servants, that is, in the modern parlance, the employer and his employees (see *Priestly v Fowler*, 1837; *Wilson v Merry and Cunningham*, 1868; *Yewens v Noakes*, 1880). The conflicting notion of liability in such employment relationships is abundant in the complex historical account of how the rights and obligations associated with the modern notion of occupational liability have changed, developed and transformed the doctrine of OSH. The doctrine of OSH treated in this paper looks at OSH in three ways: the legal divisions of OSH law, the domains of regulatory enactments, and, the nature of OSH law.

Depending on the legal tradition of countries OSH law falls into three division of law: the civil law aspect, the penal law aspect, and the administrative law aspect. Under the common law, the civil law branch of the law evolved mainly through court decisions, while its penal law branch was mostly developed through Parliamentary legislations. The civil law aspect pertains to compensatory claims that an employee brings to court against the employer. for breach of any OSH legal entitlements that caused the worker to suffer physical injuries (Barrett, Howells, 2000). The burden of proof for tortious remedies which the common law procedure imposed on the employee made it difficult for employees to hold employers fully liable for negligence or breach of OSH obligations (see American Mfrs. Mut. Ins. Co. et al v Sullivan et al., 1999). As a result, statutory compensation laws were introduced to deal with the procedural obstacle in the judicial system preventing workers from redressing OSH violations (see UK Work Compensation Act, 1897; Pennsylvania's Workers' Compensation Act, 1915). The penal law domain of OSH law governs the preventative regulatory rules for industrial affairs. The penal law aspects were statutory standards enshrined in legislations, developed to oversee and prosecute employers that violate those statutory standards through breach of legal responsibilities which may expose workers to occupational harms (Barrett, Howells, 2000). The administrative law aspect of OSH law covers administrative sanctions and specific penalties that State authorities can take against business entities to encourage compliance or dissuade non-compliance with OSH regulatory rules. Examples of these are: the suspension or revocation of a license to operate, temporary or permanent closure of a workplace, formal warning about non conformity to legal standards, formal request to undertake specific actions, fines etc (cf. Walters, Grodzki, Walters, 2003).

Beyond those three branches of OSH law, the doctrine of OSH is regulated at two levels: (*i*) international OSH law, and (*ii*) the national or domestic OSH law. The modern notion of OSH is prescriptively guided by global or international labour norms and rules. International OSH law comprises labour rules imposed by ILO instruments and policies. This domain also covers bilateral (see Preamble and Chapter 16.8 [e] CAFTA-DR) and multilateral labour policies (EU Directive 89/391/EEC). The central tenet of analysis for the doctrine of OSH is drawn from the EU OSH law, and the most widely recognised definition of OSH which is the 1995 ILO's descriptive definition for OSH. EU OSH law is central to the discourse about the doctrine of OSH because certain essential ingredients of the ILO's descriptive definition of OSH are traced to EU Directive 89/391/EEC. The view that work should be adapted to man, and not man to work has become a key element of the modern doctrine of OSH. That conception can be traced to article 6 (2) (d) of EU Directive 89/391/EEC, and now part of the definition of OSH formulated by the Joint ILO/WHO Committee on Occupational Health during its 12th session in 1995.

The doctrine of OSH seeks to promote the wellbeing, health and safety of workers in their work environments therefore it is a human-centred concept. The view that OSH is a human-centred concept is supported by the ILO's institutional definition which advocates: (i) the promotion and maintenance of the highest degree of physical, mental and social wellbeing of workers in all occupations, (ii) the prevention amongst workers of departures from health caused by their working conditions, (iii) the protection of workers in their employment from risks resulting from factors adverse to health, (iv) the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities, and (v) the adaptation of work to man and of each man to his job. The regulatory guidelines from EU OSH law and many other international instruments overwhelmingly indicate that the concept of OSH is humanistic, that modern OSH policies advocate preventative rather than responsive forms of regulation, and that the safety health and wellbeing of workers ought to be of overriding importance in modern OSH regulations (EU Directive 89/391/EEC; ILO/WHO descriptive definition of OSH; ILO Convention 155 1981).

A clear but sketchy overview of the doctrine of OSH has perhaps been provided, yet OSH can further be considered in terms of the ways by which given forms of standards promote the sovereign goal of OSH law. An evaluative approach to this process points to the conceptual dimension, and the positivistic dimension of regulation. OSH law seeks to achieve the primary aim of protecting workers engaged in industrial activities by ensuring that regulations and practices account for all attainable procedures that guard workers from occupational risks or harms. At the national level, this is ensured through formal institutional and legal measures that impose specified obligations on employers and in some respects obligations on workers as well (see Section III EU Directive 89/391/EEC). The positivistic approach entails a system whereby OSH regulations and practices are strictly guided by the formalistic rules and institutions operating within a country. Sometimes, the positivistic dimension of OSH can in practice formalise lawful procedures which may fall short of standards prescribed by international policy rules for the protection of workers. As noted earlier, OSH civil actions under the common law evolved historically through court rules that swung between the pleas of workers and business entities that employed them.

Historically speaking, the legal critique of judicial precedents within the field of OSH law can only as such be undertaken in view of whether rules adjudicated upon by a court

upheld principles that protect workers at their workplaces or merely favoured the interests of industries. Over the years starting from the era of the British Workmen's Compensation Acts (1897 as amended), the full protection of workers exposed to the occupational dangers of economic development have been advanced through various forms of State regulatory interventions. Even today, domestic OSH law in many highly industrialised economies cannot all be judged to have put in place rules that meet ILO's institutional standards, nor practices that promote the primary objective of OSH regulation which is to put the safety and health of the worker above any other industrial or economic consideration. As will be shown in the remaining Parts of the paper, in practice, many workers have not yet been offered the degree of occupational protection envisaged by institutional rules in the national OSH regimes implemented and enforced in their countries. To explain this claim I start by using empirical facts to recast the American model of OSH, that is, the OSH model practiced by some large business enterprises in the US, and the EU model, in particular, the OSH model practiced by business enterprises in France (Suk. 2011). The regulatory model of the US is the introspective perspective of OSH, and the regulatory model of the EU is the extrospective perspective of OSH.

3. Outline of the introspective and the extrospective views of osh

In the descriptive account of the doctrine of OSH three broad categories of OSH law were briefly marked out. First, the civil aspect of OSH liabilities as is the case under common law evolved through the judicial pronouncements of the common law courts. In a bid to fillin the gaps of occupational protection for workers exposed to industrial malpractices the State stepped in with preventative statutory regulations because the threat of compensatory claims by workers could not persuade employers to imbibe preventative practices (Barrett, Howells, 2000). Statutory law therefore introduced actionable penal rules for violation of OSH rules, and for the punishment for OSH malpractices. The administrative category of OSH law has been widespread since the 1970s. The successes and failures of its instrumentations are arguably dependent on the efficacy of practice standards therefore administrative measures established by States for the enforcement of OSH rules have been divergent between LME and CME traditions. Second, the overall rules of modern OSH law are enacted at two different domains, at the international level, where global institutional rules (ILO OSH instruments and policies) or the rules of multilateral agreements (EU OSH law and policies) are enacted. And then at the national level, which is a domain where the rules of OSH have quite direct impacts on the legal entitlements of workers. Third, OSH regulation was appraised in terms of whether it fulfils either the conceptual aim of offering the best attainable level of safety and health protection for workers, or merely whether it aims to fulfil formal rules which hardly meet the rapidly changing prevention and protection needs of workers at the workplace. To show whether the two views of OSH, that is, the introspective and the extrospective views, uphold (i) the human-centred goals of the doctrine of OSH, and (ii) the conceptual aim of OSH law which is to put the occupational safety and health of workers over and above all other considerations, let me explain what is meant by introspective and extrospective perspectives of OSH.

Introspective OSH entails a system of regulation and practice where the institutional and legal rules of OSH are implemented and enforced in ways that put the core interests of the business enterprise or an organisation over the occupational protection needs of workers.

The introspective view is inward-looking in the sense that it puts the economic concerns of a business enterprise or an organisation ahead of the competing concerns of employees, or prescriptive norms formally mandated by the State or any other external entity. It is introspective because the ultimate needs and interests of the enterprise supersede any other considerations. On the contrary, extrospective OSH attempts to provide adequate solutions to the humanistic concerns of workers in their workstations. The extrospective perspective is outward-looking because it mandates business enterprises to make the human-centred occupational concerns of workers part of the core business interest, and if need be, put the concerns ahead of the core economic interests of the enterprise. So what are the features that mark the introspective and the extrospective perspectives of OSH?

The four essential features of the introspective practice are as follows: (i) it takes a very formalistic view of OSH standards. Employers who practice the introspective views tend to follow formal rules and are less interested in taking measures that will realistically offer legally envisaged OSH protection to workers; (ii) the practice is inward-looking, that is, it pursues only objectives that accomplish the core interests of a business enterprise (Gillespie, 1990); (iii) it prefers self-regulation to preventative State regulatory interventions. It opposes formal institutional oversight or institutional control of the rules of OSH practices (iv) it supports economic progress, and achievements in ergonomics. It helps organisations to manage and reduce the cost of private health insurance. On the contrary, the extrospective view of OSH combines the pursuit of core business interests with the regulatory obligation to help fulfil the goal of OSH law. I consider four of its features most essential: (i) it takes a realist view of OSH. In this case, the realist standpoint recognises the human-centred dimension of OSH law. «If need for occupational hygiene practice is to be met, there must be developments in legislation and human resources and services, following appropriate and realistic approaches» (Goelzer, 1996, p. 987; Gillespie, 1990; Eto, 2000; Satoh, 2000; Taylor, 1982); (ii) it holds outward-looking views of OSH law and practices (Goelzer, 1996; Gillespie, 1990); (iii) it considers preventative State intervention to be crucial in realising the sovereign goal of OSH law (Goelzer, 1996): (iv) it promotes innovative methods for reducing the economic costs of the national public healthcare systems (Suk, 2011). In view of its collectivist approach to health, the extrospective version seeks the enhancement of overall human welfare and wellbeing.

I explain the introspective and extrospective traits of OSH enlisted above in the subparts that follow.

3.1. Introspective Perspective of OSH

The United States model of OSH practices is the archetype of an introspective view of OSH. The introspective perspective puts the interest of an organisation or a business enterprise at the centre of its primary goal. It offers a view of OSH practice adapted to the endogenic priorities or interests of the organisation.

In the United States, the law makes it relatively easier for employers to terminate employees based on health status, whether they have costly conditions or are medically unfit for their jobs. The doctrine of employment at will allows employers to fire employees with costly chronic conditions, as long as the condition is not a "disability" within the meaning of the ADA... (Suk, 2011, p. 1123; see also Summers, 2000).

In essence, many US firms adopt OSH practices for optimal use of people resources, ergonomic reasons, or to save costs for private health care insurance (DeJoy, Wilson, 2003;

Wyatt, 2008, cited in Suk, 2011, footnote 158). As noted by Suk, «American employers are instituting company clinics to cut their own healthcare costs, not to promote the public health goal of reducing societal healthcare costs» (Suk, 2011, p. 1134). The introspective view of OSH is so dependent on the firm's economic priorities that the practices of avoiding OSH obligations by US toxic chemicals manufacturers are not unusual. Dau-Schmidt reported that some manufacturers seek cheaper subcontractors to clean spill accidents, in order to evade or minimise the economic burdens of OSH law (Dau-Schmidt, 1995). As noted earlier, OSH is regulated primarily by the domestic laws of various countries, in most cases as a principle of labour law concerning the relationship between an employer and an employee (see §§ 653 [b] [4] and 654 [a] [1] Title 29, 15 U.S.C.). The consequence of that leads to the rule-centric focus of many US firms. They have in other words quite formalistic view of OSH practices. Under the US OSH Act 1970 a manufacturer of toxic chemicals will not owe OSH obligations to employees of subcontractors who are hired to clean up toxic spills in the plants of the manufacturer, if occupational accidents should occur (Dau-Schmidt, 1995).

When OSH rules mandate legal obligations for the employees' working environment, business enterprises find incentives to comply with such rules, including aspects of the rules that concern occupational risks from hazardous working environments. In Gillespie's account of lead poisoning in the beginning of the twentieth century in Australia, the link made between hazardous occupational environments and the employer's OSH obligations to its employees helps unveil introspective views of business practices. Despite progress in combating the occupational dangers lead poses to workers in the west, lead poisoning remains a huge OSH issue for many workers mostly in many developing countries. The view of commercial enterprises on OSH regulation and practices is often determined by the enterprise's core business priorities. Differing views for a recent pension reform in France in 2010 show the two competing forces of the introspective and extrospective perspectives of OSH at play. Employer organisations pushed for a form of practice that puts more control of workplace doctors in the hands of business enterprises. «The most contested issue is employer control over the governance of workplace health services» (Suk, 2011, p. 1110).

From this account we see that the introspective perspective seeks to reduce what it regards as unnecessary economic burden and poorly informed OSH solutions coming from State authorities. In view of the special significance they accord to their economic constraints and goals, business enterprises believe that the regulation of OSH practices should be voluntaristic (Suk, 2011). An enterprise is best placed to make well-informed judgements about how to achieve the OSH needs of its employees. In any case the business enterprise is best positioned to optimise the use of its limited resources, to sustain all its competing interests including interests related to but not limited to the OSH of its workers.

The long term interests of business organisations or *healthy companies* (Rosen, Berger, 1991) account for productivity management, profitability (Goetzel, Ozminkowski, 2000), and the competency of its special human resources. This means that the long term goal of an enterprise may include ergonomic factors – the preventative occupational health considerations of the enterprise's workforce (Hendrick, 1995). A broader acceptance by business enterprises of the special significance of human capital opens organisational health promotion and OSH practices to emerging ergonomic issues about promoting and maintaining all essential aspects of the employees' wellbeing at work (Stokols, 1992). The

ergonomic consideration of business enterprises can be framed either in the form of organisational health promotion or health promotive work environment (Shahnavaz, 2007). That proposition is due to my interpretation of Wyatt's study of US onsite health centres (Suk, 2011, p. 1114, footnote 158). The study concluded that employers' primary motivation for establishing onsite health centres is related to the reduction of medical costs.

However, the study showed that 70% of employers claimed reduction in overall healthcare costs is a factor which caused them to establish onsite health clinics, while 30% of employers had a motivation to improve the quality of care for employees. The first category of employers (70%) offers a view of evaluative judgement of enterprise decisions for it expresses widespread enterprise actions to enhance their profitability; actions that save medical costs for the enterprises (Suk, 2011). It is a preventative and cost effective approach to OSH practices, though in a truly introspective sense. The second category of employers (30%) offers a view of evaluative ergonomic judgement of enterprises in deciding to optimally tap the human resources capacity of the workforce (Suk, 2011; DeJoy, Wilson, 2003). It is as well a preventative approach to managing OSH obligation, and again in an introspective sense. It is unclear whether in the second category, the profitability and survival of the business enterprises depended on the special (scarce) competencies and skills of their human capitals. Either way, that is, whether employers introduce onsite healthcare clinics to reduce medical costs - not primarily determined by employee-focused consideration, or they introduce the healthcare centres to optimise productivity and profitability through considerations fundamentally determined by the employees' healthcare needs, this introspective feature of OSH practice helps reduce the cost of the employer's private healthcare insurance or the employer's private healthcare budget.

The prevailing OSH standards oscillate between the introspective perspective, and the extrospective perspective. I have presented the features of its introspective view, now my analysis swings to the extrospective features of OSH practices.

3.2. Extrospective Perspective of OSH

By its very nature the extrospective version of OSH inspires a humanistic view of OSH regulation. The conceptual aim of OSH as equally expressed in US OSH law and EU OSH law seeks to offer the best possible occupational protection to workers in their employments. The OSH practices mandated under the European model show an extrospective perspective of OSH for it requires employers' responsibilities for the overall welfare of all their employees, and the employers' responsibilities for other third parties who may be exposed to harm as a result of the activities of those employers (see section 3 British HSWA 1974; French Labour Code; Preamble and article 14 [3] Directive 89/391/EEC). The European model has extrospective perspectives of health promotion and protection because it expresses outward-looking views about human welfare, compared to the introspective views of core business goals of an enterprise. This means that the extrospective model looks beyond the organisational goals for protecting workers from occupational harms, by targeting to protect human persons from harms caused by the activities of an organisation, regardless of the significance of the external individuals to that organisation. «Member States have a responsibility to encourage improvements in the safety and health of workers on their territory; whereas taking measures to protect the health and safety of workers at work also helps, in certain cases, to preserve the health and possibly the safety of persons residing with them» (Preamble Directive 89/391/EEC).

The outward-looking character of EU OSH law offers a human-centred view in two ways: (i) with regard to its effort to promote ergonomics through formal regulation. Employers are mandated to take steps in order to ensure that work is adapted to the individual, and not the individual to his work. In that case, that the employee's duties, equipment, production methods, and the employment's conditions be structured in manners that suit the worker (article 6 [2] [d] Directive 89/391/EEC; WHO/ILO institutional definition for OSH); (ii) with regard to its target to protect immediate relatives of employees from potential occupational illnesses which their loved ones may bring home from work (see Kar-Purkayastha et al., 2011; Roscoe et al., 1999; Whelan et al., 1997). The humanistic feature of the European model of OSH practices is elaborate in regard to how OSH was and is still regulated under the French Labour Code. «The 1946 statute, like the Vichy statute it replaced, ultimately required regular compulsory medical examinations for all employees, regardless of the size of the firm» (Suk, 2011, p. 1093).

The extrospective OSH practice derived from the French Labour Code is not confined to the formalistic obligations of the employer declared by the law (see article 14 EU Directive 89/391/EEC). It is in practice truly humanistic in the following ways: (i) it seeks to protect the health of the worker through the policy of regular medical assessment of the worker's health conditions in connection with the terms of his employment (ii) it aims to determine whether the employee poses a danger to any other workers (iii) it imposes a duty to record and report potential outbreak of illnesses through occupational harms. «The workplace doctor is obligated to declare and report toxic exposures and diseases to relevant authorities» (Suk, 2011, p. 1103). In view of duties imposed on workplace doctors under the Social Security Code, the OSH practices of enterprises in France help reduce the cost of the national healthcare system.

Although the occupational medical examination is not intended to replace primary preventive healthcare, it does include many essential elements of a routine preventive checkup with a primary care physician. Consequently, in practice, it makes all employees learn new facts about their own health that they might not otherwise investigate through primary healthcare (Suk, 2011, p. 1095).

Studies show that 40% of workers in Paris get regular medical check-ups from their workplace doctors alone. The same study suggests that 35% of cancer cases in France were detected by workplace doctors, and that 73% of the cancer diagnosis were made at the very early stage of the conditions (Suk, 2011, p. 1108). The French OSH practice although mandated by statute is hence an archetype of the extrospective OSH practices.

4. Some key comparisons of introspective and extrospective osh through the purview of the lme and the cmes

Having explained introspective and extrospective forms of OSH practices, I keep their meanings in mind while I review how unionisation influences industrial relations, VET, and labour market policies in a LME versus in CMES. This review exercise seeks to show that introspective OSH standards are compatible with labour regulations of LMES, while extrospective OSH standards fit with labour regulations of CMES. Above all, unionisation and union density help present argumentations about the extent to which industrial relations, VET, and labour market policies in the LME and the CMES truly favour or disfavour workers.

4.1 Industrial Relations

The features of the introspective OSH practices bring to bear some of the remarkable elements of labour market policies and industrial relations formally encouraged in the LMES considering the low degree of union density common in LMES, and high level of conflict (poor social dialogue) between trade unions and employers' unions in the US.

Deregulation in American industrial relations advanced relatively rapidly on two related fronts, one rooted in union avoidance strategies pursued by individual firms, flanked later by collective efforts to roll back union bargaining rights. Confronted in the 1970s with intensified competition in international markets, American employers seized on opportunities embedded in US labour law to avoid unions and defeat organizing drives. They were powerfully abetted by the state, which especially under President Ronald Reagan fostered a political and legal climate that was hostile to organized labour and that helped to hasten a large scale deregulation in American industrial relations (Thelen, 2014, p. 37).

On the other hand, the CMEs are shown to be proponents of forms of labour market policies and constructive industrial relations receptive of active trade unionisation. This is what Thelen has to say about Germany: «This is a classic CME, and one in which firms entered the crisis years of the 1970s heavily invested in competitive strategies that rely on high-skill, high-quality production. Consistent with the logic of VofC [varieties of capitalism, heightened competition in international markets since that time has if anything intensified cooperation between labour and capital in the manufacturing sector and shored up traditional institutions and practices, including coordinated wage bargaining and labourmanagement cooperation at the firm level. For good reasons, many observers attribute the country's current economic performance partly to continued strong social partnership in the export sector» (Thelen, 2014, p. 47). So in view of the fact that unionisation can help improve working protection for workers, CMEs can characteristically be considered as promoters of extrospective OSH practices. «In this way as well, collective bargaining in Denmark also accompanies and supplements state social policy... Of course, the solidarityenhancing effects of such moves depend heavily on how encompassing collective bargains are» (Thelen, 2014, p. 66). Although trade union density is not the sole parameter here for judging whether a system of OSH regulation is introspective or extrospective in character, political economies where trade union participation and consultation are active provide greater opportunities for workers to fully enjoy OSH legal protections or to improve their safety health and wellbeing at the working environments (see articles 1 [2], 6 [3] [c], 10 [1] & [3], 11, 12 [3] EU Directive 89/391/EEC; see also \$\ 656 [a] [1], 668 [a] and 670 [c] [2] Title 29, 15 U.S.C.).

As indicated earlier, the concept of OSH aims to protect workers in employment relationships, and envisages the best possible security for them, from occupational deaths and injuries (Bisom-Rapp, 2009; Title 29, 15 U.S.C.; EU Directive 89/391/EEC; Barrett, Howells, 2000). It is argued, considering that the focus of Thelen is on labour market institutions in LMES versus CMES, that unionisation in all its forms provides a collective cushion for workers in the pursuit of adequate occupational protection from work injuries, diseases, and deaths. For a judgement on Thelen's account of industrial relations in the LMES and CMES, it is argued that for many workers in the US private sector (especially low income/skilled workers), America's industrial relations support introspective OSH practices, whereas Germany's industrial relations (the manufacturing sector) and Denmark's industrial relations (considering the use of State intervention powers to broker deadlocks between employers' unions and trade unions) align with extrospective views

of OSH. «[T]he assault on union rights has indisputably been a function of a neoliberal campaign by employers... the US case seems overdetermined: weak power resources, lack of a dedicated "left" political party, and the absence of corporatist interest intermediation all point in the same direction. In the current study, then, the United States is an important limiting case, providing a point of reference that will allow us to distinguish between deregulation and dualization on one hand and deregulation and embedded flexibilization on the other» (Thelen, 2014, p. 47).

4.2. Vocational Education and Training

The model of education and training in LMEs is standard: it is a system that is based on the formation of general skills. The US is infamous for its inferior system of VET, but at the same time famous for its superior higher standard education systems. This is how Thelen succinctly explained what she refers to as the individualisation of risk in US education and training policy: «The trajectory of change in US training policy has mostly involved a retreat on the part of the state from direct sponsorship of training and a move away from programs targeted to address the needs of the most vulnerable in society. Instead of the government assuming responsibility, the United States mostly has turned to market solutions, even in the area of education policy» (Thelen, 2014, p. 84). It must be added that «[t]he contrast to Germany is especially stark. There, a high-quality system of VET has not only survived but thrived» (Thelen, 2014, p. 76). CMEs feature a model of VET that encourages the development of specific skills. Education in CMEs also includes two components of VET, the initial and continued VET (IVET and CVET).

In view of certain provisions of EU OSH law, it appears that training for specific OSH skills, legal requirements for consulting workers in the planning and introduction of new technologies and in the choice of new work equipment, all oblige the employer to fully account for the OSH interests and concerns of workers (see articles 6 [3] [c], 11 [6], 12 [3] EU Directive 89/391/EEC; see also § 670 [a] [2] Title 29, 15 U.S.C.). Similarly the Secretary of Health and Human Services under US OSH law has an obligation to consult with and advise employers and employees representatives about effective ways of preventing occupational injuries and illnesses. The provision of US OSH Act 1970 does not clearly indicate any mandate to obtain inputs from workers' representatives, on how to improve the fulfilment of OSH legal protection. But article 11 (6) of the EU Directive 89/391/EEC does, and on the other hand allows trade unions to appeal any consultation process in accordance with the national laws and practices in place, if they judge measures taken by an employer concerning workers participation or consultation inadequate for the purpose of ensuring safety and health at work.

Considering the massive individualisation of risk in US education and training, the individualisation of risk in employment relationships, and radical deregulation of traditional labour institutions by the State, many vulnerable US workers will most likely lack the capacity to improve or influence national OSH laws and practices that lack rules on OSH problems that burden them. Scaling back on active unionisation diminishes the capacity of those workers to improve laws and practices through social, political, and legal means. The CMES regulated by EU OSH law bring a different light to VET. Many workers passing through the various forms of VET are offered greater opportunities to participate in OSH training specifically relevant for their jobs. In Germany, «[o]rganised labour has traditionally played an important role not just in administering and overseeing this system, but also in pushing for ever broader profiles» (Thelen, 2014, p. 87). Workers are sometimes even able

to improve OSH knowledge and skills through continued vocational education (CVET) as is the case in Denmark. EU OSH law mandates that OSH training must not incur financial costs on the worker, and economic considerations are not legitimate grounds for compromising the protection of workers. VET and CVET are features of the CMEs that when combined with active unionisation in a country with high union density, enhance the implementation of legal OSH protection available to workers. The national laws and national practices in the CMEs that encourage VET and CVET are indeed extrospective.

4.3. Labour Market Policies

In this sub-part the case for labour market policies of a LME versus CMEs is presented. The assessment of whether LME labour policies are introspective on one hand, and whether CMEs labour market policies are extrospective on the other is carried out in terms of the significance of unionisation on: (i) statutory OSH policies in the two market economies, and (ii) OSH practices in the two market economies. For the statutory standards of the two market economies, the goal of protecting the worker and preventing conditions that may expose workers to injuries and illnesses seems to be something the two legal regimes share in common. The practices they adopt to achieve that goal are undoubtedly divergent. Three points about the roles of trade unions are discussed as parameters for the LME and the CMEs under "national OSH practices": economic conditions, active unionisation, and political or institutional functions of trade unions.

4.3.1. OSH Law and Policy: LME (US) and CMES (EU)

There is no intention here to explore the expansive and complex body of US and EU OSH law at length. In fact, the major problem with the measures of OSH protection available to workers in the introspective versus the extrospective OSH systems has much to do with the methods and practices the systems operationalise, than the goals their legal regimes have declared they seek to achieve. The US OSH Act 1970 shares many OSH rules in common with EU OSH law. But the provisions of these OSH rules are not exactly the same, and the two models use entirely different approaches in the implementation and enforcement of their OSH policies. A comprehensive comparison of legal rules in US OSH law with legal rules in EU OSH law is beyond my mission in this paper but I nevertheless mention a few thematic legal rules which both legal regimes seem to have in common.

Both systems (*i*) aim to protect workers from occupational harms (Preamble and 1 [1] EU Directive 89/391/EEC; § 651 [b] Title 29, 15 U.S.C.); (*ii*) make a link between OSH law and public health (article 14 EU Directive 89/391/EEC). In US OSH law, «[t]he Director of NIOSH reports directly to the Director of the Centre for Disease Control, who in turn reports to the Secretary of the Department of Health and Human Services» (Bisom-Rapp, 2009, p. 1204); (*iii*) provide for the protection of the members of the family of workers (Preamble EU Directive 89/391/EEC; § 671 [a] Title 29, 15 U.S.C.); (*iv*) have provisions for OSH training and education (see articles 6, 7, 10, 11 and 12 EU Directive 89/391/EEC; § 670 Title 29, 15 U.S.C.); (*v*) allow trade unions to participate in the promotion of the OSH interests of workers (*ibid.*).

Nevertheless, there are outstanding aspects of EU OSH law that put a contrast between the methods it proposes for achieving OSH policy goals, and the regulatory methods used in the pursuit of US OSH policy goals. It mandates that the OSH concerns of workers should not be subordinated to purely economic considerations (see paragraph 17 EU Directive 89/391/EEC). EU OSH laws are binding on EU member countries. These countries have

through various means for the incorporation of a treaty introduced the EU OSH law into their domestic laws (for the rules on monitoring of implementation see article 17a EU Directive 89/391/EEC).

US OSH Act 1970 marks the beginning of modern OSH law in US, and it is a statute promulgated by Congress in response to the political demands of trade unions, and concern by the public about a number of industrial fatalities in the mining and construction sectors (Bisom-Rapp, 2009). The US OSHA 1970 is a statutory law that regulates the OSH rights of many workers both in the private and public sectors, alongside with other State administered OSH regimes (Rabinowitz, Hager, 2000; Mine Improvement and New Emergency Response Act, 2006; § 668 [a] Title 29, 15 U.S.C.). The Occupational Safety and Health Administration (OSHA) is the primary regulatory agency established to promulgate OSH standards, carry out workplace inspections, and enforce OSH rules (Bisom-Rapp, 2009: Vike, 2007; Noble, 1986; McCaffrey, 1982; Mendeloff, 1979). Under us osh law osha can intervene with protective or preventative measures if occupational dangers pose health risks to workers or other members of the public. The State's regulatory intervention for protecting workers from occupational harms forms a crucial part of the labour policies of the US. For example, OSHA has the power to adopt the so called temporary or emergency standards if it finds that particular substances or situations at the workplace pose serious danger to workers. In that kind of circumstance, the necessity of emergency measures is triggered and OSHA can issue emergency OSH standards appropriate for dealing with the occupational perils that the exposed workers face (Glynn, Arnow-Richman, Sullivan, 2007; Bisom-Rapp, 2009).

4.3.2. National OSH Practices: LME (the US) and CMES (Germany, Netherland, Denmark, Sweden)

First, the shortcoming of the US OSH law since 1970 is principally the way in which key regulatory authorities are structured to operate. As noted by Bisom-Rapp, the following factors limit the effective operation of US OSH policies: lean Congressional budget for OSHA, lack of interagency coordination between OSHA (located in the US Department of Labour) and NIOSH (located in the US Department of Health and Human Services), the voluntaristic nature of many OSHA policies, and the overwhelming influence of business interest in the formulation of OSHA's standards (Glynn, Arnow-Richman, Sullivan, 2007; Huber, 2007). These crucial practicalities hamper the possibility to effectively achieve the protection of many workers exposed to occupational risks.

Even though the focus of Thelen 2014 was on cross country comparisons and particularly the impacts of the policies of different market economies on workers, it is opined that for the US, which is a LME according to Thelen's account, radical deregulation, low union density, and the fragmentation of workers' solidarity created conditions that undermined the possibility for (especially low skilled) workers to push for their welfare at work, including active participation (or proper representation through their union) on problems concerning OSH. Since the 1970s there was steady decline of the social and political influence of trade unions in US, and on top of that, US employers' unions have become better organised, more powerful politically, and better coordinated to bring their agenda into formal State OSH policies (Bisom-Rapp, 2009; Thelen, 2014). «Decades after OSHA's adoption of thousands of interim standards, business interests continue to complain about them. Surprisingly, interim standards, many of which were simply "consensus" standards adopted by professional standard setting organisations with business interest

in mind, still comprise the bulk of OSHA's standards corpus» (Glynn, Arnow-Richman, Sullivan, 2007, p. 827). The labour market policies of the US are certainly introspective because business interests tend to oppose new OSH regulations regardless of whether those regulations would produce positive OSH outcomes for workers (Bisom-Rapp, 2009).

As for the political implication of steady increase in employers influence and steady decrease in trade union influence, the impact of a less labour-interest leaning policies in the US slows down progress for achieving the envisaged goal of guaranteeing the occupational wellbeing of workers. Bisom-Rapp described the left versus right conflict in US labour market policies as follows: «Clearly, as exemplified by the popcorn lung case study, OSHA, the command and control regulator, proved highly susceptible to deregulatory ideology and regulatory capture during the Bush administration» (Bisom-Rapp, 2009, p. 1243; for the health impacts of popcorn lung illness, see *Watson v Dillon Companies, Inc.*, 2011).

For the national OSH practices in CMEs, I turn again to Thelen 2014 for insights on the implications of high union density and active unionisation in most of the CMEs she examined. Before fleshing out the argument, it is crucial to point out that the extrospective character of EU OSH model is evident in the corporatist models of OSH practices of the CMEs, and perhaps declared implicitly in the Preamble to the EU Directive 89/391/EEC. «Whereas the improvement of workers' safety, hygiene and health at work is an objective which should not be subordinated to purely economic considerations» (paragraph 17 Preamble; see also articles 6 [5] and 12 [4] EU Directive 89/391/EEC). Based on these legal provisions, the CMEs in EU are bound by law to ensure that national OSH practices fulfil the OSH objectives of the EU Directive, and this can only be possible through extrospective methods of OSH practices. In comparison to the US, the high level of union density and active unionisation in Denmark, Sweden, Netherlands and the manufacturing sector in Germany afford workers the opportunity to demand legally enforceable OSH standards through their trade union, if national State policy does not compel employers to practice EU OSH standards, just as with the workplace doctors in France (although enforced more or less through French national OSH law), «Unlike in Germany, and similar to Denmark, organised labour in Sweden has a strong footing not just among traditional blue-collar groups, but also among workers within the emerging service sectors, from salaried professionals to low-skill workers. Strong organisation among the latter has been crucial to preventing the emergence of an essential unregulated zone of employment as in Germany, even if it has not suppressed dualist tendencies entirely» (Thelen, 2014, p. 191).

The roles of trade unions are well embedded in the CMEs thereby enabling more productive social dialogue with their social partners. Trade unions in Scandinavian countries have played crucial political roles for several decades (Anxo, 2014; Thelen, 2014). In comparison with unionisation in a LME, they are very organised, competent and able to push their social and political interests into formal policies.

5. Conclusion

A comparative approach has been used to (i) present a descriptive account of introspective and extrospective OSH practices, and (ii) review national OSH standards in a LME versus CMEs. The OSH perspectives of large business enterprises in the US, and most business enterprises in France helped uncover features of the introspective versus the extrospective forms of OSH standards. In the review of features of LMEs and CMEs based

on Thelen 2014 account it is argued that active unionisation and union density can be important indicators of the type of OSH policy outcomes available to many workers in the US; and the CMES within the EU which Thelen 2014 examined. The basis for that assertion is that active unionisation may produce different outcomes in market economies with high versus low union density. Based on these assessments, active unionisation (and high union density) is a crucial driver of extrospective OSH practices for it attempts to equalise the bargaining power of workers with the conflicting inward-looking economic interests of employers. Unionisation also affords trade unions the opportunity to integrate serious concerns about occupational harms into the OSH trainings delivered to workers (Walters, 1998; Reilly, Paci, Holl, 1995). Most importantly, the ability of competent trade unions to consult and participate in constructive dialogue with their social partners provides a political leverage to workers for ensuring that national OSH standards are implemented in ways that fulfil the goals of OSH law. In light of these arguments the CMEs considered in Thelen 2014 promote labour practices that are extrospective in character.

The merits of active unionisation on industrial relations, VET, and labour market policies are unfortunately less readily available to many workers, especially unskilled and low income workers in a LME like the US. So the prospect of these workers to enjoy forms of OSH protection equivalent to the goals of OSH law remains at the mercy of responsive State interventions. Although some left leaning governments of the US attempt to push core OSH interests of workers to the fore, the overall political climate in the US tends to be overrun by business interests (Bisom-Rapp, 2009). The situation is so due to (i) the unwavering support of the Republican party to business or economic interests, (ii) the domineering influence of employers unions and business lobbyists in the US, (iii) the impact of radical deregulation on unionisation since the post-World War II era (Thelen, 2014), and (iv) perhaps the fragmented nature of OSH coverage for workers in US OSH law. These are simply the reasons why I posit that the social, political and legal conditions in a LME (the US) are amenable to introspective OSH practices, but that the CMES (Sweden, Denmark, Netherlands, and Germany) are by virtue of the roles which trade unions play in their systems are supportive of extrospective OSH practices. This is also the reason why I conclude that many workers in the introspective regime of the US are far from exercising the high OSH protection standards which are available to workers in those extrospective regimes of the European Union.

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