An Historical Explanation of the Development of Occupational Health and Safety and the Important Position it now Occupies in Society

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Abstract

Scientific and social (economic and ethical) dimensions of occupational health and safety (OH&S) are discussed. Three broad stages in the development of ethics in Western society are analysed in order to assist in understanding the arrival of moral relativism and constructivism under postmodernism. Against this background three recent stages in the emergence of OH&S are outlined and OH&S is shown to be of key importance to sustainable development. Comment is made about the prospects for survival, under moral relativism, of the duty of care ethic which lies at the heart of OH&S and which has until the present time catalysed professionally responsible innovation and change. It is argued that (1) because OH&S tools and techniques called up in legislation are scientific in nature and apply equally to all under law, and (2) because OH&S is increasingly understood as a profitability strategy, ongoing duty of care appeals for reform may continue to be effective even against the corrosive malaise of moral relativism. OH&S workers are reminded of the contribution their profession can make to safe and civil society and to sustainable development and their responsibility for upholding and promoting the ethical dimension expressed through duty of care.

1.0 Introduction

This paper traces the growth of professionalism in occupational health and safety from 1837 onwards to arrive at an understanding of the position it (OH&S) occupies in both sustainable development and the building of safe and civil society. The brief history traced out also serves as the context for a discussion about the economic and ethical dimensions of occupational health and safety and the essential tension between them, and about how this essential tension appears to resolve itself.

The paper progresses through a number of sections. Section 2 explains the nature of the economic and ethical dimensions of OH&S. Section 3 makes a brief comment on the transition of society from premodernism to postmodernism to arrive at a profile of the social ethical domain in which occupational health and safety professionalism today must operate. Section 4 traces out the history of OH&S (from 1837 to the present) and in that history the transition of occupational health and safety from the domain of market failure to the domain of the profit motive, which transition highlights the nature of the economic dimension in practice. Section 5 merges the content of sections 3 and 4 into a discussion about the present practice of OH&S in Australia and the resolution of the tension between ethics and economics. Conclusions are drawn in Section 6.

Professionalism is used in this paper is a collective noun encompassing such activity as public policy strategy including law, and the work of nurses, doctors, consultants, standards writers, educators, researchers, coroners and the like whose interests centre on occupational health and safety.
2.0 Economic and ethical dimensions of OH&S

OH&S in society has a scientific dimension and a social dimension. The social dimension is further divided into two main components one being economic and the other being ethical.

The economic component allows that occupational health and safety and increased profitability can work together rather than against one another. To injure or kill the worker, or to break or alienate their will, is to lose or diminish the skill. Replacement costs, legal costs, rehabilitation costs, compensation costs and downtime costs are involved. On this basis, humans, and their government and business organisations, can sometimes accept that prevention is cheaper than cure and actively work to enshrine the cheaper-than-cure dictum in business process, and in industrial, commercial and quality assurance law.

The ethical dimension is more complex and has an individual component, and a group component. At the individual level a person’s work – their safe work and decent work – provides their defence against society. It is that activity through which humans can profitably deploy their own human capital and in this sense it is both a cause, and an outcome of, safe and civil society. Economic independence is part of this ethic but the ethic goes beyond simple economic survival to the aspirations (values) of the individuals concerned. At the group level the ethical dimension springs from the gregarious nature of humankind and resides in social mores. A simple practical corollary of this group dimension has it that it is considered immoral for society to look the other way and continue uncaringly to make profits (for some) while the making of those profits causes injury, sickness, trauma and death (for others).

The economic dimension is largely informed by profit and economic necessity and the ethical dimension by individual and group (mores) values. While it is helpful to treat the economic and ethical dimensions separately for discussion purposes they are inextricably interwoven in human consciousness. Individual and group dimensions also overlap. For example when individual managers decide, on the basis of personal ethics, that their firm will operate beyond compliance, social external benefits accrue. Unfortunately the obverse is true also because business people bring both their low and high natures to profit taking (Marshall, 1920, Chapter 13).

OH&S is thus a complex animal. It is protected by scientific armour (standards, formulae, procedures, and the like). Its modus operandi is economic: industry cannot easily afford to kill or maim its labour skills and individual workers require stable and safe working environments to be able to deploy their personal human capital. Its raison d’etre and final cause are ethical: as will be shown its seed was sown out of a sense of injustice, its sustaining ethic is a duty of care rather than a duty of science or economics, and its cycles of change are invariably catalysed by questions of value. It was not always thus and this paper is, among other things, an investigation of the claims made in this paragraph.
Summary 1

*OH&S has a scientific dimension and a social dimension. It presents itself as a science and is acted on as a science but it is driven by economic and ethical considerations.*

3.0 Ethical dimensions of post modernism

Table 1 defines three broad stages in the development of ethics in Western society. Each stage is a logical development of the preceding one there being no suggestion of paradigm shift. What Table 1 doesn’t reveal is that mankind also has a history of its own self-understanding of its so called gregarious instinct, and the role that instinct plays in the emergence of the *polis* or human gathering the outward manifestations of which is society and its various infrastructures. To wit: each of the three stages of Table 1 is associated with a discernibly different *ethical* explanation of the foundations of the political state and these explanations are presented below.

The *premodern* state is understood to emerge from human nature in that it is founded on humankind’s want of company. This gregarious instinct is said to be intrinsically good as too is the political state (known as the *natural* state) which emerges from it. The natural (premodern) state is, at its basis, a good state founded on stable foundations. Nevertheless humans have to be educated towards understanding how to live in such a state. Law and punishment can also assist individuals along the road to *right reason and just desire* which are the keys to goodness perceived as *happiness with honour and justice*. The final end of political life (the state) is to foster this goodness. Aristotle’s *Nicomachean Ethics* outlines in detail the ethical basis of the premodern state and throughout the premodern era Aristotle’s value system was largely subsumed in the cosmology and ethics of an ascendant Christianity. Plato’s Academy (founded 387 BC) was closed down in 536 AD and in one sense the closure symbolises the defeat of reason by faith. The visitation on which the Mission of Mohammed was established occurred in 609 AD but unlike the Christian establishment, Mohammed’s heritage does not appear to have been subsequently challenged by the scientific and industrial revolutions which weakened its (the Christian establishment’s) authority.

The *modern* era began with a challenge to the premodern state by dismissing as incorrect the claim that the *natural* state founded on gregarious nature was a good state. Rather, the moderns claimed that the natural political state emerges from “the war of everyone against everyone else” (Hobbes, 1985, Chapter 13). They held humans to be evil and rapacious, and that as a result nature has implanted in humans an instinct of distrust which in turn engenders a fear of violent death at the hands of other humans. Under modernism the *natural* state is despotic rule encapsulated in the statement that life is “nasty, brutish and short” (Hobbes, 1985, Chapter 8). This fear is so great that it serves as a check and balance to the mean, vain and predatory human soul, and results in the emergence of an *artificial state* (society and its rules) – a state constructed by human reason to alleviate despotic rule. Moderns thus live in an artificial state which at its best is a poor foundation on which to build civilisation: a foundation that at any time may crumble into brute chaos.

Laws are required to maintain the artificial state which can only exist if they are obeyed. Mankind is just if it obeys the laws of the artificial state, not out of fear but because they are laws per se. Education and punishment too are essential requisites of the artificial state. The beginning of the end of the modern state can be understood in terms of (a) the beginning of
the decline of the Judeo-Christian ethic which informed it and (b) the rise of modern science and its method.

Table 1: Three époques in the development of society

<table>
<thead>
<tr>
<th>Era</th>
<th>General Description</th>
<th>Basis for Truth</th>
<th>Representative Developments</th>
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<tbody>
<tr>
<td>Pre Modern</td>
<td>A period extending from the pre-Socratic to circa 1450-1500 during which the</td>
<td>Man is governed by natural law (emanating from the divine) with revealed truth as the basis for a</td>
<td>• The idea of natural law&lt;br&gt;• Ptolemaic cosmology involving a unified Judeo-Christian science-ethics understanding.</td>
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<td></td>
<td>Aristotelian synthesis of a unified science–ethics construct was woven into</td>
<td>scientific understanding of the universe.</td>
<td>• Establishment of Mission of Mohammed&lt;br&gt;• Scientific revolution begins</td>
</tr>
<tr>
<td></td>
<td>Judeo-Christian belief.</td>
<td></td>
<td></td>
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<tr>
<td>Modern</td>
<td>A period germinating about the time of the scientific revolution (1450-1580 say)</td>
<td>Man is increasingly governed by statute law (which is viewed as subservient to divine law) in a</td>
<td>• The diminishing of natural law&lt;br&gt;• Copernican cosmology of the sun centred universe&lt;br&gt;• Universal gravitation&lt;br&gt;• Theory of evolution&lt;br&gt;• The industrial revolution&lt;br&gt;• Increasing control of Parliament by commercial and business interests&lt;br&gt;• The ascendance of statute law&lt;br&gt;• God is dead: Nietzsche</td>
</tr>
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<td></td>
<td>and continuing to the turn of the 20th century. During this period a split occurred</td>
<td>in a period in which science gains increasing authority as the basis for truth in understanding the</td>
<td></td>
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<td></td>
<td>between science, and ethics and religion, which took different routes to the</td>
<td>universe. At first this science is seen as a legitimate pursuit of God’s natural universe through the</td>
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<tr>
<td></td>
<td>explanation of truth.</td>
<td>god given gift of human reason. Finally science goes secular, and sometimes is branded as</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>challenging revealed truth</td>
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<tr>
<td>Post Modern</td>
<td>A condition coming to existence in the first half of the 20th century and finding</td>
<td>Science as the modern explanation of truth, and scientific method as its vehicle of inquiry, are</td>
<td>• Science – values divide&lt;br&gt;• Attempts at reconciliation of science and ethics&lt;br&gt;• Ethnic cleansing&lt;br&gt;• IT and genetic “revolutions”&lt;br&gt;• Spectre of the shallow existence of the “last man”&lt;br&gt;• So called victory of capitalism&lt;br&gt;• Environmental crisis</td>
</tr>
<tr>
<td></td>
<td>a full recognition of itself in the quarter of the century leading up to the</td>
<td>found inadequate to the task of resolving questions of value. Moral relativism rules and there is</td>
<td></td>
</tr>
<tr>
<td></td>
<td>millennium.</td>
<td>a view taken that certain truth (fact) is impossible even in science.</td>
<td></td>
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</tbody>
</table>

In the *postmodern* era - our era – God is said to be dead and moral relativism is the order of the day. The spark between reason (the tradition of Athens) and revelation (the tradition of Jerusalem) is extinguished and compromised: anything goes. The post modern state is said to be inhabited by the last man (and woman) - a creature(s) of shallow engagement and existence, fixed on the easy consumption (when it can be attained) brought by scientific success, and plagued by a mediocre (if not truant) inner intellectual life. Human will is said to be largely absent when it comes (individually or collectively) to the big issues of morality. Science still fuels progress in this era and ethical debate and contention is present. The will that is present can drive both “good” and “bad” achievement. Here humankind is increasingly debilitated and distracted by its perceptions of the ephemeral, the absurd, the shallow, the complex nature of the basis for truth, and a moral relativist perspective. Constructivism in education is the child of moral relativism and under it humans hold multiple “truths” about a
multitude of phenomena and social issues, and trot out appropriate ones as needed on an if-it –
works-use-it-basis.

Summary 2

The ethical component of postmodernism is manifested in moral relativism and constructivism
and under these anything goes: if it works use it. To remain effective OH&S professionalism
has to survive in such an ethical environment. Duty of care, as a clearly identifiable ethical
position, has to stand fast and countervail the stream of moral relativism.

3.0 Three stages in the emergence of professionalism in occupational health and safety
(OH&S)

Poor occupational health and safety performance is not new, and concerns about it, and
attempts to prevent it, are recorded in antiquity\(^2\). And there have always been concerns voiced
about OH&S at different times in various countries\(^3\). However, the emergence of a more
formal, private and public professionalism in occupational health and safety is of much more
recent origin, dating, in the West, from 1837\(^4\) and three clear developmental phases can be
distinguished.

Stage 1: consolidation

The first phase (Table 2) which involved an acceptance by government that some stand must
be taken against the terrible trauma in the factories of the industrial revolution, involved the
slow construction of prescribe, police and punish legislation. It extended from 1837 (the
Priestly v. Fowler case) to the Robens reforms of 1972 (the 80’s and 90’s in Australia) and the
first one hundred years of this phase were to pass before the common law\(^5\) definition of duty
of care emerged in the 1937 case of Wilsons and Clyde Coal Company v. English.

During this first phase the law went through a number of changes in the way it attempted to
address the competing interests of “master” and “slave”.

It is difficult to know how bad conditions might have been without the countervailing power
applied through the processes, protocols and institutional infrastructure of the era. Many other
forces were also at play. Improvements in legislative drafting during this time helped foster
the growth of regulations to the law, the development of scientific standards, and the
convention of calling up these standards in legislation and regulation. There was also
significant social enlightenment accompanied by considerable growth and development in the
social and physical sciences.

It is safe to say that the precipitation of the duty of care construct in 1937 together with the
body of legislation enacted in the USA and the UK and Commonwealth countries over time

\(^2\) Code of Hammurabi, translated by King, W. L. 2002 [Online], Available:

\(^3\) For example, Andre Weel (2000) discusses OH&S arrangements in the Dutch merchant navy in the 17\(^{th}\) and
18\(^{th}\) centuries.

\(^4\) See the case of Priestly vs. Fowler, 1837 in Brooks, Adrian 1990, Guidebook to Occupational Health and Safety Laws,
CCH Australia, Sydney, page 17.

\(^5\) The idea that one should take care to act in such a manner as not to bring harm or injury to their neighbour, their neighbour
being defined as one likely to be harmed by the kind of behaviour in question. (Brooks, 1990, p.2)
are evidence of occupational health and safety’s emergence and consolidation as a recognised
and an important domain in society.

Table 2: Stage 1 - establishment and consolidation

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Main Developments</th>
<th>Milestones</th>
<th>Characteristics</th>
<th>Some Key Persons as Benchmarks</th>
</tr>
</thead>
</table>
| 1837 to 1972 | • 1837 Establishment of OH&S as an entity at common law (Priestley v. Fowler)  
• 1937 Established duty of care concept at common law (Wilson and Clyde Coal Company v English)  
• Emergence of statute law based on legislate, police and punish | • 1879 Bourneville model factory/village experiment begins  
• 1906 Establishment of the ICOH as a permanent commission  
• 1907 Illinois Commission on Occupational Disease  
• 1911 Federal Survey on Occupational Disease (USA)  
• 1930 all US states have laws on job related safety  
• Post 1946 UN, WHO and ILO established | Characterised in its final stages by apathy, over regulation, ad hoc and haphazard application, fragmented legislation, confused and out of date, and incomplete in its coverage of hazards | • Justice Cockburn  
• The Cadbury Brothers  
• Alice Hamilton |

Stage 2: from market failure to profit motive

The second phase (Table 3) began in 1972 with the Robens Report which was the outcome of the UK government’s acknowledgement that public policy strategy to date had not been enough to stem the flow of industrial accident, sickness and disease. In review, Robens (1972) found OH&S practice at the end of the previous era to have had serious shortcomings: it was said to be (a) apathetic, (b) over regulated, (c) ad hoc and haphazard in application (d) fragmented (e) confused and out of date, and (f) incomplete, leaving holes and gaps in its coverage.

Table 3: Stage 2 - The Robens era

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Main Developments</th>
<th>Milestones</th>
<th>Characteristics</th>
<th>Some Key Persons as Benchmarks</th>
</tr>
</thead>
</table>
| 1972 to 1992 | • Robens type legislation introduced  
• Surge in education and training in SHE  
• SHE paradigm shift: away from market failure towards market mechanism and profitability through emphasis on quality assurance and control.  
• Enhanced status for OH&S  
• SHE to SHEQ (Q = quality) | • Robens Report presented  
• Robens legislation enacted in the UK  
• Robens type legislation replicated or adapted in a number of countries  
• Ongoing refinement and incremental change | • The doing of the duty of care may be delegated but not the duty itself which is fixed on the CEO  
• Enabling legislation  
• Emphasis on self auditing rather than policing  
• Adopts duty of care approach from common law  
• Emphasis on consultation rather than policing  
• Tripartite consultative approach  
• Calls up education and training  
• Codes of practice emerge  
• Legislation binds the state  
• Quasi criminal rather than civil | Lord Robens and his Committee |
The Robens attempt to change this unsatisfactory state of affairs went to jurisprudence itself. Enablement and self-auditing were introduced alongside policing, prescription and punishment as central to the spirit of the legislation. The Robens change is often associated with tripartite consultation, and a quasi-criminal (rather than civil) accountability mechanism. It is ongoing: for example Robens change is in its early stages in South Africa in 2006. It also acted as a template for subsequent changes to environmental management legislation and is the predominant public policy legislative approach to SHE amenity in many countries.

The Robens change catalysed growth in OH&S/SHE education and training. The self-policing, tripartite-consultative, and quasi-criminal elements created a demand in the private sector for other than medical personnel skilled in OH&S. As a result preventive technology and knowledge became more important and this was found in education and training, quality assurance and control, engineering design, risk management, design for the environment, purchasing strategy, corporate reporting, and other related disciplines and methodologies.

Education and training contributed through consolidating or creating courses in ergonomics, OH&S law, safety science engineering, occupational health and safety nursing, epidemiology, preventive medicine, occupational and environmental health medicine, psychology and sociology of work, quality assurance and control, and managerial courses in corporate occupational health and safety. The status of occupational medicine and occupational hygiene was also enhanced, and there has been interdisciplinary and border-crossing inquiry between occupational health and environmental health. Standards organisations progressed beyond single-issue standards to the development of management systems for occupational health and safety and environmental management/health and safety. These systems integrate a variety of safety health and environment skills in a sophisticated manner, and their ongoing adoption by industry creates a new round of demand for yet higher skilled safety health and environment personnel. Educationalists are required to be innovative and timely in the development of curricula that will help provide intellectual capital of the kind needed.

The Robens reforms required that government, industry and labour all own responsibility for good occupational health and safety behaviour. This shared ownership has helped drive an incremental creep from an occupational health and safety focus (OH&S), to a safety, health and environment focus (SHE), to a safety, health, environment, and quality focus (SHEQ). A very significant change in this period is the transition of OH&S from the realm of market failure to the realm of the profit motive. This change reflects the adoption by industry of a SHE based profitability strategy on the inputs side and continues to be driven by the emerging triple bottom line approach to sustainable development. Porter’s value chain construct can serve to further articulate the nature of this change which is one kind rather than degree.

Porter constructed the firm as a value chain (Figure 1) adding value in a competitive environment. The primary activities are the production operations themselves and these happen within the internal environment created by the support activities. Law, the quality assurance movement, and education are helping to ensure that occupational health and safety is an integral part of the primary activities of operations management. Likewise occupational health and safety is increasingly called up across the support activities. This call up is being driven, inter alia, by human resource management education, design for the environment, clean and green technology initiatives, clean and green procurement initiatives, and firm image and reputation. There is a flow-on to primary activity.
Summary 3

The Robins reforms and the OH&S link to profits have together generated an OH&S domain hallmarked by (a) duty of care and due diligence principles supported by statute and common law provisions, (b) industry, trade union, and public responsibility of occupational health and safety through quality assurance, education, and public awareness programs, (c) public and private sector involvement in OH&S research, education and training, (d) OH&S industry itself including consultancy, and product sales and delivery, (e) compensation, rehabilitation and insurance arrangements, and (f) an active and established OH&S, NGO presence. Again it is difficult to conclude whether or not this professionalism of the second phase was an improvement on that of the first because definitions and recording procedures used in gathering information for statistics were different in each of the two periods. However the Robens era can rightly be said to be an era in which there was legislative renewal and substantial growth and development in tools and techniques for OH&S strategy and in their sophistication, and in OH&S knowledge and related research, and an era in which profits (the economic dimension) became the sibling of intervention (the ethics dimension).

Stage 3: Brundtland’s sustainable development and the notion of sustainable workplaces and jobs and Annan’s call for safe and civil society and social and responsible business

A third phase (Table 4) in the ongoing development of good professional conduct in OH&S began, unannounced really, with the coming to be of the Rio Declaration⁶ and its working document Agenda 21.

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⁶ Although occupational health and safety (OH&S) is not mentioned specifically by name in the Rio Declaration, its presence is inherent in Principle 1: Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature. The first sentence of Principle 7 (States shall cooperate in a spirit of global partnership to conserve, protect, and restore the health and integrity of the earth’s ecosystem,) acknowledges the role of environmental health. Principle 10 states, among other things, that each individual shall have access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities and the opportunity to participate in decision-making processes. In naming victims of
Table 4: Stage 3 – the Brundtland-Annan transition to sustainable development, to safe and civil society, and to social and responsible business

| 1992 to the present the Robens-Brundtland Era | • Robens legislation continues to consolidate: becomes the template for EH&S legislation. | • The Brundtland Report | • Ethics is given a high profile |
| | • Clear statement of health and productivity/profitability as two sides of the one coin | • The Rio Series of conferences | • Global and convergent |
| | • Emergence of social and responsible business | • Establishment of the CSD | • Market oriented engaging the profit motive |
| | • Ownership of green issues by the conservative side of politics | • Adoption of green and brown issues by the WTO, World Bank | • Questions market is the morals business as usual convenience |
| | • The greening of institutions | | |

This phase, which overlaps the second phase, is in the early stages (2006 is its 14th year) of its life cycle. Four of its hallmarks are beginning to emerge: (a) it brings ethics back into the arena by giving it a higher profile, (b) it is global, (c) it is market oriented and engages the profit motive but (4) does not sit easily with the market is the morals, business as usual convenience. The forces driving this third phase are ubiquitous and include globalisation itself, the present “supremacy” of the market ideology, the ethical challenge to this ideology which confronts it with poverty and inequality of income distribution, the rejection by some of moral relativism in its strict form, and the dogged perseverance of the sustainable development experiment itself. Perhaps anxiety generated by television’s daily revelation of environmental crisis and its graphic reporting of the brutal nihilism also plays a role. Further clarification is needed.

First, the ethical component: the Brundtland Report and subsequent founding of the Commission for Sustainable Development (CSD) brought ethics back into the game of human and corporate conduct, good government and the building of the safe and civil society. Second, the global dimension: it is global because the world’s nations are signatory to Agenda 21 and each nation pursues, with varying sincerity and enthusiasm, her Agenda 21 responsibilities. Duty of care and due diligence thinking increasingly informs intranational and international conduct and performance as it enters national cultures through conventions, legalities, regional agreements, international standards, international codes of conduct, international law, e-learning and such phenomena. Third, the market orientation: it is market oriented because the whole sustainable development experiment is predicated on a market led solution to the eradication of poverty and the promotion of the safe, healthy and civil society. Fourth its challenge to market is the morals thinking: it is uneasy with the market ideology when advocates of this ideology claim that the price mechanism itself is the value system, that the market itself defines moral behaviour, and that no further thought need be given to the

pollution and the transfer of substances and activities harmful to health Principles 13 and 14 respectively acknowledge occupational and environmental health.
question of the kind of *right desire and correct reason* that should inform interpersonal 
transaction and the common concerns of the community.

So where is all of this leading? Well it suggests that the next step in the OHS, SHE, SHEQ 
progression may be something like SHEEQ (for example), the additional E signifying ethical, 
social and responsible business (and government). Such business is seen as embracing safety, 
health, environment and quality but going beyond these to other issues of civil society until 
now considered beyond the legitimate concern of profit making activity. There is some 
evidence that such a shift is possible namely the evolution of Porter's *value chain* and the 
establishment of the *Global Compact* and these developments are briefly discussed in turn.

First the evolution of Porter’s value chain: James (Beaumont, 1993, p. 64) has modified 
Porter’s value chain and placed it in a redefined socio-business environment (Figure 2). The 
new socio business environment dictates that profitability, and even the medium to long term 
survival of the firm, now depend on more than good green management at each of the levels 
of *primary* and *support activity*. Three margins increasingly determine profitability: an eco 
margin, a risk margin and a social margin. Firms now have to ask an additional set of 
questions. For example, is the eco margin narrowing? That is, is the extent to which the firm’s 
products meet or surpass environmental benchmarks and performance standards, losing 
ground to the performance of substitute products or potential entrants? Is the eco margin 
working for or against the social margin? For example will savings in exhaust emissions of a 
petrol engine, and safety design of a vehicle, carry much weight with a pollution-sick 
citizenry wanting fuel cell power and better driver training and policing? How should risk be 
managed to account for eco and social margin impacts on profitability? Should the firm plan a 
sunset strategy for the existing product or find alternative green uses for it? Other questions 
can be asked: is the risk margin sufficiently wide to allow an orderly phase in of 
countervailing strategy or are there wildcards in the pack? What phase of their life cycle are 
the source industries in, and what are the implications of this?

Risk margin, social margin and eco margin are, inter alia, informed by occupational and 
environmental health education, cornered by calls for social and responsible business and safe 
and civil society, supported or ignored by governments as the case may be, and increasingly 
becoming part of business consciousness. Two of them (the eco and social margins) are 
ethical environments. Business, by its very nature, is bound to benchmark eco margin and 
social margin strategy against its risk margin and bottom line profitability. However its 
acknowledgement of the leveraging potential in eco and social margins is part of a shift in 
thinking by business, about its own conduct and performance. This incremental shift, 
although small and fragile, is quite significant in terms of business ecology because it admits 
a strengthened ethical element to the social margin guidance of economic (primary and 
support activity) decision making.

Second, the *Global Compact*: The Global Compact is a good example of the manner in which 
(a) business is seen to be central to sustainable development and (b) occupational health and 
safety is seen to be central to business, (and hence to sustainable development also). The 
Global Compact is a voluntary corporate responsibility initiative of UN Secretary-General 
Kofi Annan. It is an attempt to harness corporate power to the attainment of UN ideals. 
Global business is asked to “embrace, support and enact” 10 principles (Table 6) derived from 
the *Universal Declaration on Human Rights*, the *International Labour Organisation’s 
Declaration on Fundamental Principles and Rights at Work* and the *Rio Declaration on 
Environment and Development*. Table 6 clearly demonstrates predominant social dimensions
of work that business is asked to respect, and the OH&S domain is at the centre of them. It is clear that ethical business, and good OH&S practice within business, is central to the success of sustainable development.

What might be some of the hallmarks of social and responsible business? Who knows really: it is early times. Perhaps such businesses would help governments level the tax playing field by standardising the business tax rate internationally. And other playing fields also: the health, safety and environment field through uniform national laws and standards and procedures across nations: the speculative destabilising investment field through uniform and severe penalties for non-wealth creating capital movements. Perhaps ethical, social and responsible business would agree not to sell arms to known terrorists and rogue governments, nor trade in illegal substances, banned chemicals or stolen biological and chemicals weapons materials and know how, nor illegally dump wastes, nor do deals with corrupt politicians, nor
Table 6: The principles of the Global Compact

<table>
<thead>
<tr>
<th>Human Rights</th>
<th>Labour Standards</th>
<th>Environment</th>
<th>Anti-Corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and Principle 2: make sure that they are not complicit in human rights abuses.</td>
<td>Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; Principle 4: the elimination of all forms of forced and compulsory labour; Principle 5: the effective abolition of child labour; and Principle 6: the elimination of discrimination in respect of employment and occupation.</td>
<td>Principle 7: Businesses should support a precautionary approach to environmental challenges; Principle 8: undertake initiatives to promote greater environmental responsibility; and Principle 9: encourage the development and diffusion of environmentally friendly technologies</td>
<td>Principle 10: Businesses should work against all forms of corruption, including extortion and bribery</td>
</tr>
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steal brand names and intellectual property, nor trade in dirty technology and goods, nor conceal research findings which reveal adverse health and safety effects, nor conceal breaches of health and safety standards, nor falsely label health and safety standards certification. Surely most would privately agree that activities of the kind outlined above are not good form. If they are spoken of with concern has not the era already begun?

Summary 4

OH&S entered into a third phase of its professional development when the Rio Declaration placed more emphasis on the efficacy of ethics as force for social reform. In earlier phases of its development OH&S had established its legal and institutional infrastructure (Stage 1) and reformed, adjusted and developed these to accommodate changing times (Stage 2). In this third phase of its evolution OH&S finds itself to be of crucial importance in the development of safe and civil society, social and responsible business an important and central and central to sustainable development itself.

5.0 The survival of duty of care: resolving the tension between economic and ethical dimensions of OH&S

The complexity of the OH&S animal is probably its great strength under post modernism. Its language is scientific so that standards, codes, formulae and procedures, once established, can be called up and enforced according to law and not according to values and political whim – unless of course governments have dictatorial powers. Because OH&S is now factored into profit motive thinking as an efficiency component of labour, through quality control and the
like, its economic importance continues to be assured in the short run. Likewise its ethical importance continues to be assured in the short run because it has become central to sustainable development and because sustainable workplaces are also important for safe and civil society and social and responsible business. The scientific armour in which duty of care is clothed is further strengthened by the economic and ethical social forces through which it must operate. But how do tensions between the ethical and economic dimensions resolve themselves?

The 169 year history of OH&S is instructive. Each of its eras was catalysed by ethical interventions; Priestley’s sense of injustice at his injury (Stein, 2006p.1), the British Government’s moral concern at the growing tide of industrial morbidity and mortality pre Robens, and the intergenerational ethical components of Agenda 21 respectively. Although ethics causes the intervention, industry invariably finds a way to transform it into an economic intervention. There seem to be four main stages in change processes of this kind. (1) First, ignore the ethical voice in the wilderness. (2) If the voice won’t go away ridicule it. (3) If the voice still won’t go away and is attracting followers, persecute and attack it. (4) If this does not work, colonise and reformulate the voice so that in part it contributes to profits. How quickly this process occurs depends on many factors including the nature and complexity of the issue and whether or not the initial ethical intervention is given a voice in law and the back up of policing and punishment regulations.

6.0 Conclusion

In its brief history OH&S has emerged from market failure to take a central and important role in sustainable development, safe and civil society and social and responsible business. The OH&S profession should be mindful of its stewardship responsibilities and not crumble in the face of government intimidation from at home or abroad, business expediency, or erosive moral relativism. The OH&S animal is an animal which adapts too its times. OH&S professionalism is its stable.

Bibliography