RISK CASE STUDIES

The Concept of Risk

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The Rise of Risk

Risk is an abstraction that represents the likelihood of specific outcomes. As such, risks appear largely external to us - particular events occur whether we want them to or not. In effect, risks have always been around, however, that we conceive of something as being a risk, is a product of social progress and the evolution of human consciousness.

The ability to discern patterns, and their limitations, in nature, in order to subject these to our actions, has enabled development. In turn, the meaning and history of risk have changed too. Our understanding of risk reflects our own confidence – or lack of it – in human will and agency. Hence, it has gone through several *qualitative* transformations from randomness to chance and probability and, a more recent focus on uncertainty (1).

In recent years, there has also been a phenomenal *quantitative* growth in references to risk. The word exploded into the academic literature in the 1990s, coinciding roughly with the translation into English of Ulrich Beck's sociological best-seller, *Risk Society*, in 1992 (2). Since that time, the number of conferences, courses, centres and journals, focusing on, or making use of, the word *risk*, have expanded rapidly too.

This development begs our understanding. Do we face more risks today? Have we become *more conscious* of the various risks that we face? Or, are these risks now of a *qualitatively different* order? Beck, and the British sociologist, Anthony Giddens, err toward the latter of these possible conclusions. They suggest that society now faces new risks – those generated by ourselves. Accordingly, Beck and Giddens distinguish between what they consider to be *natural risks* and what they have come to define as *manufactured risk* (3).

There are numerous problems with these distinctions, not least of which is trying to understand where one category ends and the other begins. For instance, it could be argued that humanity itself, has only come to exist in a self-conscious state through its separation from nature, and hence most of the risks that impact upon us are necessarily mediated in unnatural ways. What's more, the widely-held assumption that natural products or processes are necessarily better for us than manufactured ones is simply wrong.

Both of these writers, and many others besides, note a heightened *consciousness of risk* within contemporary society. This is often attributed to a loss of control over who determines what risks are acceptable for society, as well as the social distribution of costs and benefits. Few however, critically examine such perceptions. They tend to be accepted as a given. Accordingly, the solutions proffered revolve around the need to regulate risk, rather than the need to understand perceptions.

But it may be that, rather than living in a *Risk Society*, we now live in a *Risk Perception Society*. And if so, rather than taking risks at face value, it is their perception that ought to be the subject of sociological analysis and investigation. Unfortunately today, many seem to fetishise public perceptions, considering it almost rude to interrogate them. But, whilst dismissing people's views may well be patronising, so too is adapting or pandering to these uncritically.

The academic and social commentator, Frank Furedi, has noted that over recent years our use of the word *risk* has altered. Risk used to be considered, at least in part, as a conscious relationship. People could choose to *take a risk*, implying an active engagement between the human subject and objective reality. Nowadays, many references to risk are prefixed by the word *at*. We are now increasingly perceived of as being *at risk* in numerous situations (4). This reveals and reflects a growing sense of human passivity, disconnection or impotence in the face of what are assumed to be implacable or inevitable external processes.

A further shift has been the growing tendency to focus more on hazard and uncertainty than on risk and probability. Hazard is understood to be the *potential* effect of a situation, process or product, such as its being unstable, corrosive or carcinogenic. Risk refers to the *actual* chance of something happening, taking account of real behaviour or exposure. This is often expressed as a probability. Everything that we do exposes us to hazards. It is *how* we do things, and *how* often, that determines the risk.

So for instance, stairs are a hazard, but it is the likelihood of injury that is known as the risk. The latter will be a function of variables such as step height, lighting conditions, age and speed. The call, emanating from certain quarters, to regulate specific situations on the basis of their *innate* hazardous properties is therefore, whether consciously or not, a call to remove human *agency* from the equation.

In a similar vein, uncertainty refers to the difficulty of knowing what *may* occur in advance of experience. It seeks to distinguish situations where we can base decisions upon data, from those where we can not. But that there remain unknowns to be determined in all instances is hardly new. In fact, we can only move towards an appreciation of what we do not know by starting from what we *do* know. Unlike risk and probability, prioritising hazard and uncertainty, downplays our understanding, competence and will.

These respective shifts; the *quantitative* explosion in reference to risk in all possible walks of life, the focus on people's *perceptions* of risk over the actuality of the dangers they face, the shift in how we use the word *risk* from being a verb reflecting an *active* relationship to becoming a noun, used in a *passive* sense, and the desire to prioritise *invariant hazards* and *unknown uncertainties* over the conscious *choice* or ability to *engage with risk* and to *determine probabilities*, appear to share similar roots. It is to this that I now turn my attention.

The Demise of Society

When Margaret Thatcher famously suggested in an interview that *'there is no such thing as society'* (5), she was, understandably, derided by many. But today, it would appear that her statement was almost prescient. In form at least, if not in content, there is now very little awareness of the extent to which many phenomena are shaped and determined by social forces. Instead, there has emerged a growing emphasis on nature and individuals as the presumed roots of most issues.

Hence, science and psychology now occupy peculiar and privileged positions in contemporary life (6). Despite the fact that many perceived problems in the world today are shaped more by their social *context* and origins than by their scientific or psychological *content*, it is the latter that are increasingly scrutinised and held to account.

From analyses of the impact of genetically modified organisms on the environment to studies of psychological orientations and preferences, from concerns about the consequences of exposure to endocrine disrupting chemicals on early-years development to attempts to predict behaviour in a terrorist incident, such an outlook presents our world and our responses to it as being increasingly determined by impulses either entirely external to us, or so innately internal that there is little we can do about them.

Ironically, at the same time as natural forces and individual behaviour are singled-out and assessed, they are also feared and monitored as potentially disruptive sources of risk to our lives. Why is this? How did the demise of a broader understanding of ourselves, as well as many of the phenomena we observe as being broadly social in content, come about? These are important issues to address, as they impact upon our sense of the possibility of transforming the world. If things are largely scientifically or psychologically given, then there may be little point in trying to change things.

It is the gradual erosion of any sense of the need for, and the possibility to achieve, social change that drives this outlook. In the past, radicals sought to transcend the limitations imposed upon society by advocating widespread social reform. Science fed into, and fed off, this broader aspiration and dynamic. Science can transform society, but it is also a product of society – and a society that does not desire transformation, or fears the consequences of change, is unlikely to develop as rapidly as it could otherwise (7).

The emphasis often given as to the ability of science to effect social change is one-sided. It was the aspiration for social progress that gave humanity confidence in the power of its own reason in the first place – a factor that then proved of significant importance to the development of science. The Scientific Revolution represented the triumph of rationality and experimentation over the superstition, speculation, diktat and domination that had gone before. It was a practical battering-ram with which to challenge perception, prejudice and power. But science was also the product of a broader social dynamism – as well as becoming an essential contributor to it.

And, just as the initial dynamic behind science was social change, so social change – or more particularly the lack of it – could circumscribe it too. Initially this came from the vociferous rejection of the old religious and monarchical orders that had been supplanted. Then, with the advent of positivism, scientists themselves sought to decouple science from the political project to transform society. Businesses – subject to the internal imperative to innovate and compete against one another to realise profits – could harness science, with all the instability and the constant flux this produced – but the social order of the market system as a whole was beyond challenge.

Finally, over the course of the twentieth century, a wider layer of society lost its faith in the progressive capabilities of scientific transformation. Two world wars, separated by a depression and followed by continuing poverty and conflict in the developing world generated doubts as to the possibility of universal human progress. Radicals, who had traditionally championed the liberatory potential of scientific advance, now viewed it with increased suspicion. It was clear for instance, despite the potential they offered, that the Manhattan Project and the Apollo Programme had initially been driven by the narrow needs of American militarism.

Some now argued that aspiration itself – rather than its failure as evidenced in the collapse of confidence in social progress – was dangerous. Science was seen as the amoral steamroller of a dispassionate new modernity that crushed communities and tradition. What is so poignant about the modern disenchantment with science, is that it has emerged at a time when its achievements are without precedent. But behind the current crisis of faith in science, lies a collapse of confidence in humanity, and hence in the desirability and possibility of social transformation (8).

In parallel with the gradual disillusionment of society with science, has come an equally significant process of disengagement of society from politics. This accelerated after the demise of the old Cold War divisions. For the majority of ordinary citizens this formal alienation has been exacerbated by a growing sense of social disconnection at the level of informal attachments and associations with others. These social bonds have been severely eroded over the last decade or so. The resultant underlying sense of isolation and insecurity right across all sectors of society has become a key element shaping contemporary perceptions of risk.

At the formal level, people in advanced Western societies are increasingly unlikely to participate in the political process. This effect is most striking among younger age groups. Electoral turnouts are at an all-time low and in the few instances where these are high, emotional attachment appears to rule over reasoned argument. Few are active, or even passive, members of political parties or trade unions as their forebears were, and there is little attempt to engage in – or raise the standard of – debate. When people do vote, it is often on a negative basis – against an incumbent, rather than for a replacement.

This means that there is very little loyalty, and accordingly predictability, in the outcome of contemporary elections. Marginal events, largely disconnected from the actual process – such as a terrorist attack or claims as to the personal character traits of particular contestants – can have quite devastating impacts. Turnouts range between 10% and 60% depending on the type

of election. But, as this is split between two or more major parties, the actual mandate of those put in office is even lower.

What it means to belong to one of these bodies has irrevocably been altered too. In the past, trade union membership suggested a solidarity with members of a community that one might not even know – as well as a sense of collective purpose and struggle in seeking to transform existing conditions. Today, it is more likely to represent a means to obtain individual perks, such as cheap car insurance, or personal security in relation to health and safety issues at work. Suggestion of redundancy is more likely to lead to a negotiated settlement than a form of group action.

For the social elite, the political disengagement of the majority is potentially catastrophic. It exacerbates their own sense of isolation and insecurity, as their democratic mandate and political legitimacy become questionable. This has been made worse by a loss of vision and purpose. This became particularly pronounced through the demise of the old political framework, whereby the world was divided between the two competing visions of a socialist left and a free-market right.

Today, the categories of left and right have been expunged of their traditional associations and meanings. Voters are unable to distinguish between the pronouncements of the various major parties. Now, all fight for what they believe to be the centre ground and are desperately seeking issues that may reconnect with, and re-engage, ordinary people. Foremost amongst these have been the environment, human health and security.

At the informal level, the changes in society are even more striking. Many have commented on the growing pressures faced by families, communities, and neighbourhoods. In his book on this theme, *Bowling Alone*, the American academic Robert Putnam also pointed to the demise of informal clubs and associations (9). Meeting up with friends occurs less frequently than previously too. In other words, people are not just politically disengaged but also, increasingly socially disconnected. This loss of social capital has occurred and been experienced within a generation.

Not so long ago, for example, it was still possible across most urban centres, to send children to school on their own, assuming that other adults would act *in loco parentis* – chastising them if they were misbehaving and helping them if they were in trouble. Today, such a straightforward social arrangement can no longer be taken for granted. No-one ever signed a contract saying that they would look after other people's children. It was simply an unstated and self-evident social good. Ironically, this loss of a social sense of responsibility makes the individual task of parenting harder (10).

In a similar way, ordinary communities, at the turn of the last century, invested a great deal of effort establishing and running their own institutions. These took a wide variety of forms from churches, to working men's clubs, schools and trade unions. It is almost impossible to find a similar process at work within society today.

This is not to suggest some kind of golden-age of community activism. Clearly, past societies were also associated with a wide manner of activities and actualities we are quite glad to have seen the back of. However, the resulting erosion of social connectedness is significant.

The Rise of Risk Perception

Being less connected leaves people less corrected. It allows their subjective impression of reality to go unmediated or unmoderated through membership of a wider group or trusted community. The erosion of collective forms of social association, both in the formal sphere of political conviction and participation, as well as in the informal sphere of everyday life, has had a devastating impact upon how people view themselves and the world around them.

Views and values which, in the past, would have been filtered and scrutinised through various layers of public and private insight and knowledge, come today to form unchallenged personal frameworks for understanding the world. Individual obsessions can grow into all-consuming worldviews that are rarely open to reasoned interrogation or debate. The sense that ideas are actually shaped through an interaction between material circumstances and social associations has been severely eroded. Today, what would once have been considered to be mere opinions, have become inextricably and existentially bound to one's emotional identity. Questioning these can be perceived as tantamount to a physical assault.

Without a sense of the possibility of social solutions, and divorced from any trusted networks or webs of association by which to provide meaning and a sense of belonging and attachment for themselves, people are increasingly inclined to view events as random, out of control or inevitable. Social isolation and insecurity lends itself readily to problem identification and inflation. In part, it is this that explains our recent proclivity to emphasise or exaggerate all of the so-called risks that are held to confront us.

From BSE (bovine spongiform encephalopathy, more commonly known as mad-cow disease) to GMOs (genetically modified organisms), from the assumed risks presented through excessive use of mobile phone to the purported link between the MMR (measles, mumps, rubella) triple-vaccine and childhood autism – all new developments are now viewed through the prism of a heightened and individuated consciousness of risk.

Nor are our fears restricted to the realms of scientific and technological products and processes. Many age-old activities and agents have also now been reinterpreted through our growing sense of isolation and fear. Abduction, bullying, crime, doctors, the environment and food, form just the first few letters of an ever-expanding lexicon of new concerns. Even relationships and sex can now be viewed and assessed using an instrumentalist risk calculus – to the detriment of both.

But, rather than the world changing any faster today than in the past, or becoming a more dangerous, unpredictable or complex place, it may be our diminished, more fragile and isolated, sense of self that has altered our confidence to deal with change and the problems it gives rise to (11). Far from it being the inevitable reflexive consequences of manufactured risk impacting upon us, it may be our alienated and distorted perceptions that lend themselves to identifying everything as a risk.

Those who propose that we now inhabit a *Runaway World* (12), would be hard pressed to show how the pace of change today is any greater than say, over the sixty-five year period two

centuries ago between the creation of Richard Trevithick's first steam locomotive and the advent of transcontinental railroads across the United States of America, or the pace of change over the same period a century ago between the Wright brothers first powered flight and man walking on the moon. If anything, when considering the tumultuous social developments that accompanied these periods of technical innovation, change today appears somewhat attenuated in its impact.

Much of the recent focus has been on the largely undelivered promises of biotechnology – a technology which, in its various stages is now passing its fiftieth anniversary – and the potential of the internet. But whilst the latter may have led us to being more networked virtually, the extent to which this has transformed the real world is less evident. Transfers of information alone do not effectuate change. Radically overhauling existing transport networks, a transformation not currently envisaged by many, would for instance, necessarily have greater social and scientific consequences.

In our technically networked world, we may be more aware – but we are also easier to scare, than previously. Being more isolated leaves us more self-centred, as well as risk averse. The demise of the social also leads to little sense of the possibility that if there truly is a problem needing to be addressed then it is together – with others – that this can best be altered or challenged. In turn, these developments reduce the likelihood of our acting for some greater common good and end up making us less resilient, both as individuals and as a society.

All of these developments have had a quite devastating and stultifying impact upon society. The breakdown of collectivities have, in the absence of any coherent replacements, enhanced the sense which isolated individuals have of themselves, as being frail and vulnerable. In turn, an exaggerated perception of risk lends itself to increasing demands for greater regulation and social control. Accordingly, people increasingly look to those in authority to enhance their sense of security by mitigating the worst effects of the natural world and the actions of those who seek to change it.

And in an age characterised by an absence of political vision and direction, the politics of fear, or risk-regulation, have provided a reluctant and isolated elite with an agenda and a new, if limited, sense of moral purpose. The authorities have willingly embraced this role. Latching onto the generalised climate of isolation and insecurity, politicians have learnt to repackage themselves as societal risk managers – particularly around the issues of health and security.

In a quite remarkable transformation, radicals have reinvented the state as a mechanism of social protection. People who would once have sought to organise their own affairs and build their own institutions – in the absence of any sense of social solidarity or their own ability to deal with problems collectively – now turn to the state to resolve matters. Even those environmental and consumer lobby groups with the most vehement anti-state rhetoric, look to the state to act as the ultimate regulator and enforcer.

Politicians now pose as the people who will protect us from our fears and regulate the world accordingly. But the demise of any positive sense of the possibility and desirability for social transformation has also led to a reduction in what it is that politicians actually offer the public today. The petty lifestyle concerns they focus on, reflected in incessant debates about smoking, smacking, eating and drinking are unlikely to inspire and engage a new generation

of voters (13). Nor – at the other end of the spectrum – do doom-laden predictions relating to global warming and terrorism.

Indeed, the more such concerns are highlighted, the more it becomes impossible for the authorities to satiate the insecurities they create. Hence, alongside disengagement and alienation, has come a concomitant disillusionment and mistrust in all forms of authority, whether political, corporate, or scientific, as these invariably fail to live up to new expectations. This catastrophic corrosion of trust – in outlook if not in practice – has facilitated the replacement of healthy scepticism with unthinking cynicism.

Accordingly, expertise is now perceived as elitist and knowledge as biased or unattainable (14). In many situations today, the public are encouraged, and have become accustomed to, assuming the worst and presuming a cover-up. This has generated new demands for the attribution of blame and compensation. Image and rumour now dominate over insight and reason. Myths and conspiracy theories abound, encouraged by the same people who demand the inclusion of presumed public perceptions in decision-making.

Focusing on people's perceptions has become the new mainstay of governments, activists, the media, and even risk consultants. These suggest that our perceptions of risks are as important – if not more so – than the actuality of the risks we face, as perceptions often determine behavior. Thus, it is held, that irrespective of the basis for such fears in scientific *fact*, their effects are real in social *consequence*, leaving governments with little choice but to take such concerns on board and to regulate accordingly.

It is this outlook that the former Chief Scientific Advisor to the UK government, Sir William Stewart, reflected at the end of his chairmanship of the government's own inquiry into the purported adverse health effects of mobile phones. He concluded that in future *'anecdotal evidence'* should be taken into account as part of the process for reaching decisions (15).

Such a conciliatory approach benefits from appearing to take ordinary people's views very seriously. In an age when few participate actively in political life, it seems commendably inclusive and democratic. It is also a godsend to governments bereft of any broader dynamic or direction. But, assuming or adapting to popular perceptions is as contemptuous, and as patronising, of the public, as dismissing them outright. It may also be more damaging.

The New Public Health

The World Health Organisation (WHO) definition of health is *'a state of complete mental, physical and social well-being'* (16). After its adoption in the preamble to the WHO Constitution in 1946, this was largely subsumed to the pursuit of more tangible goals, such as eradicating disease and treating illness. Its return as a key reference point to contemporary debates about health is not a measure of the inherent strengths of the concept, but rather of the decline of other, more socially-oriented approaches and outlooks for enhancing social well-being.

For societies with a diminished sense of the import and impact of social forces upon them, public health and public safety have been reconceptualised as a multiple of individual well-being and personal security. Hence, despite drawing attention in a limited way to the social aspects of health, the WHO definition feeds into more narrowly subjective orientations and privatised worldviews. As the British General Practitioner and medical writer and commentator, Michael Fitzpatrick, has pointed out, health became politicised at precisely the same time as the world of politics was suffering a dramatic decline (17).

Fitzpatrick notes that people in Western societies live longer and healthier lives than ever before, yet seem increasingly preoccupied by their health. He suggests that the search for a personal sense of well-being is unrealisable despite, and largely because of, the barrage of government and other public health campaigns that encourage people to assume individual responsibility for their health.

More recently, Furedi has pointed to the fact that the concept of well-being itself, necessarily presumes its opposite – that is, that the natural order of things is for people to be ill (18). Hence, the requirement in contemporary health campaigns for constant vigilance to stave off illness. Conspicuous awareness has become a defining posture of our times.

This contemporary focus ignores the real gains in public health achieved over the last century and a half. As the medical consultant and author, Raymond Tallis, has indicated, much of this was attributable to developments beyond the remit of medicine. Increasing prosperity, better nutrition, education, public hygiene, housing and many other factors played their part. It is this that allowed the proportion of deaths that occur between the ages of 0 and 4 to decline from 37 per cent in 1901 to 0.8 per cent in 1999. As a consequence, *'Nearly two thirds of the increase in longevity in the entire history of the human race has occurred since 1900'* (19).

Tallis suggests that once public hygiene and a welfare state had been established, the contribution of scientific medicine – both to the extension of our quantity of life, as well as to the quality of it – has been proportionately greater. But infectious diseases, that had been the main cause of premature mortality and the most susceptible to scientific interventions, have declined in their significance. As a result, contemporary Western societies now face different health problems. Heart attacks, strokes and cancer are the major killers, whilst arthritis, diabetes and asthma are the major causes of ill health. And, as Fitzpatrick explains, in dealing with this new pattern of disease and disability, modern scientific medicine appears to offer diminishing returns.

Nevertheless, *'in real terms the health of even the poorest sections of society is better than at any time in history: indeed the health of the poorest today is comparable with that of the richest only twenty years ago'*. Hence, Fitzpatrick suggests that recent trends to denounce scientific medicine as a form of paternalistic authoritarianism, fall wide of the mark. Seven in ten children with cancer are now cured, compared with fewer than three in ten in the mid-1960s, mainly due to the development of new drugs. As American sociologist, Paul Starr, noted in a Pulitzer prize winning contribution, *'Just as medicine used to be uncritically given credit for gains in health that had other causes, so medicine was now disparaged without prudent regard for its benefits'* (20).

At the same time however, pseudo-scientific and blatantly unscientific approaches for dealing with the feeling of illness – as if this were the same as a disease – have been extended into those areas of our lives that actually require social solutions. Fitzpatrick is particularly critical of the rise of CAM (complementary and alternative medicine) in this regards. Coinciding with the wider loss of faith in science these alternatives may make sense to individual patients who find conventional medicine ineffective and conventional practitioners unsympathetic – but for doctors to collaborate with such practices suggests a denial of expertise that reflects a far broader loss of nerve within the profession itself, and *'a capitulation to irrationalism'*.

Medical intervention today has also increasingly spread into areas that would once have been considered to be *lifestyle* issues, such as eating and drinking, as well as into the once private realm of sexual habits and perceptions of abuse. That this should be so, begs examination. As indicated earlier, in exploring the growth to contemporary prominence of the concept of risk, we should be alert to many initiatives being driven more by social context and political considerations, than by scientific content.

Aside from the indisputably clear and robust evidence linking smoking to lung cancer, few – if any – of the many health concerns raised recently – including that of secondary inhalation of tobacco fumes – present anywhere near so transparent a picture. Despite a multitude of examples and volumes of advice, epidemiology fails to support most pronouncements about health, for the simple reason that the data suggesting causal linkages, rather than mere association or correlation, remains disputed at the highest level and ultimately unpersuasive.

In the 1960s Austin Bradford Hill and Richard Doll, whose pioneering work categorically demonstrated the dangers of tobacco, proposed a series of criteria which would allow epidemiologists to judge whether an association was likely to be causal (21). The association should be strong, graded, independent of confounding variables (such as class, gender, race and occupation), it should be consistent – having been observed in different types of study and with different populations – reversible and plausible. Smoking met all of these – but few associations between illness and disease today and their supposed risk factors meet any.

That people have gone along with a number of such health campaigns – from covering-up in the sun, to not smoking in pubs and monitoring the calories and units of alcohol they consume – hence appearing to support the requisite lifestyle changes, rather than denouncing or opposing them, may well be a symptom of their passive sublimation, rather than the healthy, active and engaged endorsement that is usually presumed by government and activists.

It seems likely that much of what passes as public health concerns and research today is – consciously or not – part of the broader agenda of issues serving to reconnect an isolated elite with the public by addressing their assumed insecurities. Unable to show conclusive evidence for a link between particular problems and their presumed causes, governments have fallen back on advocating preventative strategies of restraint in relation to purported risk factors for which the available evidence falls far short of demonstrating a causative role.

In this, the parallels with our distorted and exaggerated sense of threat pertaining to matters of security in the world, subsequent to the terrorist attacks of the 11th of September 2001, are quite striking. I have noted elsewhere the parallels between the so-called principle of precaution in relation to environmental matters and the principle of pre-emption in relation to international security (22). To these we can now add the principle of prevention in relation to health.

As isolated individuals, we are constantly encouraged to consider the worst that might happen, and to act as if this were true. This explains to some extent the attention now paid to basic public health problems in the developing world. But, rather than advocating development or targeted intervention, as would have been the case in the past, in order to ensure the provision of clean water, and the eradication of Malaria and Aids, the focus – distorted through contemporary Western sensitivities and insecurities – is on containment and prevention, as perceived through the narrow prism of our collective personal security.

Prevention is, of course, better than cure – but only when it can be shown that the probability of what one seeks to prevent is rather high, and the effectiveness of any proposed cure can be guaranteed. Otherwise, prevention readily becomes a mantra and a problem in itself. Prevention is of necessity, required to be general in application and long-lasting – cure can be both specific and discrete. Nor does providing a cure require a moral judgement on anybody's part. On the other hand, if your primary focus is on prevention, then it is morally wrong not to take what are presumed to be the appropriate corrective measures.

In many, if not most, public health debates encountered today, both domestically and abroad, few, if any, of these essential mitigating circumstances relating to prevention are met. Yet, the presumption that they are, and the moralising actions that ensue, dominate. Despite widespread misgivings and concerns among leading scientific and medical professionals in relation to various cancer screening programmes, for instance, both government advice and non-governmental campaigns continue to prioritise awareness and screening over the development of more effective treatments and cures.

The overall result of these interventions is to promote a new form of dependency, or *help-seeking* behaviour by the public, from appropriately informed experts and professionals. This may be packaged in the language of *choice*, but the clear message is that people are expected to make the *right choice*, otherwise they may require a more prolonged period of *support*. This outlook reflects the broader cultural changes identified earlier. And these developments have been bought-into by medical professionals, health officials, regulators and politicians alike, as well as by the general public.

The Medicalisation of Society

How did this state of affairs come about unchecked? After all, as early as the 1970s a number of radical critiques of *medicalisation* had emerged (23). Developed in the United States, these all shared an understanding of the importance of individual autonomy. Their strength lay in their insight into the potential loss of freedom that accompanied the process of medicalisation. Their weaknesses lay in their inability to connect this to broader social trends.

Those who developed these ideas, like feminists and the radical, Ivan Illich, encouraged cynicism in science and its achievements and attributed too central a role to medicine and medical professionals in the overall process (24).

The British medical sociologist David Clark has noted that *'at the time when Illich was writing, the mid-1970s, a much more unitary and optimistic view of medicine was in evidence than exists today'*. By contrast, *'the modern medical system is pervaded with doubt, scepticism and a mistrust of expert claims'* (25). Others too, have identified a growing equivocation on the part of the medical profession regarding their own expertise and deference towards their patients, as by far a bigger problem than an assumed *'club culture'* (26). Yet, the caricature of the arrogant, distant and unsympathetic consultant persists.

In fact, recent studies about particular new illnesses indicate that doctors are not central to these developments. In other words, as US academic Peter Conrad suggests, medicalisation is a *'sociocultural process that may or may not involve the medical profession'* (27). The American military sociologist Wilbur Scott has emphasised the role of anti-war campaigners in the *'invention'* of PTSD (post-traumatic stress disorder), for instance (28), and in a similar vein, Conrad and Deborah Potter have noted how it is adults with so-called ADHD (attention deficit hyperactivity disorder) who diagnose themselves (29).

PTSD is foremost amongst the ever-expanding list of syndromes and sensitivities that people have become conscious of today. Its origins relate to the experience of US veterans after Vietnam. These suffered not so much from defeat in south-east Asia, as from rejection upon their return home (30). Shunned as pariahs and branded psychopaths, the PTSD label offered moral exculpation and access to compensation. But whereas older conditions such as *shell shock* and *battle fatigue* had been held to be specific, relating to a soldier's background and psyche, the new diagnosis was applied more generally, assumed to derive from the fundamentally traumatising experience of war.

Originally framed as applying only to extreme events, PTSD spread rapidly to encompass relatively common happenings such as accidents, muggings, verbal or sexual harassment, and even workplace disputes. It finally entered the official *Diagnostic and Statistical Manual of Mental Disorders* (DSM) in 1980.

In 1952 the DSM only recognised 60 categories of abnormal behaviour, by 1994 this had expanded to 384 (plus 28 *'floating'* diagnoses). Furthermore, it is now increasingly suggested that many, if not most, people in society suffer from mild forms of familiar conditions such as depression and anxiety, obsessional compulsive disorder and autism. Aid agencies also

commonly consider entire populations to suffer from PTSD in advance of any detailed analysis (31).

Ironically, most veterans diagnosed with PTSD have had no combat experience, pointing to a self-justifying reconstruction of current problems through a narrative of past trauma. Research also suggests that PTSD is more serious and more common among international relief and development personnel, than for the locals they seek to support (32). These facts indicate the category to be culturally constructed and its causes amplified through our particular Western obsession with risk and stress, often in pursuit of remediation or recognition.

It is not just medical categories that are social products. Concepts of the *person*, or what is *normal* or *acceptable* behaviour in different circumstances are unique to particular cultures at particular times too. Hence, many more people present symptoms of stress and depression to their doctors today than a generation ago (33). This has been due both to a widening of the definition of such disorders, as well as the substitution of values such as resilience and composure by vulnerability and disclosure. The trend to medicalise or psychologise problems reflects the more fragile individualism of our times.

It is important to understand that medicalisation is not foisted from above onto unwilling putative patients. Rather, the demand for diagnosis is often generated from below. Indeed, there has been very little criticism raised from either the public or experts alike as to the growing notion that a significant percentage of the population experiences or exhibits mental and physical health problems that have not been diagnosed and are insufficiently recognised.

The demand for recognition has become one of the dominant themes of our times. Active campaigns exist to raise awareness of and recognise specific new illnesses, including PTSD, PND (post-natal depression) – including amongst men – ME (myalgic encephalomyelitis or chronic fatigue syndrome), MCS (multiple chemical sensitivity), IBS (irritable bowel syndrome) and RSI (repetitive strain injury).

It would appear that what is now emerging in society is a form of human subjectivity that positively embraces the sick-role. Indeed, the NHS (National Health Service), branded a *'National Sickness Service'* by the recent report into health by the former head of NatWest bank Derek Wanless (34), has gradually moved away from emphasising cure towards offering recognition to those who suffer, thereby facilitating the notion of sickness as an identity that merits recognition, rather than a problem that needs a solution.

It was the American sociologist Talcott Parsons who, in the 1950s, first theorised the concept of the sick-role as being, not just a biological state but a social state too (35). As such, his innovative analysis proposed that individuals held two rights and two obligations. Their rights were that they should be allowed exemption from the performance of their normal social obligations, as well as being excused from responsibility for their own state. Hence, a sick person could not simply be expected to pull themselves together and get well by an act of will.

On the other hand, once exempted from their responsibilities, sick people also needed to be taken care of. This constituted their obligations. Firstly, that they should be motivated to get

well as quickly as possible, and secondly that they should seek technically competent help and co-operate with medical experts. This would usually imply establishing a relationship with a physician. In this sense doctors played a complementary role to that of the sick person.

For Parsons, the primary function of these relationships was to control the disruptive effects of illness in society. This was achieved through the obligations of the patient to co-operate with the medical task, thereby preventing the development of a deviant subculture. In this sense, the social system ensured passage from illness to wellness.

But these rights and obligations could only be fulfilled in a society where there were shared assumptions about social order and the desirability of individuals returning to their ascribed social roles. In other words the sick role was predicated on the assumption that everybody understood that they should get well and indeed, would want to get well. People needed to know what their normal social roles were and understand the desirability of fulfilling these.

Today, these shared assumptions have broken down. The steady decline of shared meanings and values has led many to live in a state which Parsons would have identified as deviance. People no longer necessarily undergo the process of getting well. What takes place instead is the generation of an illness identity, which is recognised through contemporary public health sensibilities thereby providing legitimacy to a new, incapacitated role.

This has allowed the sick role to become semi-permanent, resulting in a reciprocal suspension of responsibilities. People in this position cannot be expected – and do not expect – to perform their normal social roles. Soldiers who can't fight, students who can't sit exams and people who can't work, have increasingly become a feature of our times. These new identities are encouraged through the diminishing of social expectations in the individual, the recognition of sickness as an unavoidable identity, and the promotion of help-seeking.

It is this that Furedi refers to as *Therapy Culture* (36). And as the therapeutic ethos and its concomitant relationships extend into more and more areas of life, so similar problems become reproduced elsewhere. Now, parents, partners and colleagues are no longer expected to be able to perform their social role either.

This social construction of illness, under the guise of the new public health may be costly, but it is a small price to pay for governments that seek to reconnect with the people. People who are self-consciously ill are far less threatening and far easier to manage than those with the social-consciousness to be active and demand more.

Hence, in 2002, the number of days lost from work through stress reached 33 million, passing for the first time the number of days lost through strikes in the UK in 1979, the year that included the *winter of discontent*. But, this stultification of the conscious, subjective and active element in society raises different problems in relation to promoting national resilience in the face of a presumed global war on terrorism. It also lends itself to the exaggeration of the threat posed by presumed public health problems elsewhere, and hence to the promotion of a counter-productive and prescriptive security framework for understanding international health issues.

Security fears, public health campaigns and contemporary preoccupations with illness have also encouraged people back into a relationship – directly or indirectly – with the state. In its

turn, systematic government interference in healthcare has eroded the boundary between politics and medicine. This has been a long and gradual process.

In the mid-1970s, it was a Labour government that first took up the cause of prevention. The then health minister David Owen, as a former hospital doctor, would have been familiar with the radical critique of conventional medicine. But the White Paper *Prevention and Health: Everybody's Business* was felt by many to be too hectoring in tone (37). The strategy made little impact as Owen was an unpopular minister in an unpopular government that was brought down in the wave of militant trade unionism that culminated in the *winter of discontent*.

In the USA, where government concerns with escalating health care costs were greater and trade unionism weaker, the doctrine of individual responsibility won greater approval, connecting with a growing interest in self-help and consumerism. In a paper anticipating subsequent trends, American sociologist Irving Zola identified medicine as *'becoming a major institution of social control'* (38). This was not that evident at the time, due to the more independent and confident form of individualism that still pertained.

Despite launching what was claimed to be the biggest health campaign in history – in relation to AIDS – it was not until 1992 with the *Health of the Nation* White Paper, that the Conservative administration launched a comprehensive health promotion programme (39). In tune with the times, this identified ten *risk factor* targets to tackle matters such as smoking, diet, teenage pregnancy and blood pressure. Politicians had also learnt by then, that if a policy directed at changing individual behaviour was going to make an impact on the public, then it was necessary to foster intermediary institutions between the state and the people.

The number of such intermediaries has been expanded significantly since the 1997 election victory of New Labour. The government appointed Tessa Jowell as the first minister of public health and made the promotion of *healthy living* a central theme of policy – not just for the Department of Health, but across other ministries.

The confusing multitude of supposedly independent groups within the sector has allowed ministers to deflect accusations of running a *nanny* state, despite many of these being funded by government, promoting government agendas, or proposing state action as a solution to particular perceived risks and problems.

The greater impact of official health promotion campaigns over recent years reflects the enhanced sense of individual isolation and vulnerability that now pertains. This has been augmented by the many former activists who retreated from public activity to pursue political objectives through their professional work, often in education and health. Far from undermining the system, since abandoning their once radical goals, they have rather strengthened it with an infusion of more culturally attuned energies.

Through the re-definition of poverty as social exclusion and the promotion of social inclusion to make people feel good about themselves, health promotion has now become redefined as a means for redressing inequality rather than the other way round. As a result, general practitioners, midwives and other professionals who have *'a relationship with people that reaches deep into their personal, private space'*, have increasingly been enlisted to take on more

socially oriented goals beyond merely treating their patients. They are encouraged to take a more active interest in their patient's lives to the probable detriment of both the patient and their professional relationships as instead of serving patients' needs, they now serve the demands of government policy.

Fitzpatrick concludes, *'It is rather ironic that, after seeking to take over the management of the social as well as the medical problems of the neighbourhood, many GPs complain of high levels of stress (not to mention a growing inclination among their patients to assault them).'* The solution, he proposes, lies in restoring the centrality of treatment over prevention, as well as reminding those doctors concerned about restoring public trust, that this was first established through a commitment to medical science and the determined defence of it, along with their autonomy, against anti-scientific prejudices and political intereference.

The New Security Fears

Since the 11th of September 2001 there has been much focus placed upon the need to enhance social resilience, understood as society's ability to recover or withstand adverse conditions or disruptive challenges. Politicians, emergency planners and others talk incessantly of the need to *build, engender, improve* or *enhance* resilience in society (40). Unfortunately, much of this debate is framed in the fashionable, but limiting, language of risk management.

Senior officials regularly point to the central role they attribute to risk reduction. This, in keeping with the times, is understood in narrowly technical terms, as consisting in the main of horizon scanning, investment in equipment, training, business continuity planning, new legislation and the like.

But this reveals the absence of any broader purpose and direction in society at large. After all, risk reduction is a means, not an end. In the past, society was not so much focused on reducing risk as upon enhancing capabilities towards some wider goal. Risk-reduction was a by-product of such activities.

Presumably, people are prepared to risk their lives fighting fires or fighting a war, not so that their children can, in their turn, grow up to fight fires and fight wars, but because they believe that there is something more to life worth fighting for. It is the catastrophic absence of any discussion as to what that something more might be, that actually leaves us fundamentally unarmed in the face of adversity today. In that regards, risk management is both insufficient as an approach, as well as being unambitious.

Combined with the contemporary cultural proclivity to speculate wildly as to the likelihood of adverse events and the demand for high-profile – though not necessarily effective – responses and capabilities based on worst-case scenarios, we may end up distracting our attention in a way not warranted by a more scientific assessment and prioritisation of the various risks that we face as a society.

The incessant debate as to the possibility and consequences of an attack using chemical, biological, radiological and even nuclear weapons, is a case in point. Whilst it is widely accepted that the probability of a chemical, biological, radiological and even nuclear terrorist attack is low, it is assumed that this can not be ruled out. It is often suggested that although groups such as Al Qa'ida may have relatively poor capabilities in such techniques, their intention to develop these is nevertheless clear, and if they did, the consequences might be devastating.

Like the new public health this, in essence, captures the logic of our times; *'Never mind the evidence, just focus on the possibility'*. It is a logic that allows entirely vacuous statements such as that of an official after the supposed discovery of the chemical agent ricin at a flat in North London, who was reported as saying; *'There is a very serious threat out there still that chemicals that have not been found may be used by people who have not yet been identified'* (41).

But undiscovered threats from unidentified quarters have allowed an all-too-real reorganisation of everyday life. The US government has provided $3 billion to enhance bioterrorism preparedness. Developed nations across the globe have felt obliged to stockpile smallpox vaccines following a process, akin to knocking over a line of dominoes, whereby one speculative *'What if?'* type question, regarding the possibility of terrorists acquiring the virus, led to others regarding their ability to deploy it, and so on.

Health advisories to help GPs spot the early signs of tularemia and viral haemorrhagic fever have cascaded through the UK's urgent alert system. And homes across the land have received the government's considered message for such incidents; *'Go in, stay in, tune in'* (42).

Like all social fears, there is a rational kernel behind these concerns. But this is distorted by our contemporary cultural proclivity to assume the worst. It is the fear of bioterrorism that is truly contagious, and it is a fear that distracts us from more plausible sources of danger, diverting social resources accordingly, and exposing us all to greater risk. It is also a fear that has bred a cynical industry of security advisors and consultants, out to make a fast buck by exploiting public concerns, and thereby driving those concerns still further.

For instance, rather than view the recent outbreak of SARS (severe acute respiratory syndrome) in south-east Asia as being a fairly limited, familiar and essentially predictable condition – in view of the close proximity between people and fowl in that part of the world – an army of health and security advisors sought to use it as an example of just the sort of threat they had been predicting.

The episode confirmed their own prejudices – either warning of a possible apocalypse to come, or serving as evidence of the need for, or efficiency of, the new health alert mechanisms they had helped put in place as a consequence of the fear of, and focus on, bioterrorism. In fact, it was their own reactions, amplified through the prism of societies inflated sense of risk, which lead them to inflict quite considerable, yet entirely unnecessary, damage to several regional economies and airlines.

There is a long history of bioterrorism incidents (43). At best, these are tactical devices with limited consequence, but not strategic weapons. The advent of biotechnology and the more recent, if overstated, possibility of genetically engineering agents to target biological systems at a molecular level is now held to pose a new challenge (44).

But few commentators point to the difficulties in developing, producing and deploying biological agents, as evidenced by the failures of the Japanese cult, Aum Shinrikyo, in this regards only a decade ago. It was this that led them to settle for the rather more limited impact produced by the chemical agent sarin, despite their resources and scientific capabilities. The Tokyo subway attack that ensued had rather more impact upon our fevered imagination than in reality.

As with the anthrax attacks, that targeted politicians and the media in the US in 2001, this incident suggests that bioterrorism is more likely to originate amongst malcontents at home, due to greater access and capabilities in developing such weapons there. Advanced economies are also better placed to deal with the consequences of bioterrorism, a fact that significantly undermines their purpose, especially to outsiders. Nevertheless, suicidal foreign malefactors

bent on undermining western democracies continue to be presented as the greater threat.

Recognising the extremely low probability and limited consequences of such incidents, some experts point to the longer-term psychological impacts as being the more important (45).

There is an element of truth to this. Psychological casualties are a real phenomenon. In certain emergencies these can rapidly overwhelm existing healthcare resources and thereby undermine the treatment of those more directly affected. But they can also become a self-fulfilling prophecy. And by increasingly framing social problems through the prism of individual emotions, people are encouraged to feel powerless and ill.

The arrival of television cameras or emergency workers wearing decontamination suits act as powerful confirming triggers for the spread of mass psychogenic illness (46). So too can psychosocial interventions, such as debriefing subsequent to an incident (47). These can undermine constructive, pro-social and rational responses, including the expression of strong emotions such as anger (48). Hence, despite good intentions, psychiatrists can become complicit in shaping social ills. This is because few are prepared to question the dominant cultural script emphasising social and individual vulnerability, and the need for professional intervention and support.

Rather than critically questioning the framing of the debate, many now simply accept the possibility of chemical, biological, radiological and nuclear terrorism as a given (49). There is little understanding of how our exaggerated sense of risk is both historically contingent, predating 2001 quite significantly, and culturally determining, giving shape to and driving much of the agenda.

The medical historian and epidemiologist, Nicholas King, has noted that *'experts were using the threat of novel diseases'* as a rationale for change long before any recent incident, and that contemporary responses draw on *'a repertoire of metaphors, images and values'* (50). He suggests that *'American concerns about global social change are refracted through the lens of infectious disease'*. This coincides with the view of others who see bioterrorism as providing a powerful metaphor for elite fears of social corrosion from within (51).

Despite incidents since 2001 pointing to the preferred use of car bombs, high explosives and poorly deployed surface-to-air missiles, the authorities have, through their pronouncements, encouraged the media to hype weapons of mass destruction. This is despite any terrorist's capabilities being rather limited compared to our own and the consequences being more likely to devastate them than us. We have stockpiled smallpox vaccines, but notably, have run out of influenza jabs. And, in the extremely unlikely eventuality of an incident occurring, we assume that the public will panic and be unable to cope without long-term therapeutic counselling.

In an age readily gripped by morbid fantasies and poisonous nightmares, few surpass the pathological projection of our own isolation much better than the fear of bioterrorism. All of this rather begs the question as to who is corrupting civilisation the most. The fantasy bombers or the worst-case speculators?

Conclusions

A heightened consciousness of risk, both amongst ordinary people, but also the elite of society, has been driven by a broader process of social fragmentation and isolation. In turn, the insecurities this has created have been addressed by various social leaders, keen to restore a sense of purpose and legitimacy for themselves in the post-Cold War world order. These parallel processes have encouraged a significant degree of risk amplification in relation to numerous contemporary issues.

Foremost amongst these are those pertaining to the environment, as well as personal health and security, which have also served as conduits for politicians and others to restore their connections to the public at large. The accompanying loss of any perception as to the possibility, and desirability, of transforming the world through social, rather than individual or technical processes, has further facilitated an exaggerated sense of the importance and consequences of psychological and scientific risks in the world.

Many of these phenomena were clearly in evidence prior to the terrorist events of the 11th of September 2001. The latter however, allowed a broader distortion of contemporary sensitivities to occur by encouraging a fatalistic sense that there are people out there who simply want to destroy everything. This in turn, has fed into our already heightened sense of individual vulnerability and insecurity. Unfortunately, many of the proposals raised to deal with such matters, project our current existential obsessions onto the world stage.

Accordingly, the notion of health promotion, as opposed to treatment and cure, for tackling world poverty is now largely assumed without debate. Also, the assumption that individuals simply need to be provided with information to make the right choices goes unquestioned. What's more, if people are not choosing to lead healthy lives then it becomes possible to condemn them morally for failing to do so. Help-seeking from appropriately qualified experts is now *de rigeur*, as is the notion that a significant fraction of the population – up to two-thirds by some accounts – is suffering from some mild form of psychological condition or other illness.

Whereas in the past governments would have hesitated to intrude directly into the private lives of their populations, today such concerns have been overthrown as the distinction between what is public and what is private has increasingly been eroded. What's more, the new processes of medicalisation and psychologisation – which have led to various claims for official recognition by specific groups – is now often promoted more informally through non-governmental lobbies and patients' associations.

Bizarrely, it would become a problem for governments today if all of their proposed health targets were met. They would thereby lose their means of maintaining a connection with the populace. Of course, with the constant expansion of medical categories, sensitivities, symptoms and syndromes, there is little chance of such a state of affairs coming to pass.

On the other hand, by encouraging a sense of vulnerability, or the notion that to be well is either odd, or something that needs constant vigilance, they have raised new problems in an

age characterised by the equally false and exaggerated perception of the threat posed to society by terrorism.

Social resilience rather requires the need to promote a more confident and assertive form of individualism, contrary to the fragmented, isolated and insecure sense of individuation that now pertains. How governments seek to square this circle in the coming years will be quite interesting.

Sadly, one consequence of contemporary Western obsessions is to constantly project our perception of problems onto others around the world. An optimistic and confident, if arrogant, imperialism has been replaced by a pessimistic, doom-laden environmentalism and public health-ism, that are no less prescriptive in their pronouncements for those upon the receiving end.

But if we are best to serve the people of the developing world, rather than impose our apocalyptic outlook upon them, then it is high-time that we promoted real development and sought to separate once and for all, the concepts of health from the prescriptions of policy.

Global health security targets communities. However, in the absence of real communities in the early years of the twenty-first century, this can only ever mean targeting large numbers of isolated individuals in a manner mediated through a range of *caring* professionals. Hence, it becomes a moralistic imperative to conform, rather than a consciously determined strategy to enhance what is in the best interests of society as a whole.

Public health and public safety often come into conflict with individual health and personal security. One may need to be obtained at the expense of the other. The recent furore in the UK over the individual rights of parents to obtain separate inoculations for measles, mumps and rubella for their children, in the light of speculative concerns raised by one hospital doctor as to the rather remote – and as it proved unfounded – possibility of the MMR triple-vaccine being linked to childhood autism, is a prime example.

Public health should never be considered to be a private matter. But the prevalent outlook that promotes individual consumer choice through the new government White Paper *Choosing Health: Making Healthcare Choices Easier* suggests the opposite (52). The consequence in relation to the MMR debacle was that – as vaccination levels descended below the threshold required to guarantee herd immunity – limited outbreaks of previously contained diseases emerged across the UK.

On the other hand, public health needs to rest on a secure scientific footing, if it is not to be replaced by a fanciful wish-list of presumed risk-associations, driven by the burgeoning preventative paradigm of our times.

The latter can only lead to the denigration of science, as well as to the demise in the reputation of those who seek to prioritise their immediate popularity and image over more reasoned but possibly unpalatable insights. Current developments are likely to prove disastrous for both patients and doctors alike. And in their third-world incarnation these simply represent the projection of contemporary Western prejudices and morbid fantasies.

Despite the fact that more people than ever across the globe enjoy better health today, the

intense awareness of health risks means that more people feel more ill, as well as unduly concerned as to what *outsiders* may bring.

This results in an ever-increasing burden of demand on the health care and security systems that all Western societies experience growing difficulty in meeting. And when health becomes the goal of human endeavour it acquires an oppressive influence over the life of individuals and when people are ruled by the measures they believe may help to prolong their existence – it is the quality of their lives that is diminished.

Our contemporary conceptualisation of risk has been quite disabling in this regards.

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