

**“ensure you can see where you are putting
your feet before walking”**

Governance and Compliance

OpRisk Europe Conference

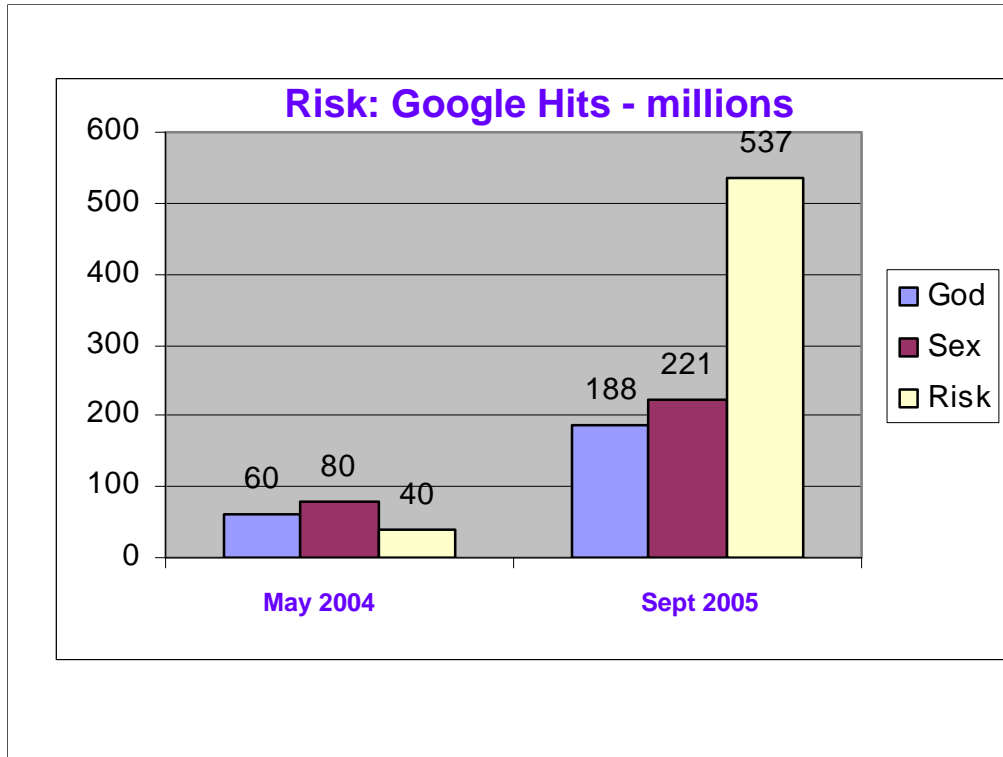
21 March

London

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- All risk is subjective. “Risk” is a word that refers to the future, and that exists only in the imagination.
- Risk management involves speculating about this future, about things that could go wrong, and about ways of preventing them.
- In recent years, in the public sector and throughout the worlds of commerce and industry there has been an explosion in the numbers of risk assessments undertaken and a remarkable increase in the thoroughness and comprehensiveness that they attempt.



In May 2004 I typed the single word “risk” into Google and got 40 million hits. For purposes of comparison, I typed in God and sex. I repeated the exercise in September 2005 by which time risk had overtaken its principal competitors by a wide margin. Sadly this game can no longer be played. Risk reached 1.2 billion hits before Google must have decided that things had become ridiculous, and capped the process. In March 2007 risk had been cut back to about 300 million. Although a crude indicator, I suspect that this explosion of Google hits on risk mirrors and, for those connected to the Internet, amplifies concerns about things that might harm us.

Drake	Clapperton	Livingstone
Gilbert	Barrow	Baker
Saxton	Lander	Kirk
Davis	Parry	Godwin -
Hakluyt	Colby	Austen
Wright	Back	Clarke
Hudson	Ross	Markham
Baffin	Biscoe	Yule
Halley	Franklin	Stanley
Dampier	Stuart	Doughty
Bruce	Eyre	Thomson
Cook	Galton	Murray
Ramsden	Everest	Curzon
Roy	Hooker	Scott
Mackenzie	Bates	Shackleton
Rennell	Burton	Keltie
Vancouver	Speke	Gertrude Bell
Park	Murchison	Hogarth

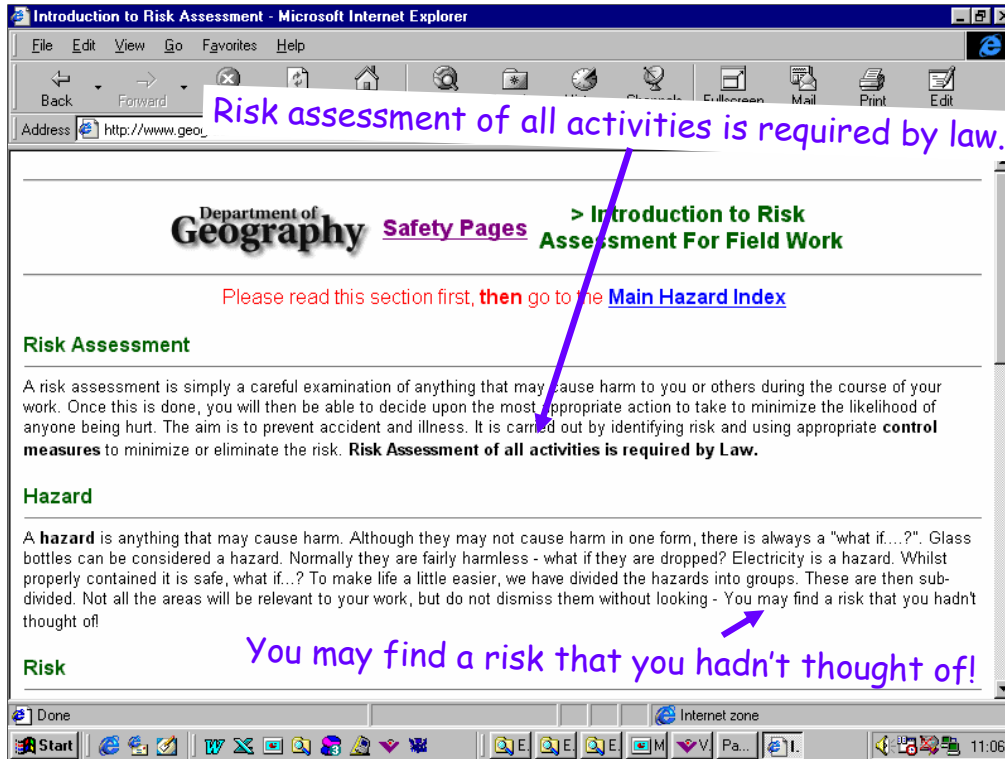
There is a frieze that runs around the lecture theatre of the Royal Geographical Society's lecture theatre on which are recorded 53 names of the heroes of the heroic age of geography. They provide an intriguing contrast to our concerns about risk.

Drake	Clapperton	Livingstone
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A quarter of them (highlighted in red) died on the job. There was no Adventure Licensing Authority. Drake died of dysentery off Panama in 1596. Scott either froze or starved to death in 1912 and Shackleton in South Georgia in 1922.



Here we have a picture of Captain Cook about to meet his end in Hawaii in 1779. Had he failed to do a risk assessment? Or did he take a risk, and his number came up?

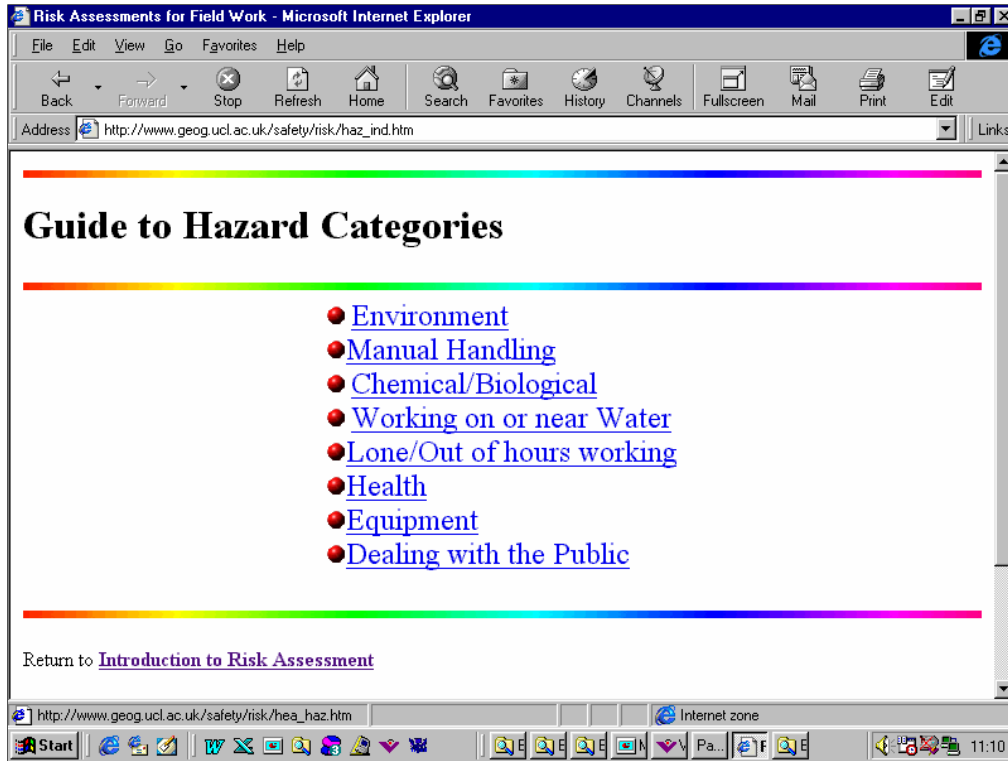


Let's fast forward to 21st century geography. In my department at University College London we must now produce risk assessments for all our final year students working on dissertations.

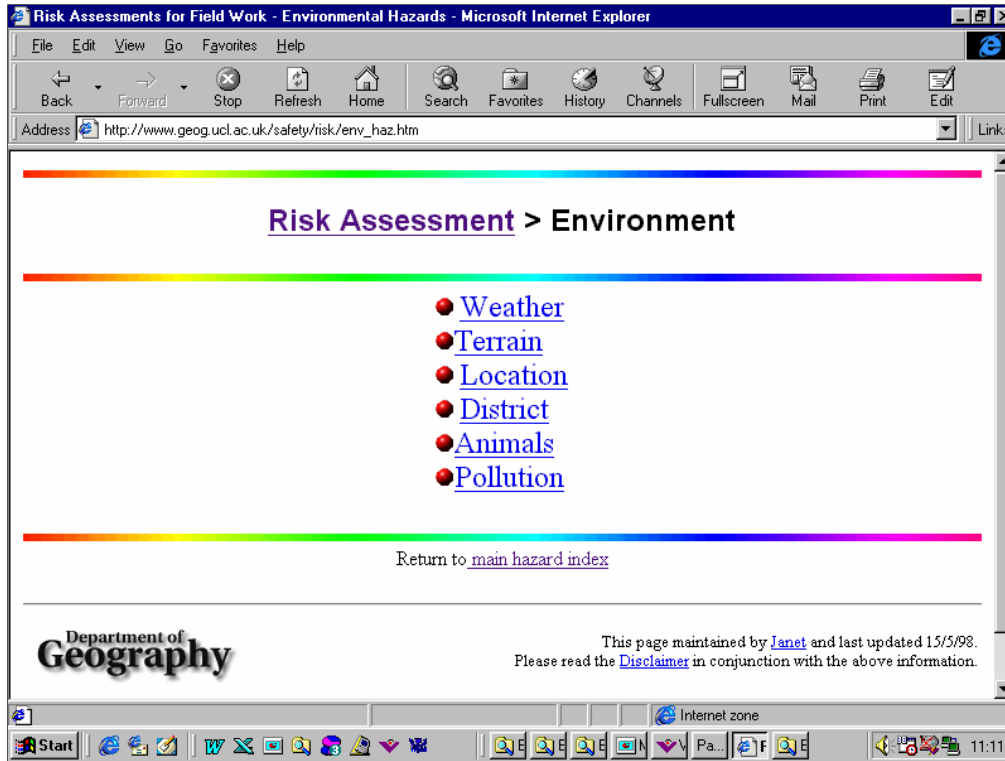
The 69 page guide on our web site explains how this should be done.

This is the first page. When I object that we are only required to assess "significant" risks, I am told that I cannot know if it is significant or not until I have assessed it. So everyone is enjoined to read all 69 pages because we might find a risk that we hadn't thought of.

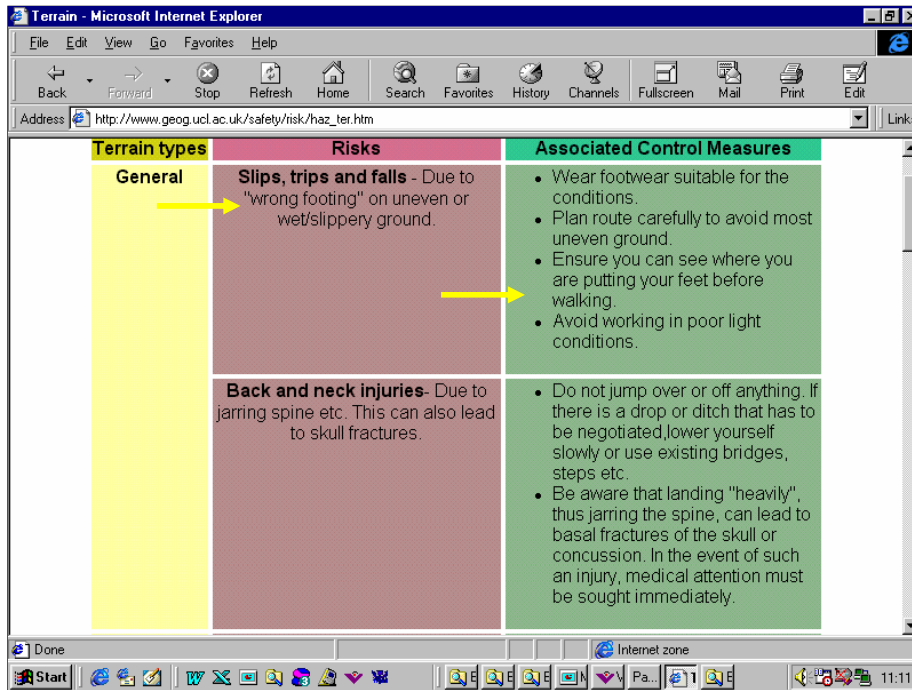
One gets started by clicking on the "main hazard index".



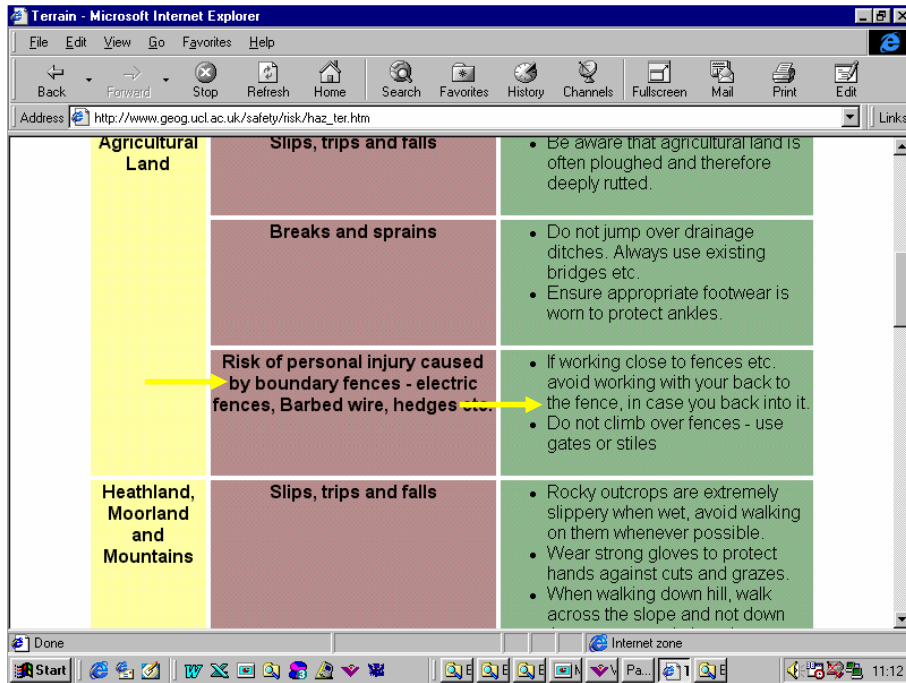
Which takes you to a hazard menu. If you click on “Environment” ...



You get another menu. If you click on “Terrain” you are taken to the risk management part of the guide.



Here we find the risk and the associated control measures. And here we find the advice that forms the title of this presentation ENSURE YOU CAN SEE WHERE YOU ARE PUTTING YOUR FEET BEFORE WALKING. And ...



AVOID BACKING INTO FENCES.



“Look where you are putting your feet before walking” is good advice – routinely offered to three year olds. But why has it become thought necessary to offer such advice formally to adult students at a university?

And how do we account for the signs of nervousness proliferating everywhere?

- A door to a BBC studio. I could not work out a way of exercising the caution that was being urged upon me.
- A notice in Russell Square tube station that I pass frequently on my way to College.
- A warning printed on Sainsbury’s shopping bags. Definitely good advice.

Such notices serve the same purpose as juju charms. The people posting them presumably rely on them to ward off lawyers. I suspect that they are equally efficacious.

“The board should maintain a sound system of internal control”

“[the annual] review should cover **all** controls, including ... **risk management**”

“no prescribed form or content”

“risk based”

“the risks [the company] faces are continually changing”

“effective monitoring on a continuous basis”

“the board should ... Ensure that it has considered **all** significant aspects of internal control”

“**All** employees have some responsibility for internal control”

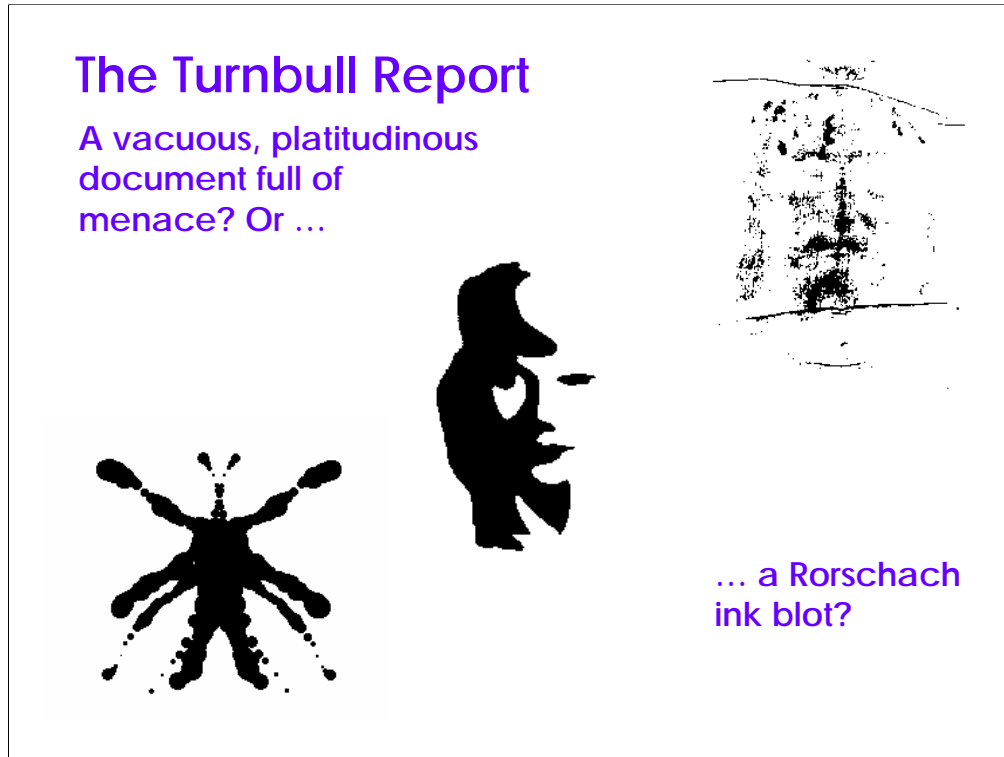
What is driving this growth of risk assessment?

The Turnbull Report: guidance on implementing the Combined Code on Corporate Governance has been a significant driver.

The open-endedness of the risk manager’s job is emphasised by the Turnbull Report (1999) –

<http://portal.surrey.ac.uk/pls/portal/docs/PAGE/RISK/BACKGROUND/LEGISLATION/TURNBULL/TURNBULL%20REPORT.PDF> - a document to which most corporate risk managers in Britain now pay obeisance. Internal control embraces risk management – and ALL employees have some responsibility for it.

And all SIGNIFICANT risks must be considered. The view that you cannot judge whether a risk is significant or not until you have considered it leads the anxious to the conclusion that ALL risks must be assessed.



The main message that many people are taking away from the Turnbull Report is that if something goes wrong, someone is going to get the blame – and it better not be me. And that the best defence against this danger is a document (a risk assessment) in your filing cabinet that demonstrates your prudence.

When I first read the Turnbull Report I noted its requirement for impossible-to-achieve comprehensiveness, its unhelpful lack of specific guidance, and implicit warnings, and described it as “a vacuous, platitudinous document full of menace.” Its message was “Be careful, or else!”

Since then I have observed the enormous amount of activity generated under the banner of Turnbull, and now am inclined to describe it as a Rorschach Ink Blot. The Rorschach Ink Blot is a tool used in projective personality tests. The person being tested is shown an ambiguous image (the ink blot, or in this case Turnbull) and asked to describe what they see. Different risk managers see different things – they project different risk-management compliance requirements on to Turnbull.

One Footsie 100 company with which I have worked has a “Turnbull Rollout Plan” based on its Business Risk Review Process that has identified 122 different types of risk that it is committed to assessing in order to comply with its interpretation of the Turnbull Guidance. Each of the 122 “types of risk” - ranging from earthquake to fraud has the potential to spawn hundreds risk assessments across the many countries in which the company operates..

Different kinds of Risk: 1



- When considering the task of managing risk it is important to be clear about the kind of risk one is dealing with.
- I suggest that it is helpful to distinguish **three categories**
- **Directly perceptible perceptible risk** - eg climbing a tree, riding a bike, driving a car. This category of risk is dealt with instinctively and intuitively. You don't conduct a formal probabilistic risk assessment before you cross the road.
- **Risk perceived through science** - e.g. cholera, you need a microscope to see it and a scientific training to understand what you are looking at. Where historic accident data can plausibly be projected into the future, actuarial science can inform risk management
- **Virtual risk** - the scientists just don't know, or reputable scientists disagree. This is the realm of risk culturally constructed. If science cannot settle an issue it is wonderfully liberating - people, including scientists, are freed to argue from their established beliefs, prejudices and superstitions.

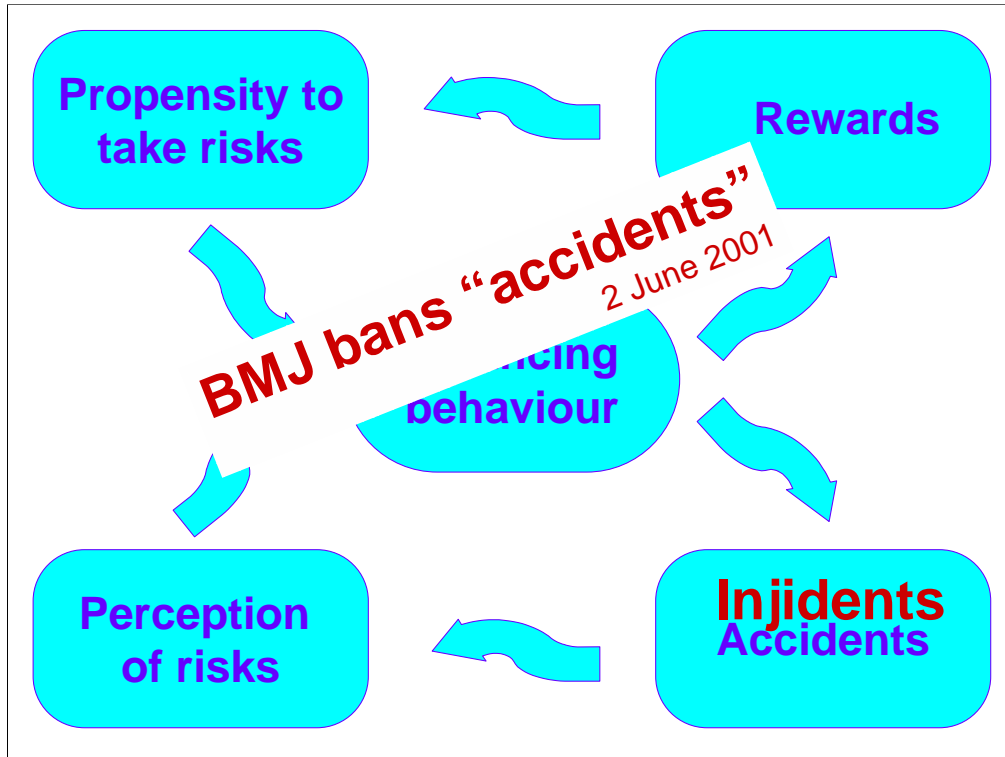
A successful risk manager



Risk management is

- a balancing act
- instinctive
- intuitive
- influenced by experience
- modified by culture

- This is an example of primordial management of a directly perceptible risk
- Anyone who has ever been in the presence of a toddler learning to toddle will be under no illusions about being in the presence of a serious risk management exercise.
- This picture illustrates a number of attributes of risk management
- **It is a balancing act** - in this case a physical balancing act - but more generally an act in which the rewards of an act are balanced against the potential adverse consequences
- **It is instinctive** - successful risk management has been rewarded by evolution
- **It is intuitive** - we do not undertake a formal probabilistic risk assessment before we cross the road - or toddle across the room
- **It is influenced by experience** – we learn about hot things, sharp things, who to trust etc through having (non-fatal) accidents, or witnessing others having them.
- **it is modified by culture.** This little fellow is clearly performing before an appreciative audience. Desired behaviour is being reinforced.



A more abstract version of what is going on in the previous slide. I call it the risk thermostat.

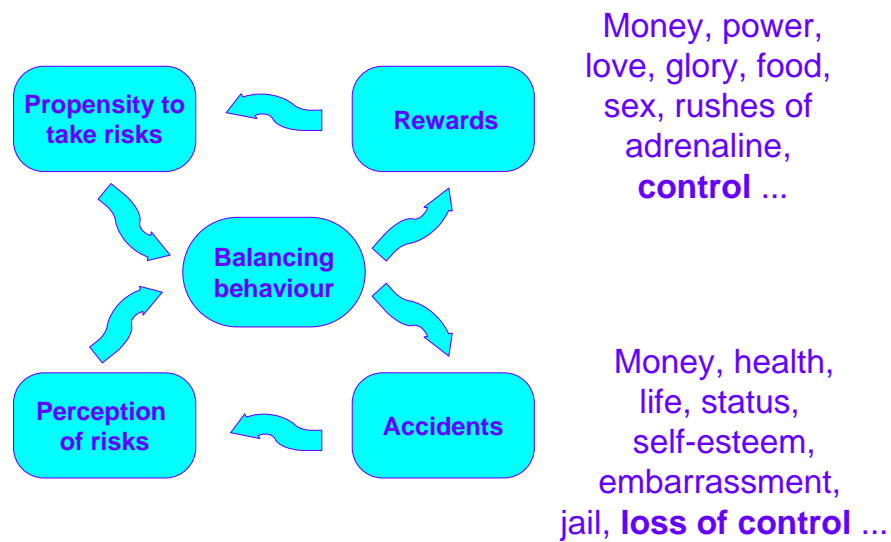
Orisk managers, managers of railways, or the Navy, or the mental health services, or pharmaceutical companies do not have the option of zero risk - zero accidents. In the real world zero risk is not on offer.

The only way they can achieve zero accidents is by going out of business.

This model of risk management strikes some as an unacceptably radical idea. In June 2001 the BMJ proclaimed in an editorial that henceforth the use of the word “accident” would not be permitted in its pages, saying that the word suggested something unavoidable, “However, most injuries and their precipitating events are predictable and preventable. That is why the BMJ has decided to ban the use of accident.”

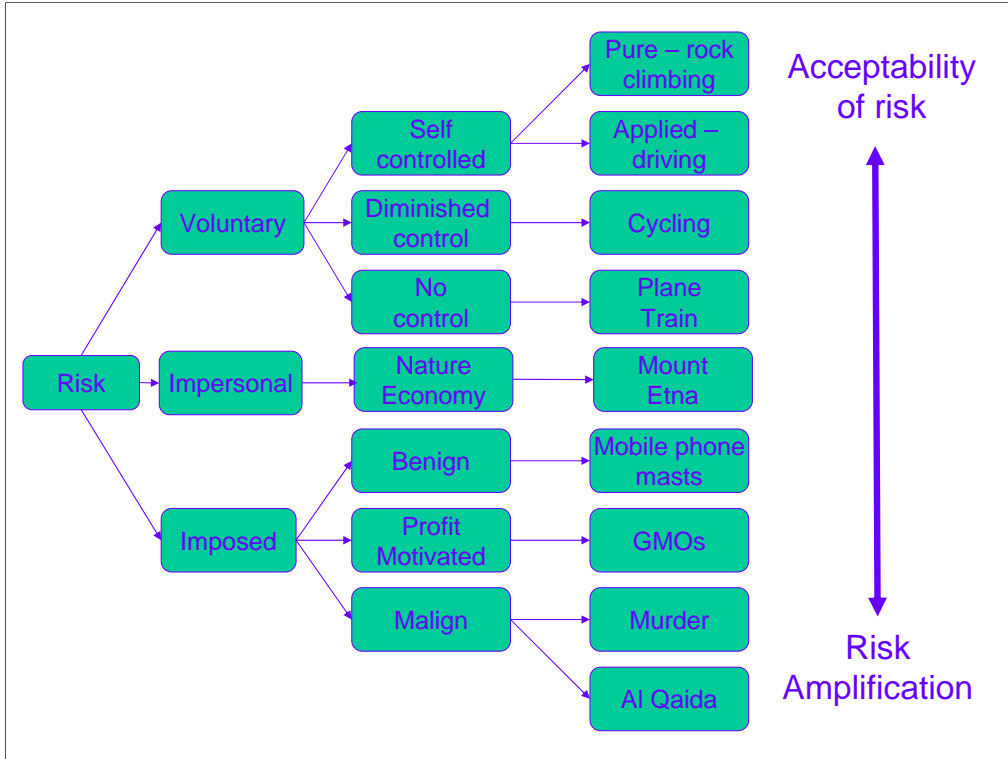
What word should they use in its place? “The English language may simply fail us here.” They suggest “injident” – injury producing incident.

The risk thermostat

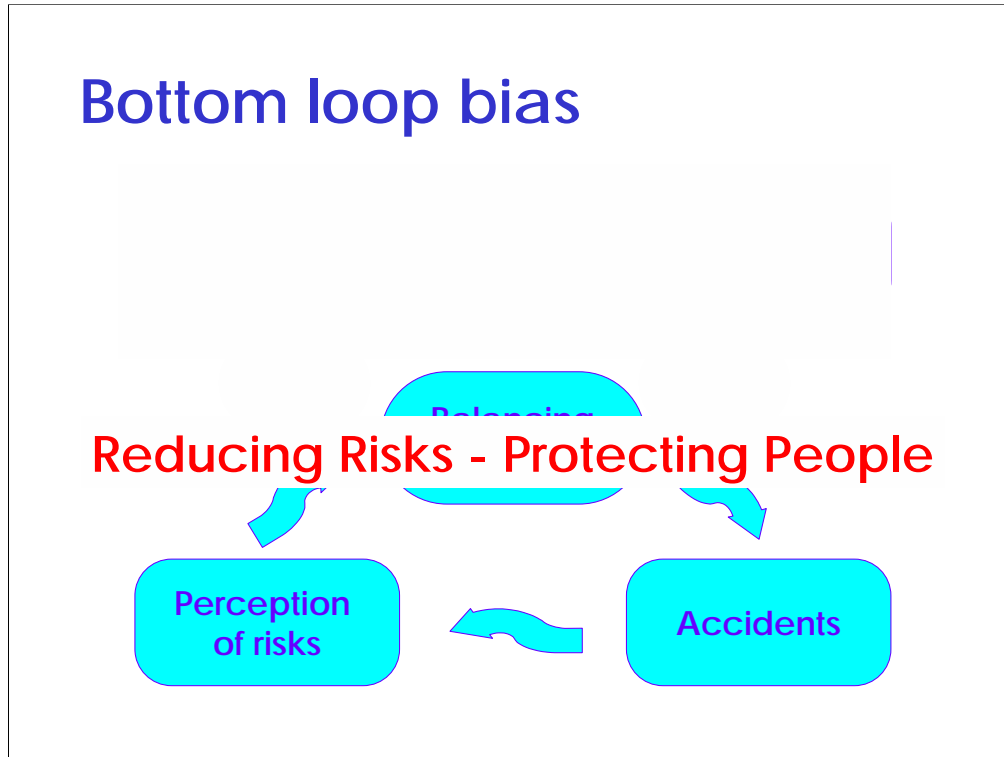


Sadly, for would-be scientific managers of risk, this model is conceptual, not quantitatively operational. The Accident and Reward boxes contain too many incommensurable variables.

Perhaps the most important variable is whether a risk is seen as voluntary or imposed. This distinction influences enormously the way in which the risks and rewards are perceived. Consider the debate about mobile phones. In this debate the risk associated with the handsets is usually held to range from small to negligible. The radiation dose associated with the base stations is orders of magnitude less – unless one is up the mast with an ear to the transmitter. Yet billions of people are queuing up all around the world to take the (voluntary) handset risk, and almost all the opposition is focused on the base stations which are seen as impositions.



Bottom loop bias



Institutional risk management.

Two prominent features of most institutional risk management are

- It strives for “objectivity” – which, as we shall see, it usually strives for in vain, and
- It suffers from “bottom-loop bias”

If I am crossing the road to catch an approaching bus I perform the risk management balancing act in my head. The gaps in traffic that I will risk depend on how urgently I want to catch the bus – will I be late for dinner? – and how fearful I am of being hit.

When risk management becomes institutionalised the specification of the risk manager’s job usually focuses solely on risk reduction. Judgements about what is safe or dangerous – they are told – should not be corrupted by contemplation of the rewards of risk taking.

“Reducing Risks – Protecting People” is the mantra of the Health and Safety Executive – Britain’s pre-eminent risk manager.

A virtual risk: vCJD from BSE?

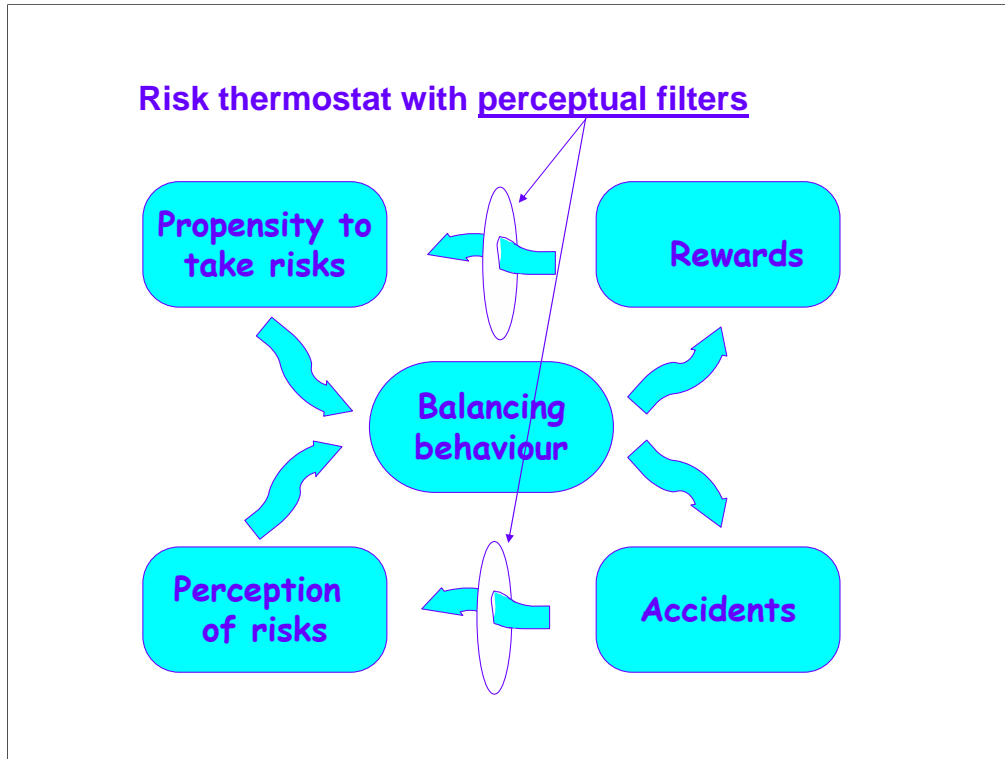
"I have worked in this field for 25 years ... did I go out and eat lamb chops, did I go out and eat lamb brain, sheep brain? The answer was 'no', but it was not based on scientific criteria, it was based on just emotion. ... At a scientific level I cannot give you a scientific basis for choosing or not choosing beef, because we do not know the answers."

Nobel Laureate Stanley Prusiner

BSE Inquiry, 6 June 1998 (www.bse.org.uk)

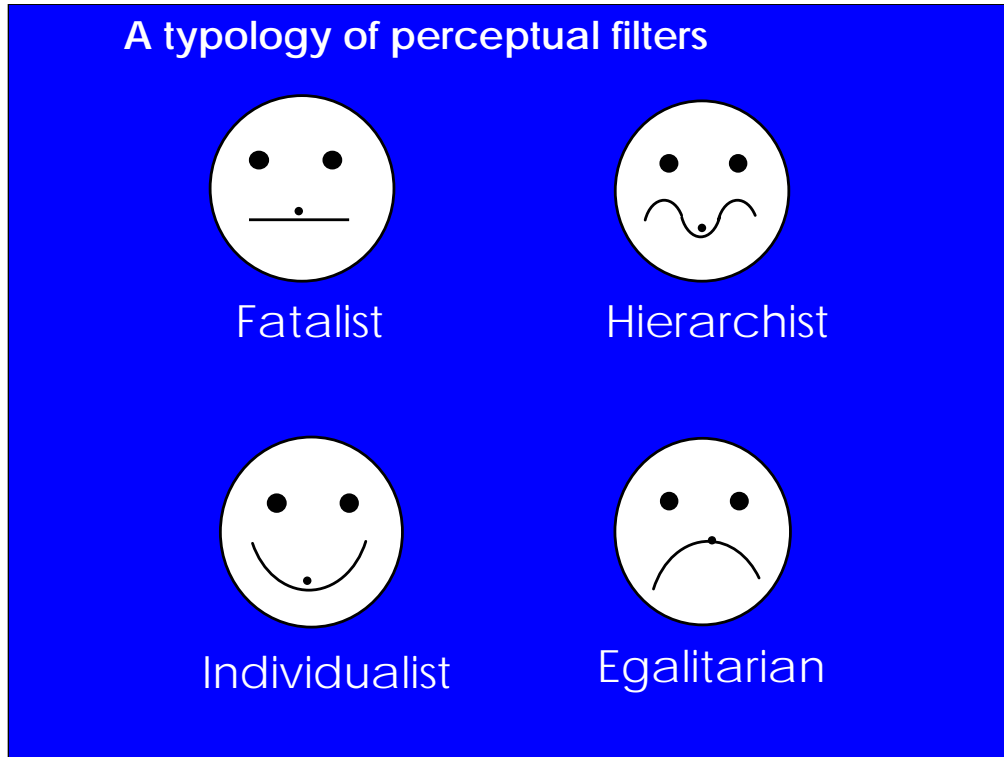
Virtual risk – an example

- Stanley Prusiner, by virtue of his Nobel prize for his work on prions, arguably outranks all the other scientists in the debate about BSE and vCJD.
- In his evidence to the Government's BSE inquiry he declared himself unconvinced by the evidence so far produced that a connection had been established between BSE and vCJD.
- He was asked if he had changed his diet since learning of BSE. This is what he said.
- For me, that fact that he has been unable to establish a connection after 25 years looking is reason enough to put it a long way down my personal list of things to worry about. For Prusiner, the possibility seems to be reason enough not to eat lamb.



Prusiner's risk thermostat and mine have different perceptual filters. The weaker the scientific understanding of a risk the greater becomes the influence of these filters.

A typology of perceptual filters



- These are caricatures, but nevertheless recognizable types that one encounters in debates about threats to the environment. With a little imagination you can begin to see them as personalities.

- The **individualist** - optimistic, confident, pragmatic - a gambler because you are likely to win more than you lose. Not much concerned about threats to the environment. Believes in devolved *individual responsibility* for risk management. **If you can't prove it's dangerous, assume it's safe.**

- The **egalitarian** - or environmentalist - treads lightly on the earth and invokes the precautionary principle at every turn. **If you can't prove it's safe assume it's dangerous.**

- **Fatalists** - have little control over their lives - *que sera sera*

- **Hierarchist** - here we find the institutional risk managers; big business, big government, big bureaucracy. They employ all the people in white coats to work out where the critical thresholds lie, and economists to devise optimal strategies for living within them.

- The **Hierarchist** sees nature as something to be exploited for his benefit; the **Egalitarian** sees nature as something to be obeyed and respected and interfered with as little as possible; the **Hierarchist** sees risk as a management problem. And the **fatalist** ducks if he sees something about to hit him

- They are certainly recognisable in the debate about BSE. Lets look at a few examples in the form of quotations that I have abstracted from the debate.



Egalitarian

- Feeding dead sheep to cattle, or dead cattle to sheep, is “unnatural” and “perverted”.
- “It is the full story of the beginnings of an apocalyptic phenomenon.”
- “Great epidemics are warning signs, symptoms of disease in society itself.”

- The egalitarian sees BSE as punishment for unnatural, hubristic methods of industrial agriculture.
- The last two quotations come from the foreword to Richard Lacey’s book on BSE
- The problem is embedded in an apocalyptic societal context.
- **If you cannot prove beef is safe, assume it is dangerous.**



Individualist

- “The precautionary principle is favoured by environmental extremists and health fanatics. They feed off the lack of scientific evidence and use it to promote fear of the unknown.”
- “It is clear to all of us who believe in the invisible hand of the market place that interference by the calamity-promoting pushers of the precautionary principle is not only hurtful but unnecessary.”

- The individualist views industrial agriculture as a boon to mankind, and CJD as an extremely rare disease whose connection with BSE is unproven.
- Hostile to regulation. Publish everything you know and let the shopper decide.
- **If you cannot prove beef is dangerous, assume it is safe.**



Hierarchist

- “We require public policy to be in the hands of elected politicians. Passing responsibility to scientists can only undermine confidence in politics and science.”
- “I have not got a scientific opinion worth listening to. My job is simply to make certain that the evidence is drawn to the attention of the public and the Government does what we are told is necessary.”

- In the case of BSE the hierarchy lost control and was acutely embarrassed.
- BSE and vCJD became hot potatoes, to be passed on to someone else as quickly as possible.
- The first quotation is from a scientist.
- The second quotation is Stephen Dorrel explaining to Parliament that he was only obeying orders.

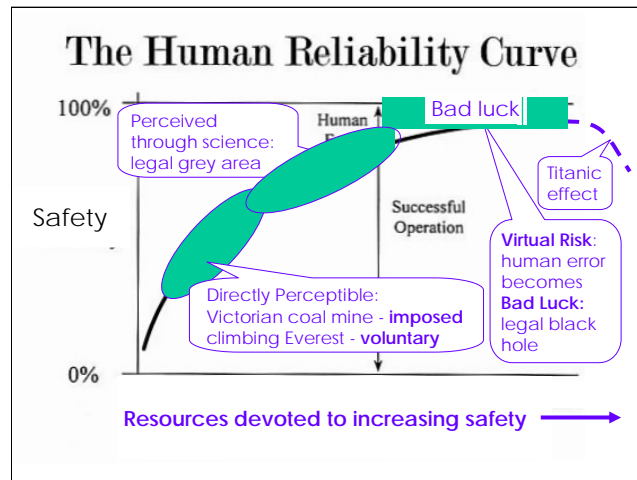


Fatalist

“They should shoot the scientists, not cull the calves. Nobody seems to know what is going on.”

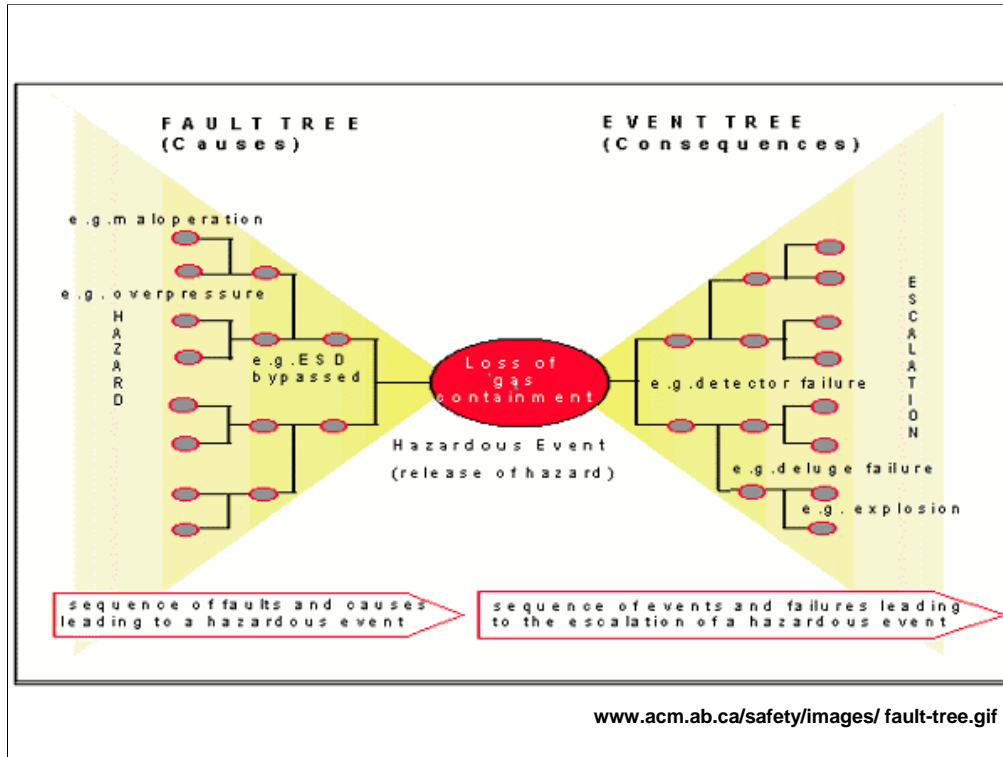
- **“Charles won’t pay for Diana’s briefs”**
Main headline in *The Sun* on 21.3.96, the day every other newspaper in the country led with the BSE story

- A dairy farmer on the verge of bankruptcy.
- The Sun is **the** fatalists’ newspaper it knows what is truly important.



This graph has been taken from the risk management manual of a major airline. It can be elaborated to illustrate the different types of risk that I have introduced.

- It proposes, plausibly, that no matter how much is spent in pursuit of safety, 100% safety is not attainable. Yet, labelling the area above the curve “human error” suggests that whenever something goes wrong it must be someone's fault.
- My embellishment of the curve suggests that however many fool-proof and fail-safe devices are provided, so long as there is a residual dependence on human vigilance and common sense, the curve might turn down. The “Titanic Effect” refers to the problem of over-confidence in technological safety measures.
- The smoothness and precision of the curve implies an unrealistic degree of accuracy and objectivity with respect to the safety response achievable with safety measures. In practice the response is usually highly uncertain.
- Questioning people within any institution commonly reveals a wide range of disagreement about where on the curve the institution lies.

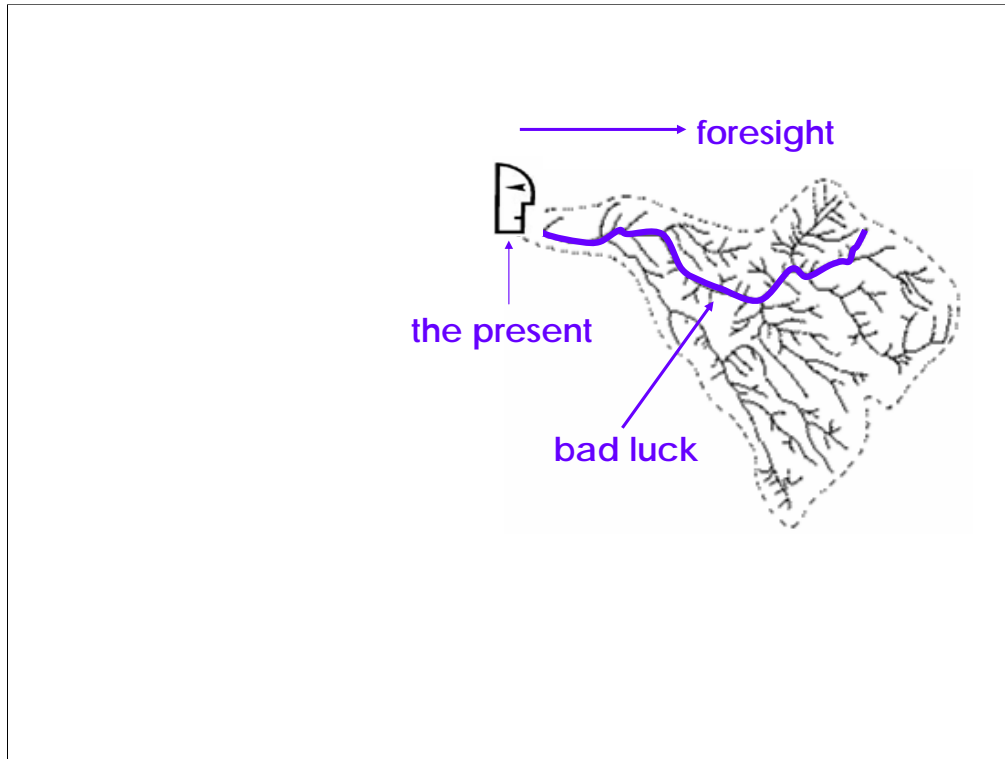


Fault trees and event trees are favourite tools in the quantitative risk assessor's tool box.

They set out clearly and systematically what is known about particular risks.

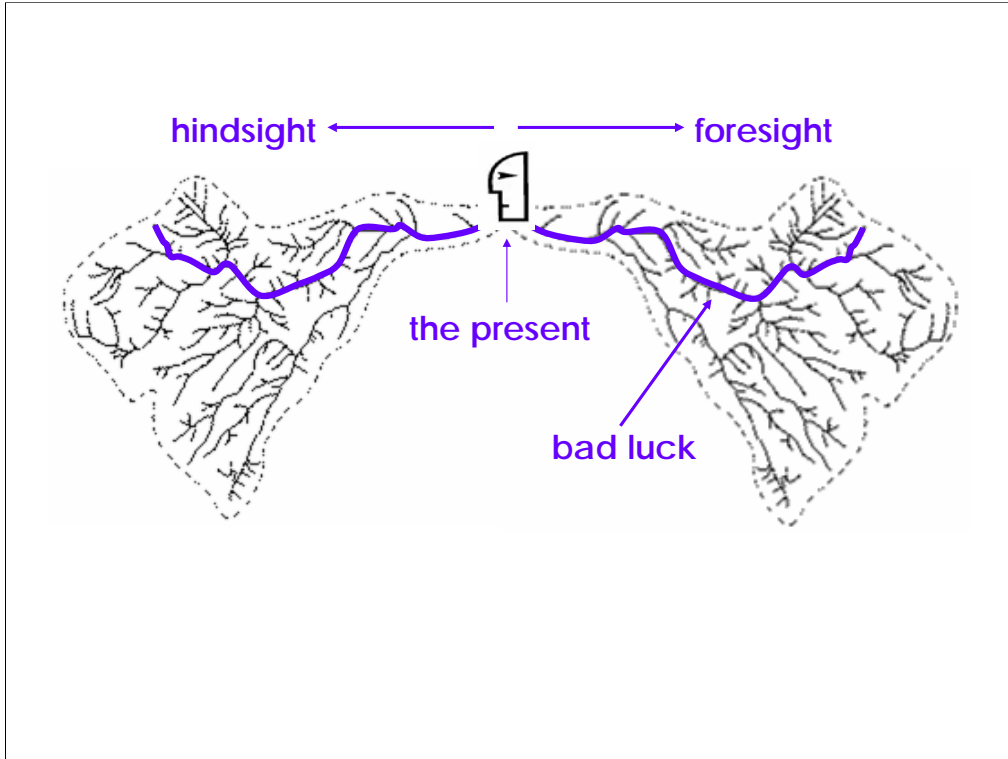
They can be a useful first step in setting out what you think you know – so long as you are not seduced by the probabilities on the right-hand side of the page. The Channel tunnel fire that closed the tunnel for six months shortly after it opened should have happened, according to the event tree analysis produced for the project's safety assessment, about once every 100 thousand years.

The problem with event trees is that they are simplistic. They require feeding with probabilities that are often wild guesses. The real world is infinitely more complicated.

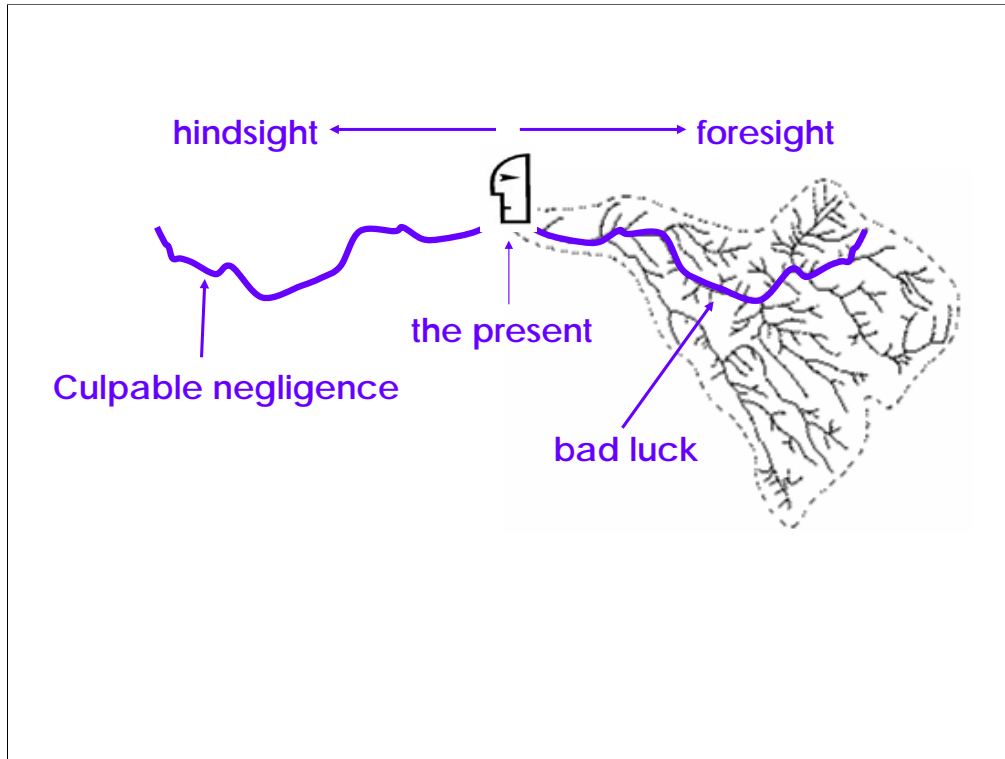


Nevertheless they can serve as a useful metaphor for the way in which we cope with risk. We peer into the future through the dense foliage of the real-world event tree and, if we think we see a risk worth taking, we go for it.

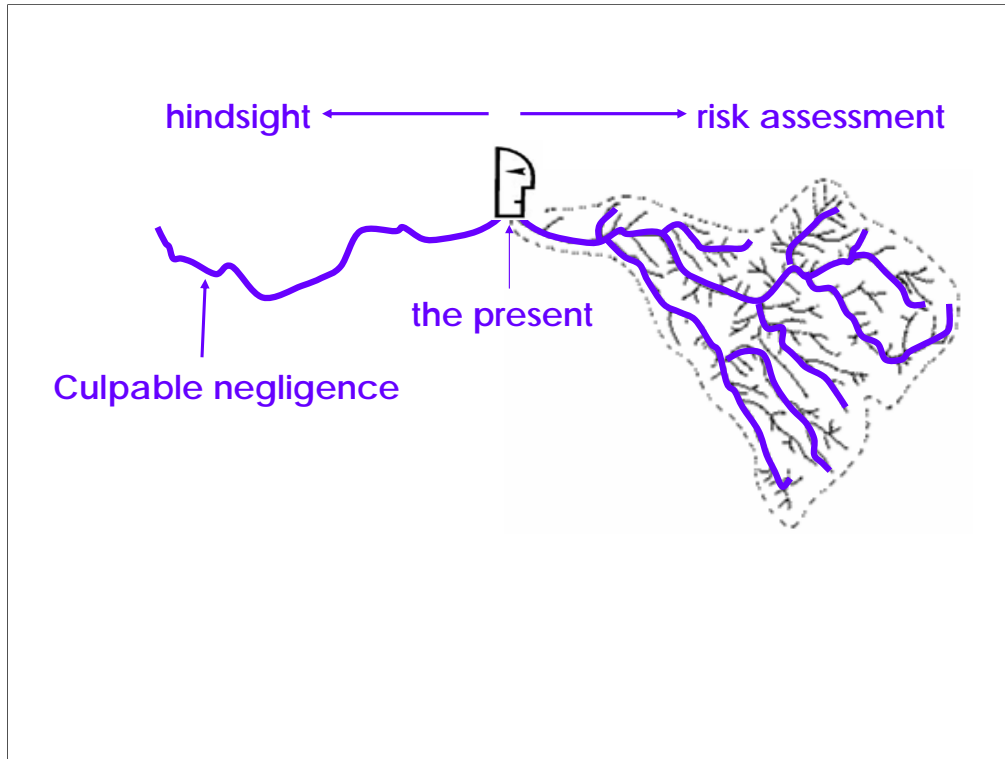
But occasionally something nasty that we perceived as a highly unlikely event happens. We are victims of bad luck.



But our bad luck, with the benefit of hindsight, looks very different. Hindsight transforms the event tree into a fault tree.



We end up in court confronted by a QC armed with a machete that he uses to chop away all the other branches of the fault tree. He leave only one branch that leads back to the original stupidity, and what looked like a risk worth taking becomes culpable negligence.



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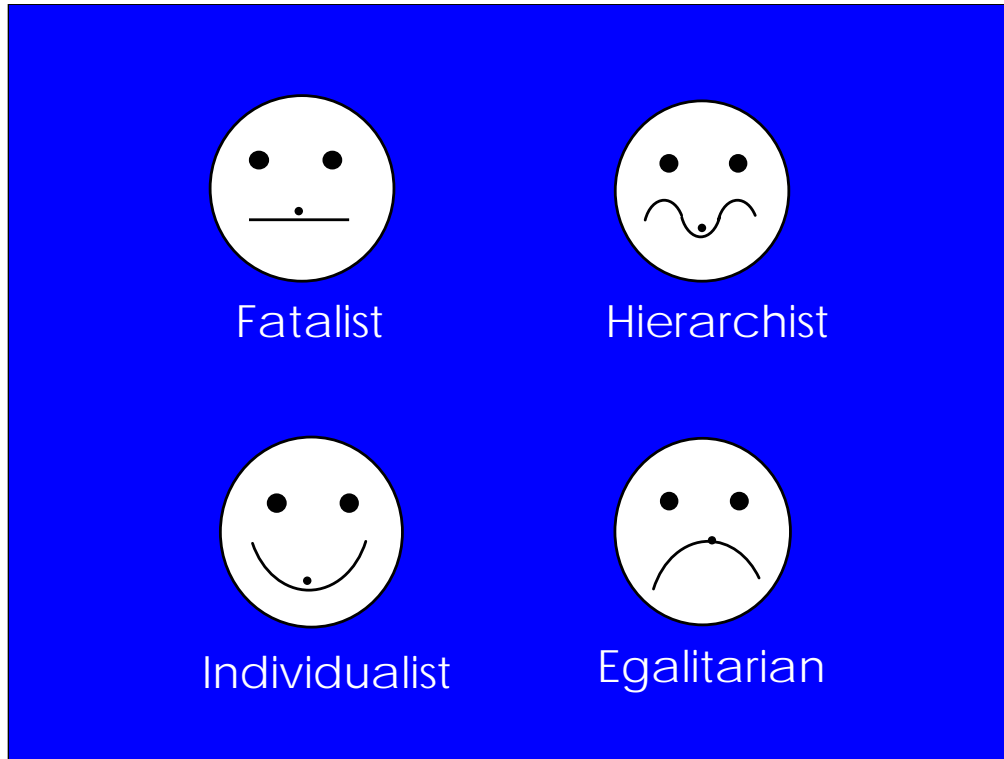
No children



“The swings are packed away at night because kids might climb the fence and use them unsupervised and hurt themselves.”

This is the Castlehaven Community Centre playground. Perhaps the world’s safest playground. When I enquired what had happened to the swings. I was told that they are packed away because kids might climb the fence and use them unsupervised and hurt themselves.

There’s no risk too small



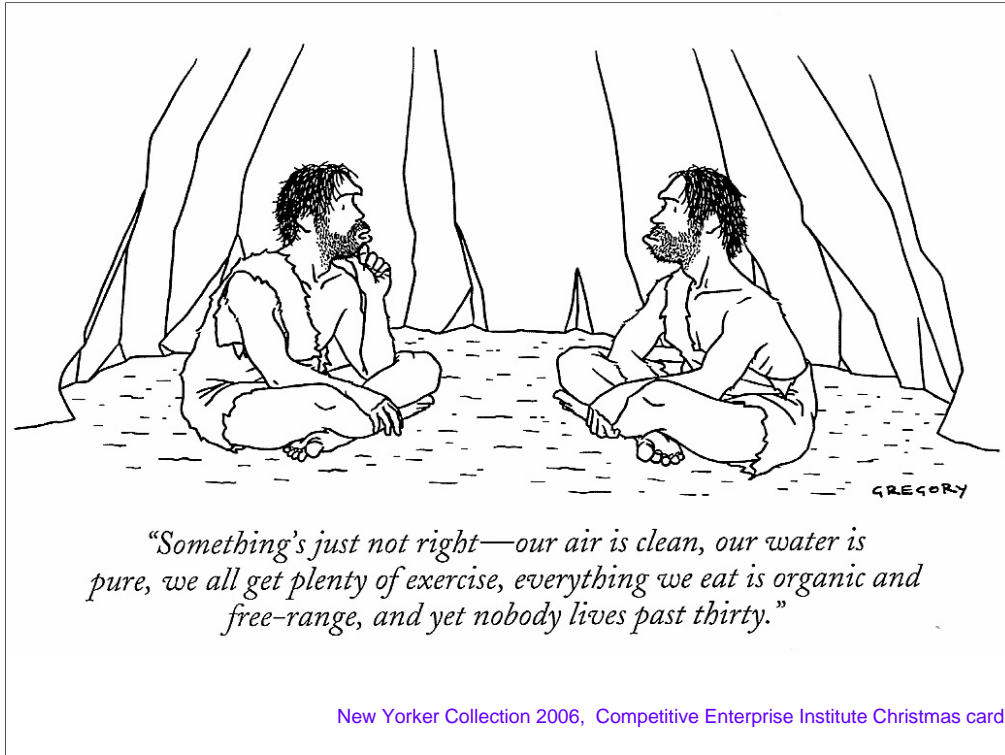
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107. Lord Reay (Chairman) Your opposition to the release of GMOs, that is an absolute and definite opposition? It is not one that is dependent on further scientific research or improved procedures being developed or any satisfaction you might get with regard to the safety or otherwise in future?

(Lord Melchett) It is a permanent and definite and complete opposition based on a view that there will always be major uncertainties. It is the nature of the technology, indeed it is the nature of science, that there will not be any absolute proof. No scientist would sit before your Lordships and claim that if they were a scientist at all.

House of Lords Select Committee on GM Crops,
Minutes of Evidence,
3 June 1998

If you can't prove it's safe assume it's dangerous.



My Christmas card from the US Competitive Enterprise Institute. An individualist response to perceived excessive risk aversion on the part of environmentalists.

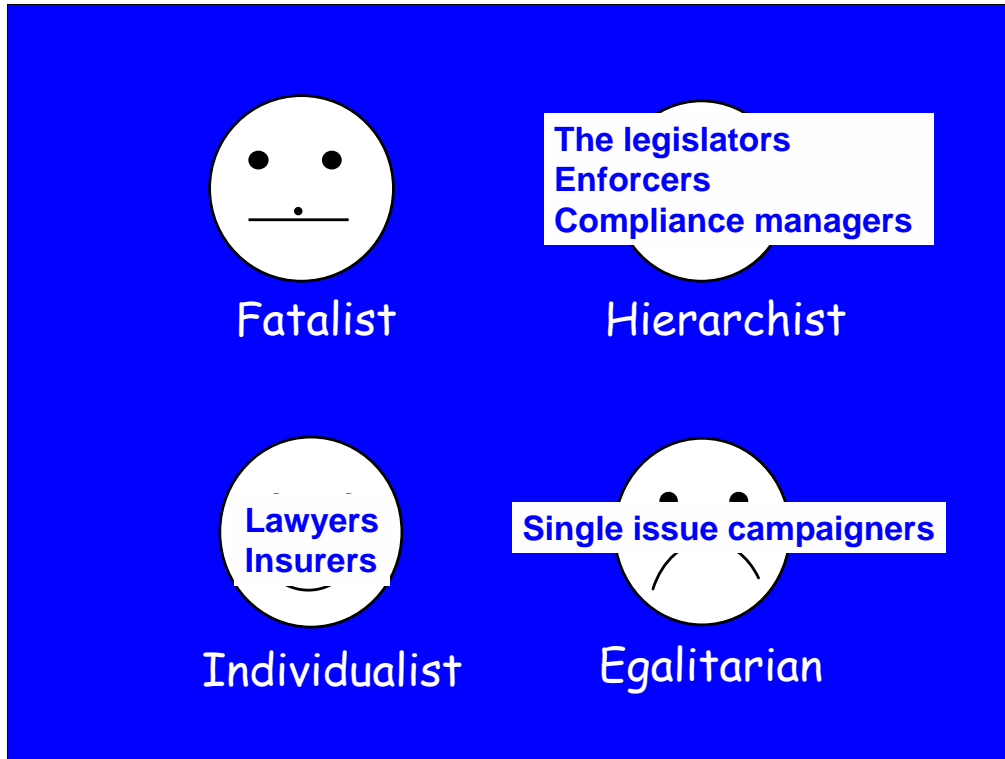


John Gummer as Secretary of State for Agriculture seeking to persuade the British public that British beef is safe.



"You can be on the right track and still get hit by a train!"

The wit and wisdom of Alfred E Neuman of Mad Magazine captures the fatalist's style of risk management



- 1. The legislators - e.g. SOX, or in this country the new "safeguarding vulnerable groups bill" which will require vetting by the Criminal Records Bureau of about one third of the adult population.
- 2. The enforcers - e.g. SEC, FDA (there) HSE, FSA (here) - + Adventure licensing authority, Grandmaster licensing authority, MOT Inspectors, MHRA
- 3. Institutional compliance officers - e.g. those at the sharp end who often wildly over-interpret the regulatory requirements, like my departmental safety officer with her 69 page risk assessment manual.
- 4. Lawyers - especially of the no-win-no-fee sort
- 5. Insurers - who are too ready to settle out of court, and whose rising premiums make everyone nervous.
- 6. Single issue groups who focus obsessively on risks to the neglect of rewards.

Prime Minister's speech to IPPR, 26 May 2005

I call [for] a sensible debate about risk in public policy making. In my view, **we are in danger of having a wholly disproportionate attitude to the risks we should expect to run as a normal part of life.** This is putting pressure on policy-making, not just in Government but in regulatory bodies, on local government, public services, in Europe and across parts of the private sector - to act to eliminate risk in a way that is out of all proportion to the potential damage. The result is a plethora of rules, guidelines, responses to 'scandals' of one nature or another that ends up having utterly perverse consequences.

Excessive risk aversion is now a subject of concern at the highest level of government. And yet ...

1. Handling risk should be **firmly embedded** in government's policy making, planning and delivery.
2. Government's capacity to handle strategic risks should be **enhanced**.
3. Risk handling should be supported by **good practice**, guidance and skills development.
4. Departments and agencies should make earning and **maintaining public trust** a priority when dealing with risks to the public.
5. Ministers and senior officials should take a clear lead in **improving risk handling**.
6. The quality of government risk management should be **improved** through a two-year programme of change, linked to the Spending Review timetable, and clearly set in the context of public sector reform.

The Government is sensitive to its lack-of-trust problem and anxious about what to do about it. It has commissioned an ink blot by the Cabinet Office Strategy Unit that appears likely to rival Turnbull and Higgs in its potential to generate unhelpful risk assessments – *Risk: Improving government's capability to handle risk and uncertainty* –

<http://www.google.co.uk/search?q=risk+government's+capability+to+handle+risk&start=0&ie=utf-8&oe=utf-8&client=firefox-a&rls=org.mozilla:en-US:official>

It's main message, like that of the Turnbull report, might be described as vacuous, platitudinous and full of menace – if something goes wrong make sure it's not your fault.

TERMS AND CONDITIONS FOR VISITING SPEAKERS/CONSULTANTS

Definitions

1. "CMPS" means the Centre for Management and Policy Studies, Cabinet Office.
2. "The Contractor" is the person who by contract undertakes to render services for CMPS.
3. "The Contract" is the letter confirming in writing the agreement between CMPS and Contractor.
4. "The Fee" as described in the Contract Letter means the price exclusive of Value Added Tax (VAT), payable to the Contractor by CMPS for the full and proper performance by the Contractor for his/her part of the Contract. In addition, travel and subsistence may be claimed where applicable and agreed beforehand.

Travel and Subsistence

5. Reasonable travel expenses will be refunded and the conditions are stated in the Contract Letter itself. CMPS may return an invoice for adjustment if taxi fares have been charged.
6. Any payment for subsistence should be agreed with CMPS before the expenses are incurred.
7. If it is agreed that it is necessary for the Contractor to stay in overnight accommodation, the bill should be paid in full by the Contractor on departure. The Contractor may then charge CMPS for these costs - incidental expenses such as phone calls, faxes, drinks etc., will not be refunded. A copy of the bill should be attached to the Contractor's invoice for reference. The only exception to this is where the entire Programme or event is being held in a hotel and CMPS will receive one invoice from the hotel for all accommodation, room hire, meals etc., for Programme participants and speakers. However, the Contractor shall still settle their incidental expenses on departure. Overnight accommodation and all meals should not exceed the amount stated in the Contract letter without prior approval.

Variation of Contract

Health and Safety

8. Any variation of any provision of the Contract must be effected in writing by CMPS. In the event of any change or cancellation of the Programme or event CMPS will give the longest possible notice. No cancellation fee will be paid if 4 weeks or more notice is given of the change. If the Programme or event is cancelled at shorter notice than this then consideration will be given to any claim for actual expenses incurred by the contractor.

Contractor's Organisation

9. The Contractor should inform CMPS in writing as to any reasons why the Contract may not be fulfilled as agreed.
10. All personnel employed by the Contractor deployed on work relating to the Contract must have appropriate qualifications and competence and in all aspects be acceptable to CMPS. Where so required, full particulars of all personnel so employed shall be forwarded in advance to CMPS for confirmation of acceptability.
11. The Contractor shall take all reasonable steps to avoid changes of personnel assigned to and accepted for the work under the Contract except whenever changes are unavoidable or of a temporary nature caused by sickness etc.
12. For security reasons the Contractor shall take the steps reasonably required by CMPS to prevent unauthorised persons being admitted to CMPS's premises or those of CMPS's clients.

Payment

13. No additional fee will be paid unless authorised in advance. Itemised claims, accompanied by all necessary documentation, shall be submitted to CMPS for scrutiny and approval. Unless otherwise stated in the Contract, payments shall be claimed in writing (invoice or letter) within one month of completing the work, quoting CMPS's reference and addressed to the person specified in the Contract letter. Payment will be made within 30 days of receipt and agreement of invoices for work completed to the satisfaction of CMPS.
14. Payments may be withheld or reduced by CMPS in the event of unsatisfactory performance.
15. VAT, where applicable, shall be shown separately on all invoices as a strictly net extra charge. A VAT number shall be quoted on any invoice where VAT is charged.

Provision of Equipment

16. Any equipment provided by CMPS for the purpose of the Contract shall remain the property of CMPS and shall only be used for the purpose of carrying out this Contract: to be returned promptly to CMPS on completion of work or expiry or termination of the Contract.
17. The Contractor will reimburse CMPS for any loss or damage to the equipment (other than deterioration resulting from normal and proper use) caused by the actions of the Contractor or any employee or agent of the Contractor.
18. Any computer disc intended to be used by the Contractor on CMPS's IT equipment must be delivered to the Programme Coordinator a week in advance of work to be swept for viruses.

Copyright

19. CMPS must abide strictly by the rules governing copyright. The Contractor, therefore, shall ensure that any materials or aids used are free from copyright restrictions.

Propriety Rights

20. All rights in the results of work undertaken by, or on behalf of, the Contractor for the purposes of the Contract, including any data, reports, drawings, designs, handouts or other material produced or acquired in the course of such work remain the property of CMPS. This applies where notes are prepared as handouts for Programmes run on behalf of CMPS. The Contractor may not use this material for their own purposes elsewhere without prior approval from CMPS.

Confidentiality

21. Work arising as a result of the Contract may not be undertaken by the Contractor without prior permission of CMPS, even if the Contract has been completed.
22. The Contractor will come into contact with Programme participants and clients who are encouraged to discuss work issues freely. All official information acquired as a result of the Contract must be regarded as confidential. It should not be discussed or mentioned in any subsequent publication, speech or lecture without the prior permission of CMPS, or the person from whom the Contractor obtained the information.
23. The Contractor shall not communicate with representatives of the general or technical press, radio, television or other communications media regarding any aspect of the Contract unless specifically granted permission to do so in writing by CMPS.

Equal Opportunities

24. The Contractor shall reflect CMPS's equality of opportunity policy in specific content and also in their style, nature of handouts, use of non-sexist and non-racial language and avoidance of the use of stereotypes.

Health and Safety

25. The Contractor shall consider their own health and safety and that of any persons involved with the Contract, such as Programme participants, at all times and not put themselves or others at risk.

An example of the risk paranoia that afflicts the Prime Minister's own Cabinet office is contained in my invitation to give a seminar to the Cabinet Office commenting on *Risk: improving government's capability to handle risk and uncertainty*. It was accompanied by a contract. 25 paragraphs long. The 25th paragraph was the health and safety clause.

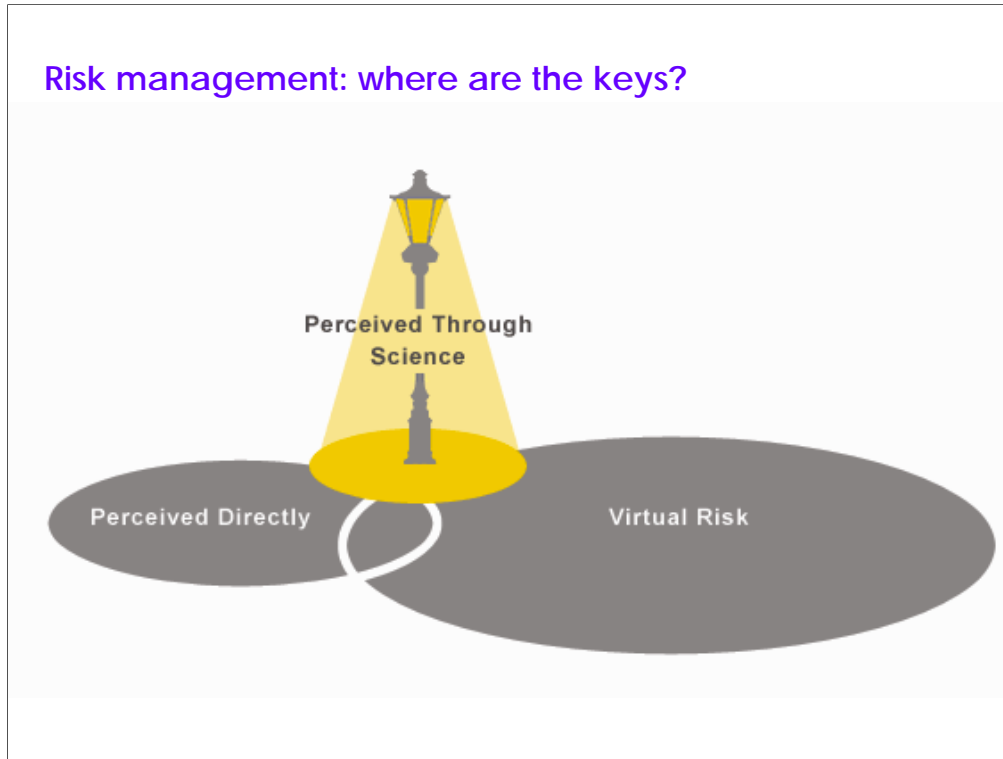
Contract for Cabinet Office Seminar

TERMS AND CONDITIONS FOR VISITING
SPEAKERS/CONSULTANTS

Health and Safety

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Risk management: where are the keys?

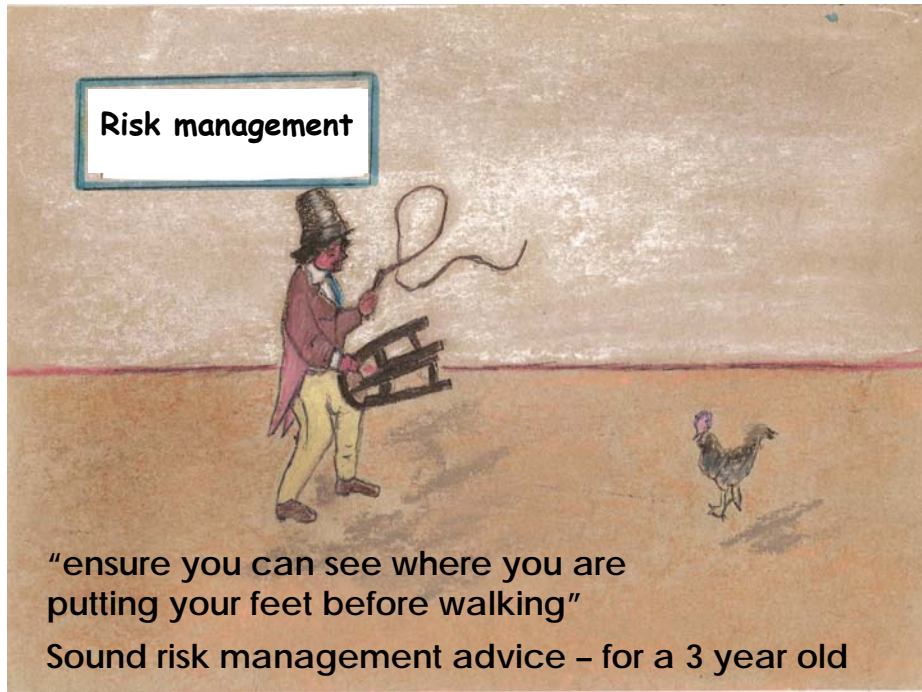


Directly perceived risk (much operational risk) is managed using *judgement* – a combination of instinct, intuition and experience. We do not undertake a formal probabilistic risk assessment before crossing the road.

Risk perceived through science. This is the realm of quantified risk assessment – the scientist, the conductor of clinical trials, the epidemiologist, the actuary, the cost-benefit analyst. This is the circle that dominates the risk literature – often, *but not always* – successfully. However objective in appearance, assessments in this circle rest ultimately on subjective assumptions.

Virtual risk. If science cannot settle an argument, people feel liberated to argue from their pre-established convictions, beliefs, prejudices, superstitions. Here we encounter arguments about values, the nature of *nature*, standards of proof, the precautionary principal and the role of regulation. In this circle, as with directly perceptible risk, we are thrown back on *judgement*.

Risk management



**“ensure you can see where you are putting your feet before walking”
Sound risk management advice – for a 3 year old**