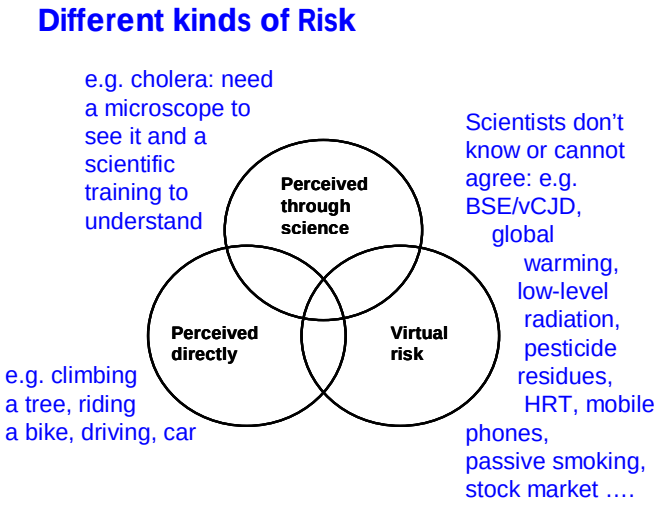
## Risk management: cutting the CRAP

*Psychosis: noun - a severe mental disorder in which contact with reality is lost or highly distorted.*

I was recently invited to address a conference of psychiatrists on the subject of risk. They, like the rest of the medical profession, practice defensively for fear of litigation, and labour under incessant demands for the assessment of every imaginable risk, however small. I offered for their consideration a new mental illness that I called *obsessive risk assessment disorder*. One of them proposed that the disorder I described was sufficiently serious to merit the label psychosis – hence *Compulsive Risk Assessment Psychosis*, or CRAP. There is a lot of it about, and numbers of new cases are growing rapidly.

There are different variants of the condition, relatable to different types of risk.

Figure 1




Directly perceptible risks we manage ourselves - if I am late for dinner, and see my bus approaching on the far side of the road, I will risk shorter gaps in the traffic in order to cross the road to catch it. I do not undertake a formal probabilistic risk assessment before I cross the road. Such risks are managed by the application of *judgement* – a still mysterious mix of instinct, intuition and experience. Thus far it has seen me safely across the road.

There are other risks that cannot be seen by the naked eye. Cholera, for example, can only be seen with the help of a microscope and by someone with a scientific training who knows what he is looking at. Science, in guises ranging from astrophysics through chemistry and biology to statistics and epidemiology, has many risk management achievements to its credit.

This is the realm of institutional risk management. When risk management becomes institutionalised there are strong pressures to replace judgement with calculation –

with formal, probabilistic risk assessment. Standard risk assessment forms require the assessor/manager to identify risks and the "associated control measures". Effective control requires a firm grasp on the thing being controlled. Where unambiguous knowledge of cause and effect is not available, knowledge of the odds is the next best thing.

But there is a third, much larger and more challenging category – *virtual risk*. Here we encounter the longest-running and most acrimonious debates about risk. If science cannot settle an issue, everyone feels liberated to argue from their pre-established beliefs, convictions or superstitions. Another name for virtual risk is *uncertainty* - imaginable possibilities for which we have insufficient evidence to attach meaningful odds or magnitudes. And beyond uncertainty in this circle lie Donald Rumsfeld's unknown unknowns – now known, with the benefit of hindsight, to have thrown his plans for Iraq into chaos.

This category presents particular difficulties for those proffering their services as risk managers. To manage something is to direct or control it. Controlling uncertainty is a tall order. In the absence of reliable evidence the risk manager, personal or institutional, is thrown back on judgement – the messy mix of instinct, intuition and experience, with all its attendant arguments.

These three different types of risk and their associated styles of risk management exist in a state of perpetual tension. My dodging traffic to catch my bus constitutes, in the eyes of the highway engineer, irresponsible behaviour that must, so far as possible, be rendered impossible by the installation of pedestrian barriers. The job specification of most institutional risk managers requires them to make the world safer. The individual risk manager trying to catch his bus seeks the optimal balance between risk and reward. But the institutional risk manager is also an individual. For him the rewards of risk taking are usually zero, and the costs of an accident, for which he might be held responsible, are potentially vast – both in terms of money and career prospects. This makes him understandably risk averse.

Britain's Health and Safety Executive has attempted to cap this risk aversion. It notes, with evidence from the scientific circle, that the "background level of risk", the annual risk of death averaged over a lifetime, is 1:100. It therefore proposes that risks of one in a million should be considered "acceptable". The risk of death in education, including staff and student from primary school to the end of university, is less then one in two million – an average of six per year over an exposed population of more than 12 million. And yet education is experiencing an explosion of CRAP.

I have before me a risk assessment produced by a local authority for a small event that involved closing a street to traffic and inviting supervised school visits. The assessment identified 22 risks, each of which had 16 tickable boxes. The highest risk identified was "Illness/injury". The associated control measure was a first aid tent, two St John's Ambulance staff and stewards trained in first aid. A "Medium risk" was that of "Young person lost/separated from group", a risk that was deemed potentially fatal. The control measure consisted of instructions to students to stay in their groups at all times, and reminders to supervising teachers of their responsibility for ensuring

they obeyed. The risks associated with a child with a food allergy, was controlled by prohibiting children from buying food while on the outing, etc etc … A fun day out!

If the sum of all the risks of harm in education over a whole year are, by the HSE's statistical standard, "acceptable", then all 22 risks on the local authority form, that students might encounter on a half-day outing, must be negligible. Yet throughout the country on any working day many thousands of risk managers are busy producing formal assessments of risks of similar magnitudes, and striving to enforce the compliance of millions with their control measures.

If we attempt to apply the methods appropriate to the circle illuminated by science, to questions that they cannot answer, our contact with reality is likely to be lost or highly distorted. We behave like the drunk searching for his keys, not where he dropped them, but under the lamppost because that is where it is light.

Figure 2 Risk management: where are the keys?