

THE SECURITY MANAGER VS. THE INVISIBLE SHARK



Ken Livingstone MSc FSyl
Director Perpetuity Training



Aim

- To examine what risk is
- To consider how we:
 - See
 - Measure &
 - Create risk
- To consider why some risks are visible to some and invisible to others i.e. the invisible shark
- To work in as many Jaws references as possible

Risk & Consequence

All actions have consequences. Each time we embark upon a course of action we are balancing risks based upon our understanding and view of the world.

We are calculating both desirable and undesirable outcomes.

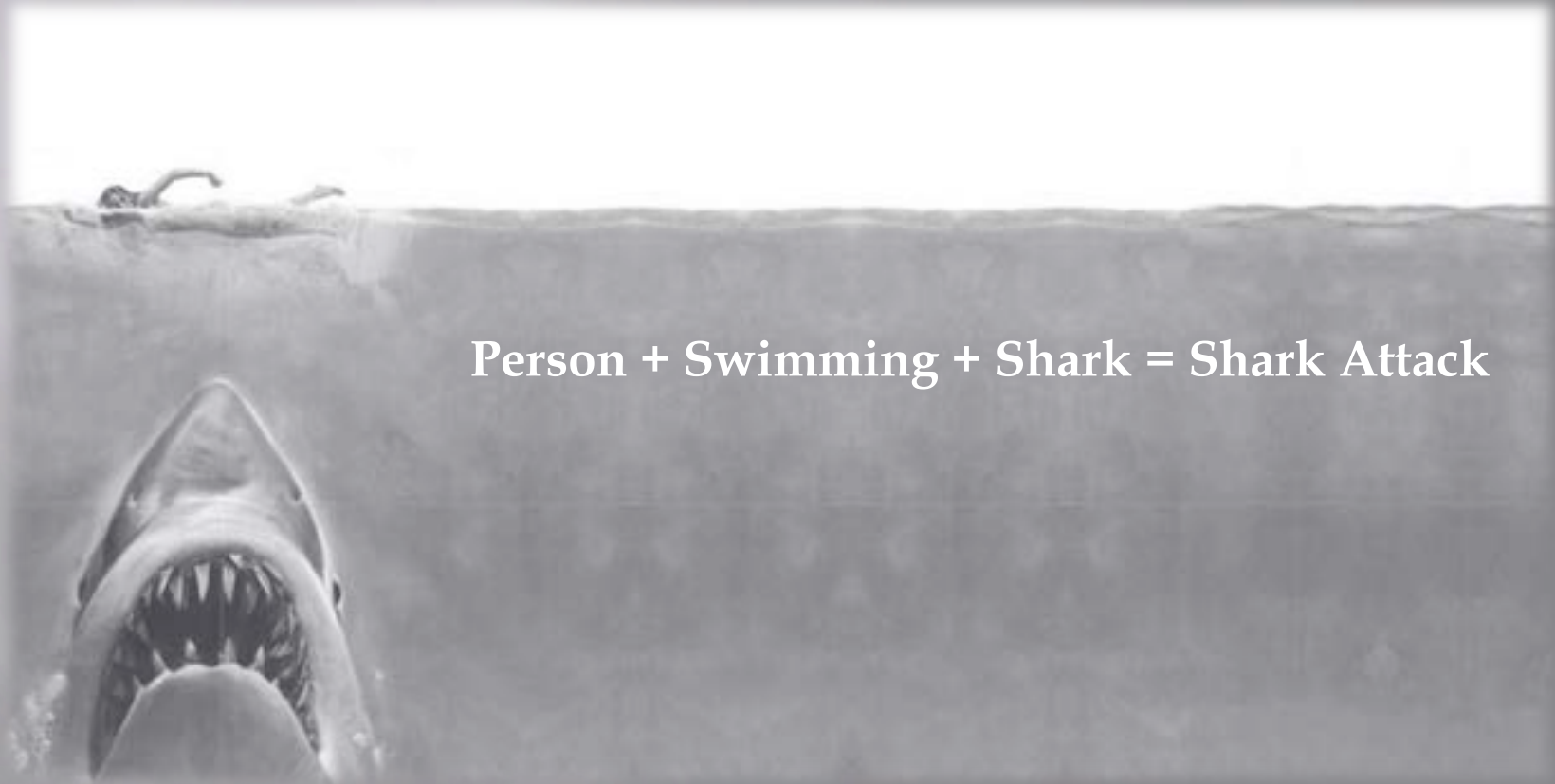
Risk assessment & management

The process of evaluating threats and vulnerabilities to an asset so as to give an expert opinion on the probability of loss or damage, and its impact, as a guide to taking some positive action.

Carl A. Roper: Risk Management for Security Professionals

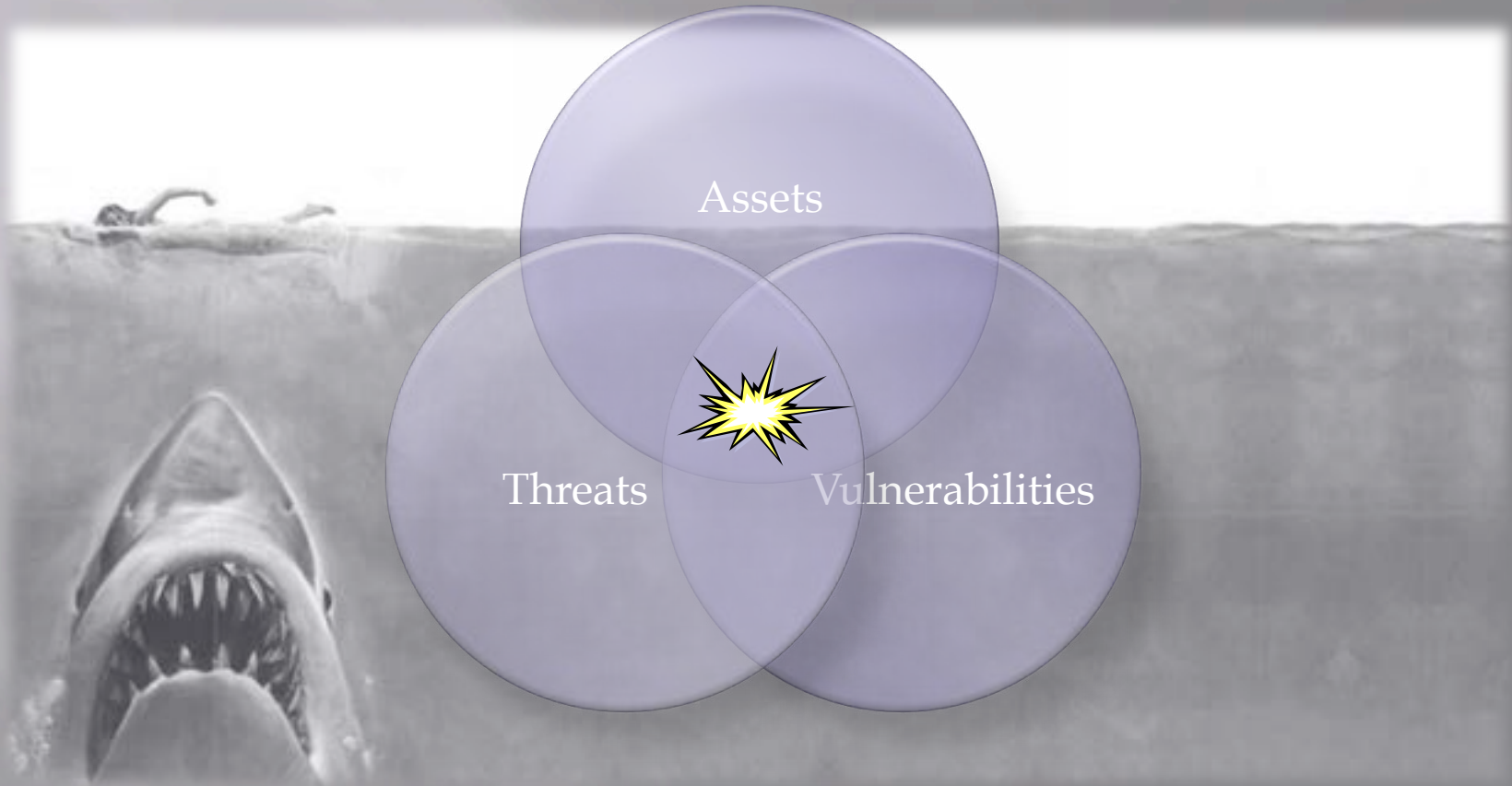


Risk calculation

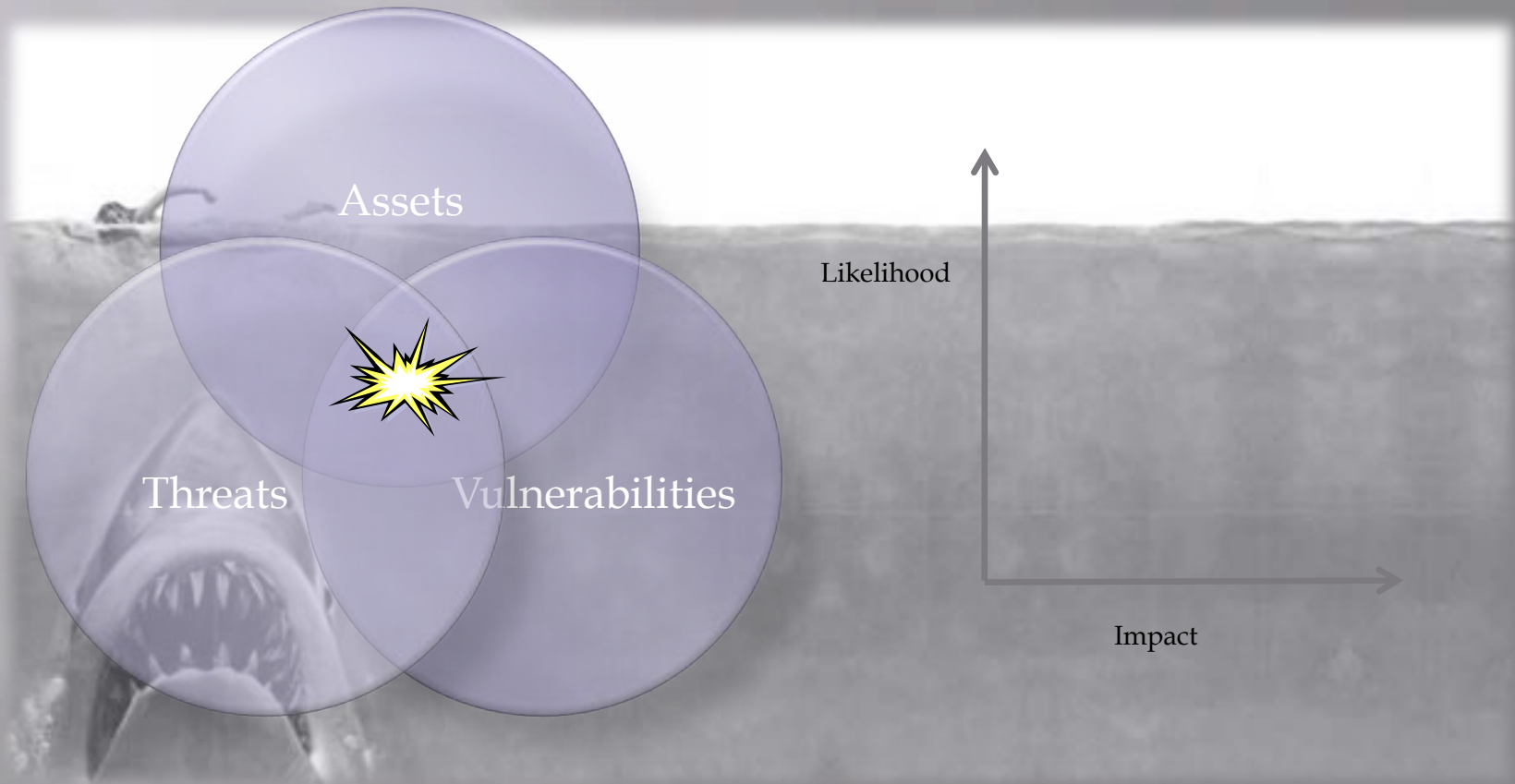


Person + Swimming + Shark = Shark Attack

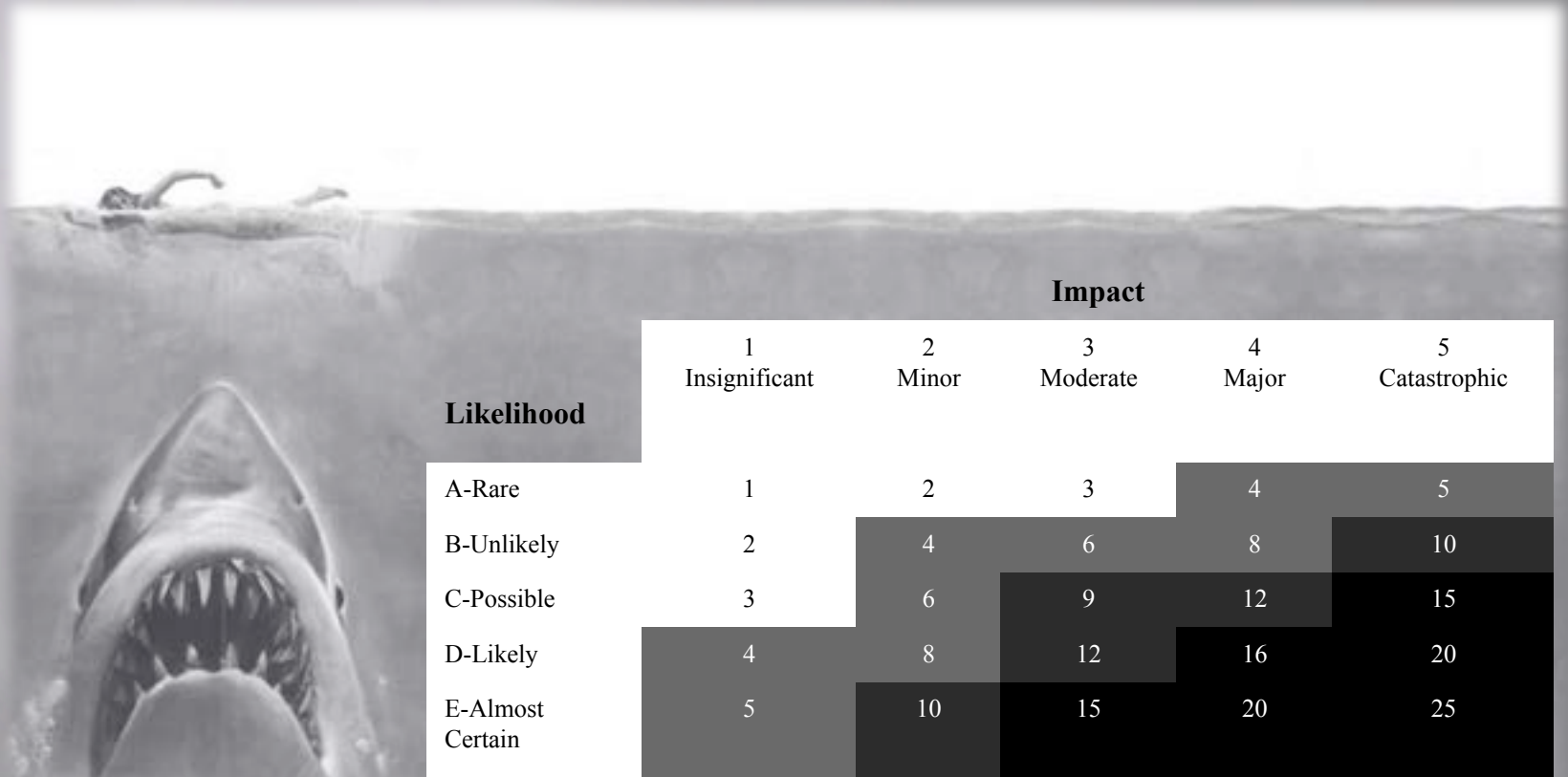
Assets threats vulnerabilities



Assets threats vulnerabilities



Risk calculation



Likelihood	Impact				
	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
A-Rare	1	2	3	4	5
B-Unlikely	2	4	6	8	10
C-Possible	3	6	9	12	15
D-Likely	4	8	12	16	20
E-Almost Certain	5	10	15	20	25

Risk is defined as an objective entity which can be quantitatively assessed

Techno-scientific

Drawn from fields such as actuarialism, engineering and economics the techno-scientific approach defines risk as:

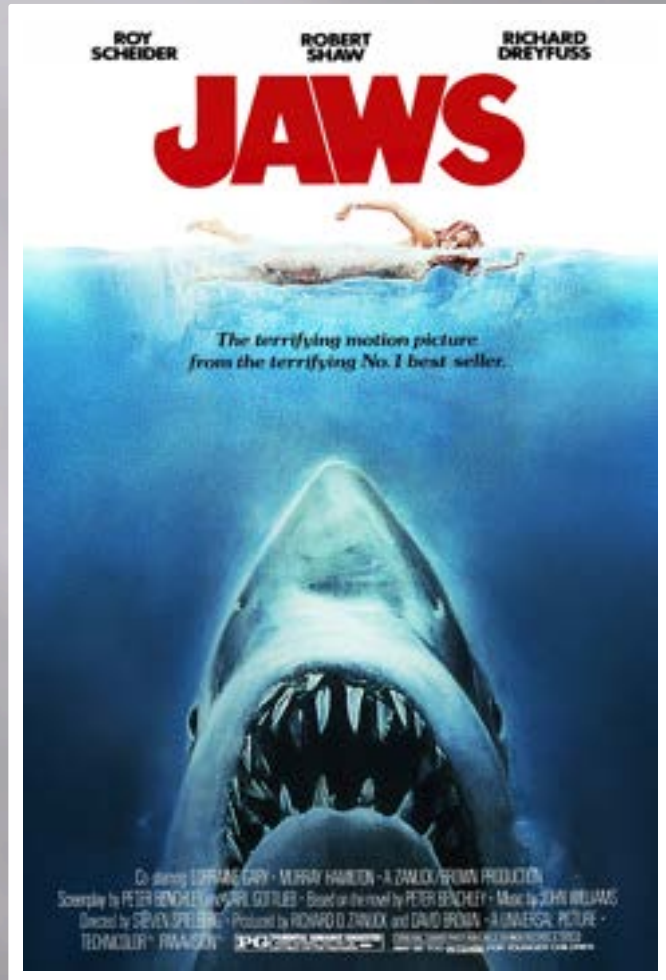
‘the product of the probability and consequences (magnitude and severity) of an adverse event.’

Bradbury, J. Introduction: approaches, tools and methods. In Brown, J. (ed) Environmental Threats.

The scientific approach to risk

1. Scientific knowledge is the only legitimate knowledge
2. Scientific knowledge is presented as certainty
3. Official science is presented as 'uninterested' other sources as 'interested'.
4. Risk is best calculated by experts
5. Belief that the public will accept if they understand

Jaws the Movie



- Jaws is a 1975 'horror' film directed by Steven Spielberg and based on the book Jaws by Peter Benchley.
- After a swimmer goes missing off the beach of Amity, Police Chief Brody believes it may be a shark attack, but Mayor Vaughn refuses to close the beaches. Its the 4th of July weekend and the towns busiest period, and Amity relies on the tourist trade.
- After a few more attacks the sheriff, ichthyologist Hooper and a local fisherman Quint, set out in a small boat to kill the shark

Security Manager as expert

In the film Jaws the Police Officer Chief Brody is convinced that a great white shark is attacking and killing swimmers – he wants to close the beaches.



Security Manager as expert



The chief of police puts together his team a shark expert Mat Hooper and a shark fisherman Sam Quint



The client is not happy...



Risk communication



‘Risk communication may be defined as the techniques (protocols) used by risk managers to inform the general public of the risks pertaining to products and/or activities, with a view to influencing behaviour’

Dept Criminology,
Leicester University

Good communication is vital



Decision Making Theory

Under predefined conditions people have a statistical likelihood of making certain choices as opposed to others

but

These decisions had little to do with rational choice making

Kahneman and Teversky: Prospect Theory:
An Analysis of Decision Making Under Risk

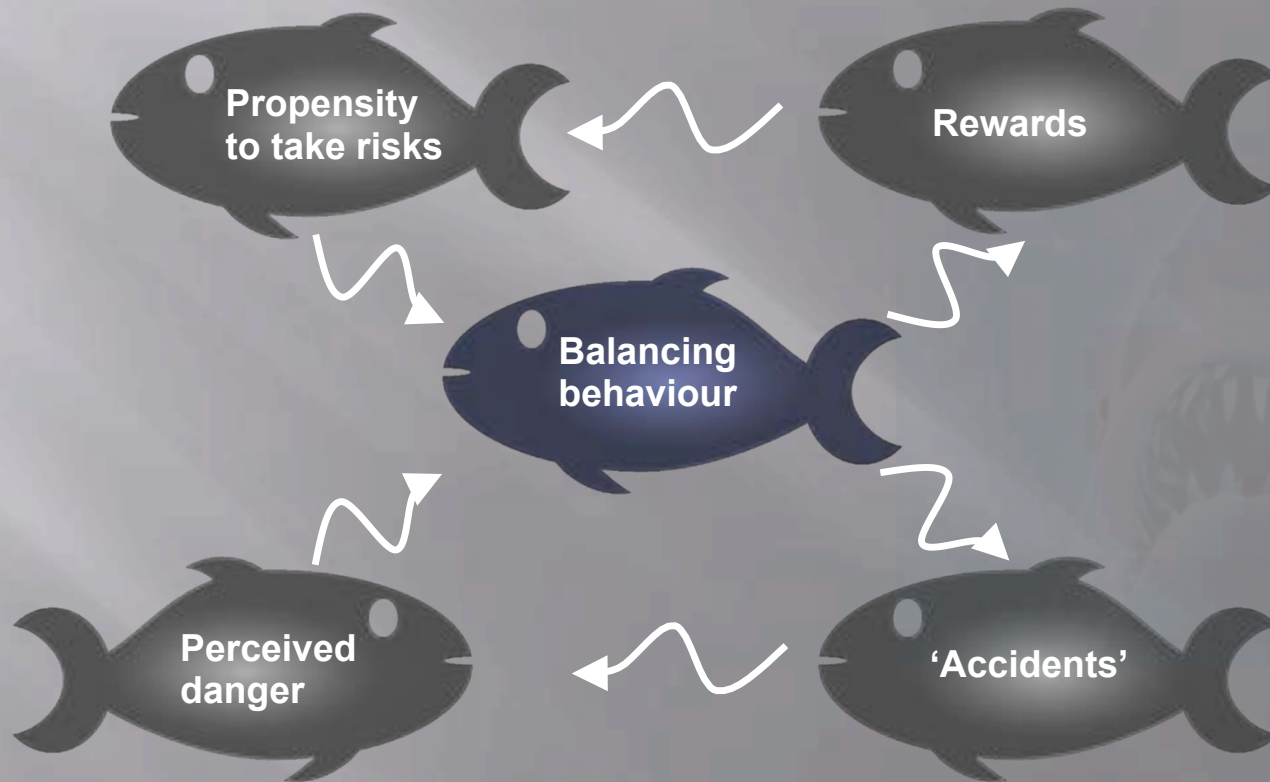
Different types of risk



The Royal Society makes a distinction between 'objective' and 'subjective' risk.

Noting that objective risks exist in any given situation but the public response to them is often 'subjective'

The risk thermostat



Adapted from J. Adams (1995) Risk

Risk and Social Science

‘Risk perception cannot be reduced to a single subjective correlate of a particular mathematical aspect of risk, such as the product of the probabilities and consequences of any event.

Risk perception is inherently multidimensional and personalistic.’

The Royal Society: Risk Analysis, Perception and Management

Risk and Social Science

Assessments of risk are derived from social and institutional beliefs and values and risk is socially constructed

We may or may not be 'all in the same boat'



Risk assessment

If the cultural theory approach is accepted no 'single' metric for risk analysis can be developed on which the different cultural biases can find common ground.

The Royal Society: Risk Analysis
Perception and Management



Culture

By culture we mean all those historically created designs for living, explicit and implicit, rational, irrational, and non-rational, which exist at any given time as potential guides for the behavior of men.

Kluckhohn, C., & Kelly, W.H. The concept of culture.
In R. Linton (Ed.). *The Science of Man in the World Culture*.
New York. (pp. 78-105).



Cultural Theory and Risk

...cultural biases best predict risk perception findings...

&

...individuals choose what to fear (and how to fear it),
in order to support their way of life.

Wildavsky and Dake Theories of Risk Perception:
Who Fears What and Why

Cultural risk

‘It does not reject rationality, it acknowledges *plural* rationalities; where the science is inconclusive the imagination is liberated to speculate *rationally* from different starting assumptions.’

Adams for THES



Culture & communication

When people communicate they are not necessarily bringing the same view to the same subject as their interpretation of the 'facts' are influenced by their culture, conditioning and experience of the world

Risk assessment

The implications of this approach for risk assessment and perception are revolutionary. It implies that people select certain risks for attention to defend their preferred lifestyles and as a forensic resource to place blame on other groups.

...what society chooses to call risky is largely determined by social or cultural factors not nature.

The Royal Society: Risk Analysis
Perception and Management

Risk re-defined

‘Whereas risk once meant the probability of losses and gains, Douglas (1990) argues that it now just means danger, and serves the forensic needs of a new global culture, in politicising and moralising the links between dangers and disapproved behaviour.’

The Royal Society: Risk Analysis
Perception and Management

Implications for security



- Don't assume that the risk/shark you see is the risk/shark your colleagues see
- Don't think that risk calculation is an exact science
- Don't believe that simply by explaining the risk you will convince your audience it is real
- Don't imagine your risk/shark is any more real than anyone else's
- Do embrace the need for risk communication targeted to the values of your audience

Conclusion

- Examined what risk is
- Considered how we:
 - See
 - Measure &
 - Create risk
- Considered why some risks are visible to some and invisible to others i.e. the invisible shark
- Worked in as many Jaws references as possible



FIN

Ken Livingstone MSc FSyl
Director Perpetuity Training

