

Risk Management: it's not rocket science

It's more complicated

Framing devices for thinking about risk

Grant's London Investment Conference

February 24, 2011

The Dorchester

London

Disclaimer

.... Any decisions you make based on information from this presentation are your sole responsibility.

Disclaimer

These slides do not constitute an offer or a solicitation of an offer to buy a security... ... Outlooks or assumptions should not be construed to be indicative of the actual events which occur.

Disclaimer

The views expressed in this commentary are the personal views of
XXX

Investment concepts mentioned in this commentary may be unsuitable ... Certain assumptions may have been made No representation is made that any indicated returns will be achieved. ... This commentary does not constitute an offer to sell any security or the solicitation of an offer to purchase any security.



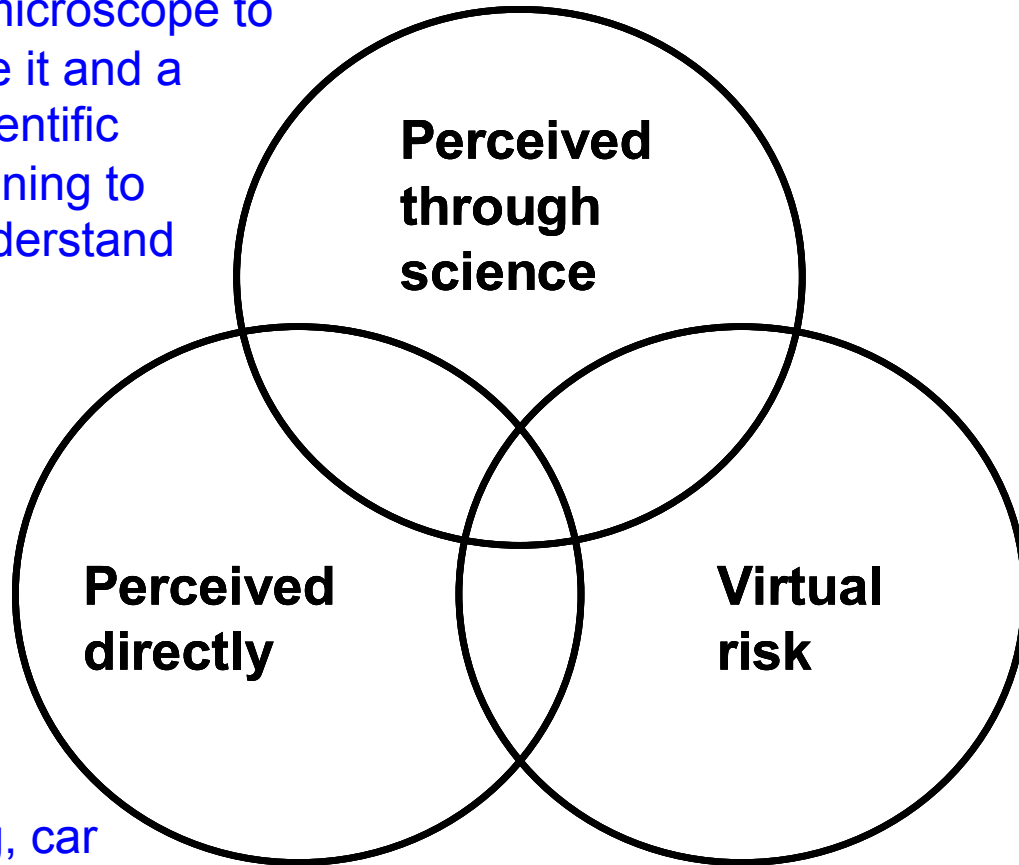
CAUTION
These plants are covered
in sharp spikes that may
puncture the skin if touched
DO NOT HANDLE

Seen in the entrance to the Health and Safety Laboratory, Buxton
“[People should] focus on **real risks** – those that cause real harm
and suffering – and stop concentrating effort on **trivial risks**
and petty health and safety.”

Bill Callaghan, Chair of the HSC (overseer of the Health and Safety Executive) - 22 August 2006

Different kinds of Risk

e.g. cholera: need
a microscope to
see it and a
scientific
training to
understand



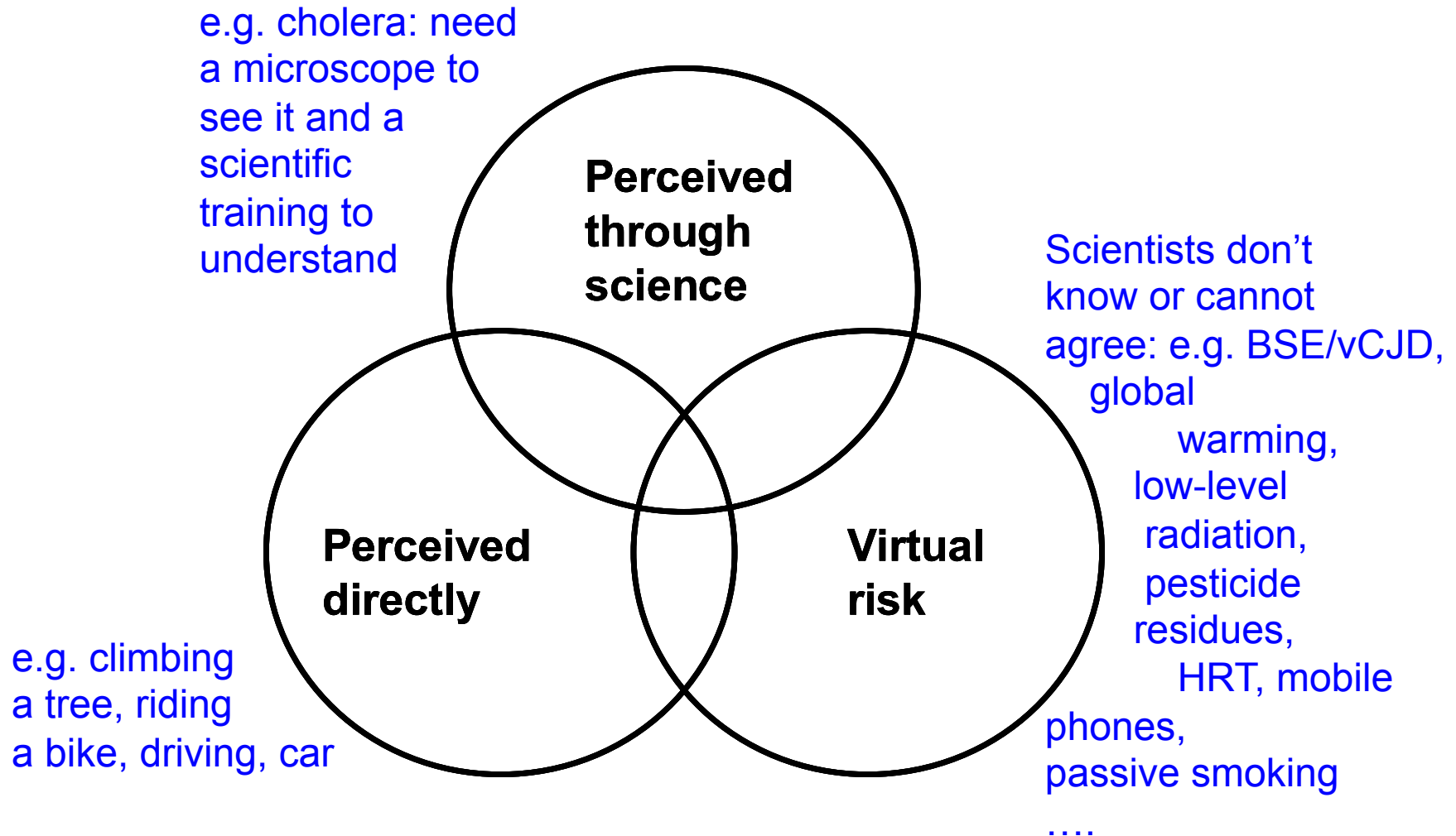
e.g. climbing
a tree, riding
a bike, driving, car



“What happened was that everyone in Ireland had the idea that somewhere in Ireland there was a little wise old man who was in charge of the money, and this was the first time they’d ever seen this little man,” says McCarthy. “And then they saw him and said, Who the fuck was that??? Is that the fucking guy who is in charge of the money??? That’s when everyone panicked.”

Michael Lewis quoting Colm McCarthy in “When Irish Eyes are Crying”, *Vanity Fair*, March 2011.

Different kinds of Risk





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The New Yorker March 21, 1988

Different kinds of Risk

Financial Risk

Terrorism

Events dear boy!

The legal environment

e.g. cholera: need
a microscope to
see it and a
scientific
training to
understand

Perceived
through
science

Scientists don't
know or cannot
agree: e.g. BSE/vCJD,
global

warming,
low-level
radiation,
pesticide
residues,
HRT, mobile

phones,
passive smoking
....

virtual
risk

Perceived
directly

e.g. climbing
a tree, riding
a bike, driving, car

A successful risk manager



Management of directly perceptible risks is

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

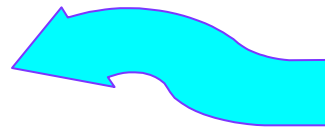
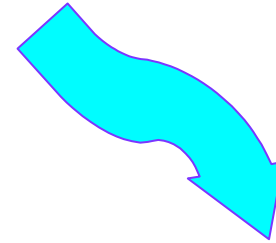
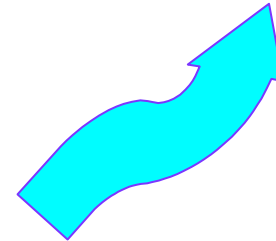
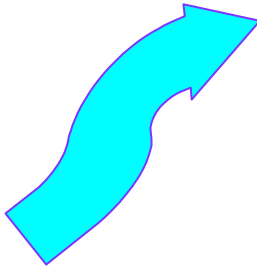
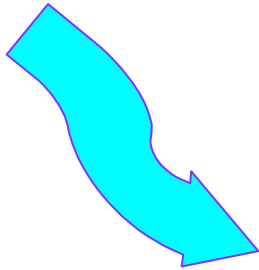
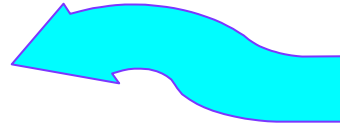
**Propensity to
take risks**

Rewards

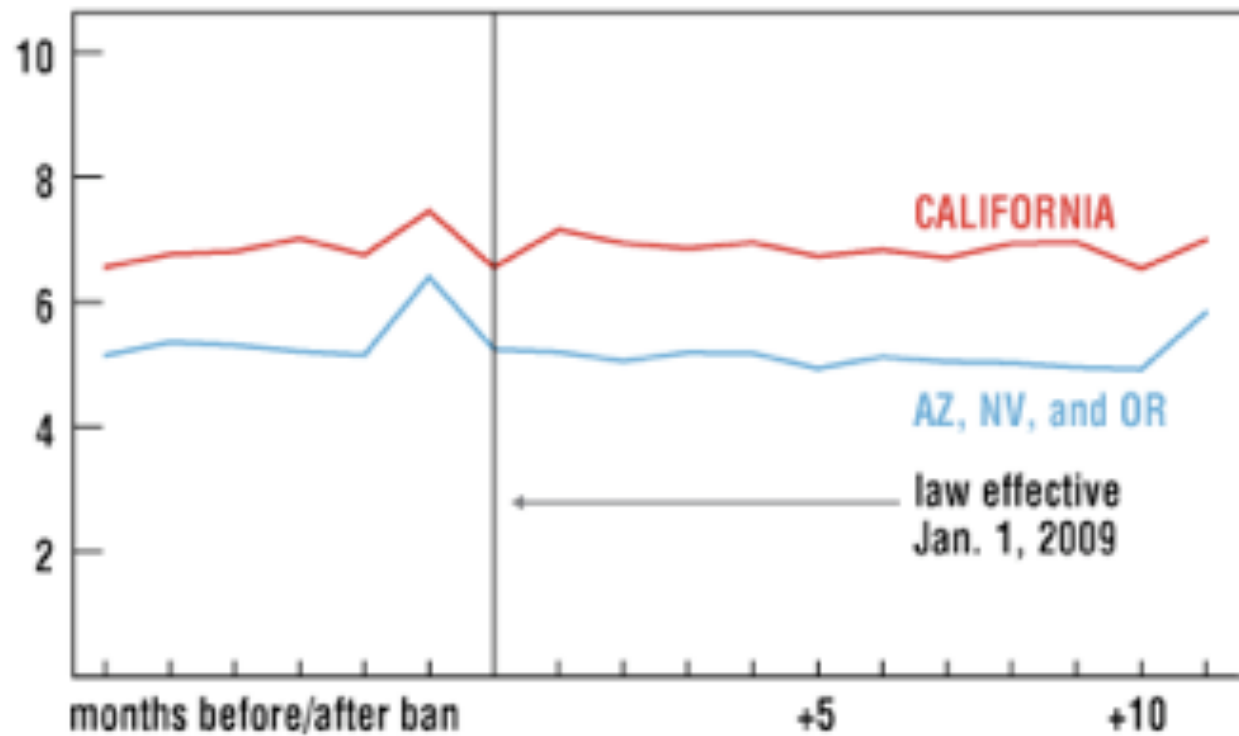
**Balancing
behaviour**

**Perception
of risks**

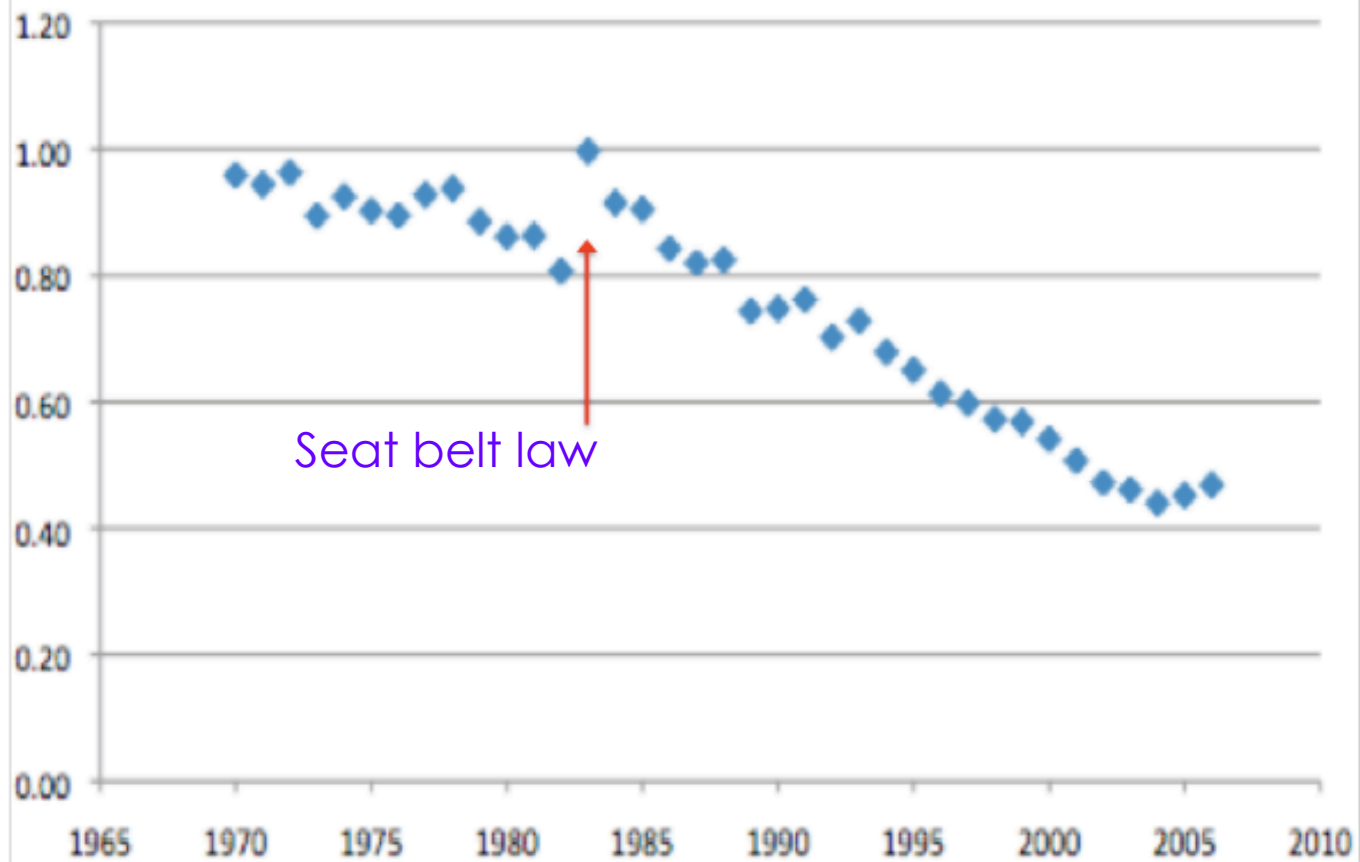
Accidents



California — Collision claims per 100 insured vehicle years, by month before and after texting law for all drivers, compared with Arizona, Nevada, and Oregon



Ratio of pedestrian & cyclist fatalities to car occupant fatalities 1970 - 2006



Bottom loop bias





Risk: Improving government's
capability to handle risk and uncertainty

Summary report

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.
9. The Contractor should inform CMPS in writing as to any reasons why the Contract may not be fulfilled as agreed.

Contractor's Organisation

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.

Property 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.
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.

Confidentiality

- 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.

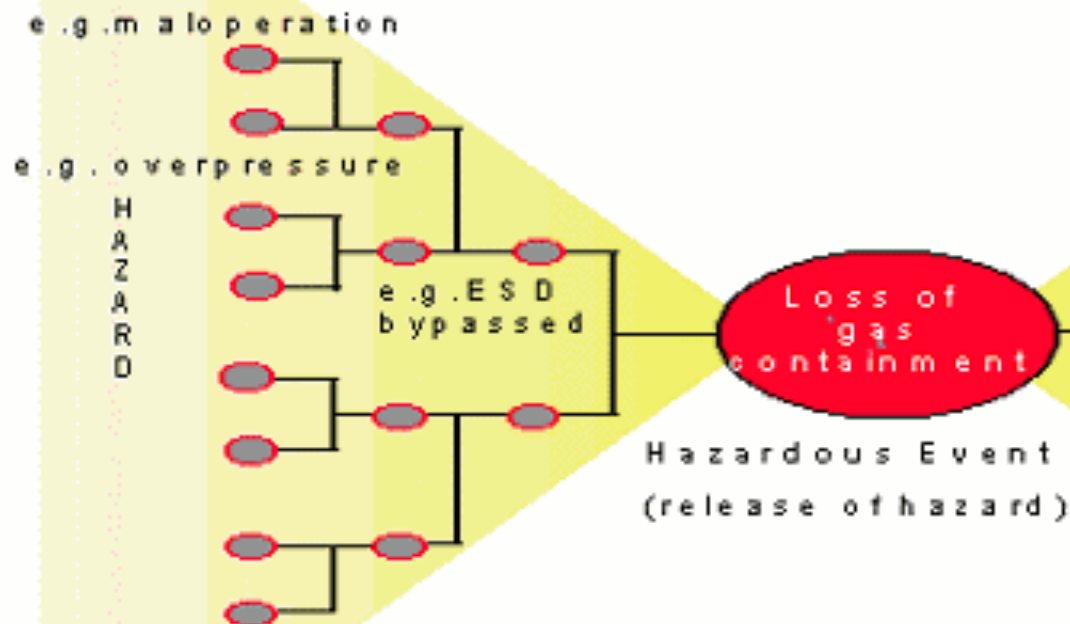
Contract for Cabinet Office Seminar

TERMS AND CONDITIONS FOR VISITING SPEAKERS/ CONSULTANTS

Health and Safety

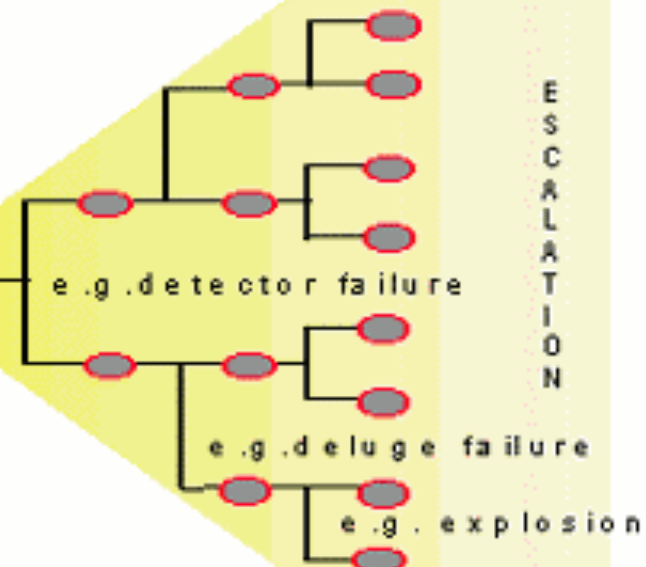
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FAULT TREE (Causes)

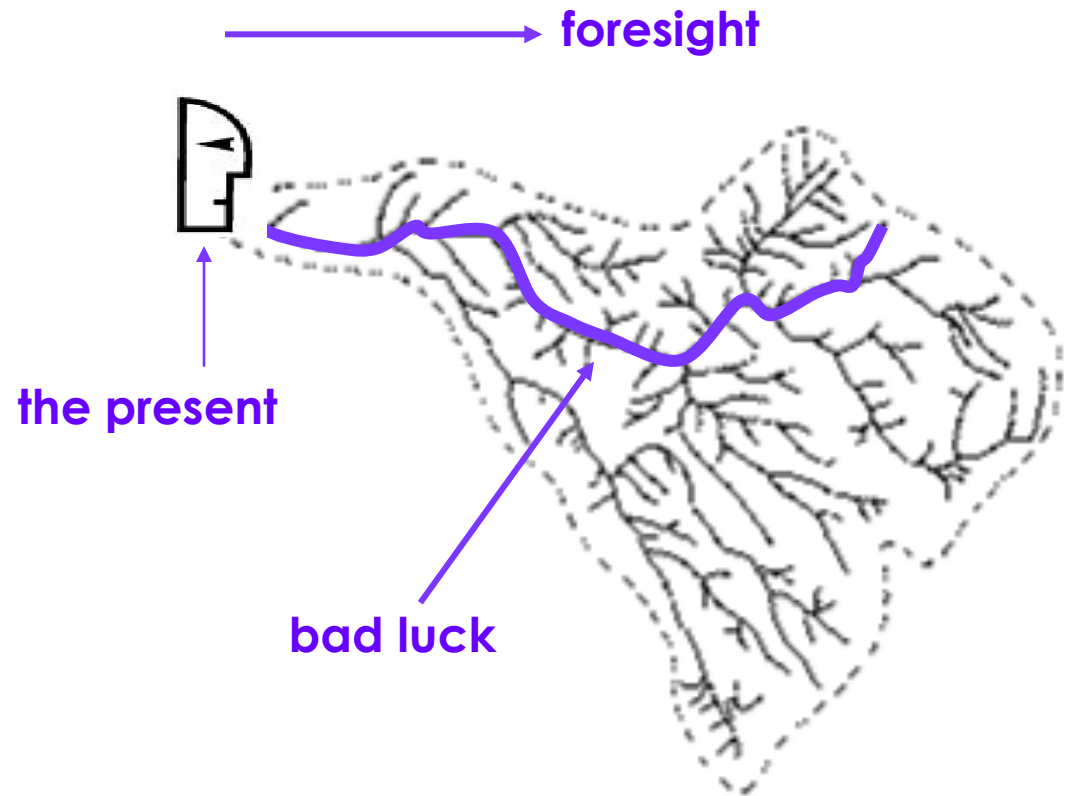


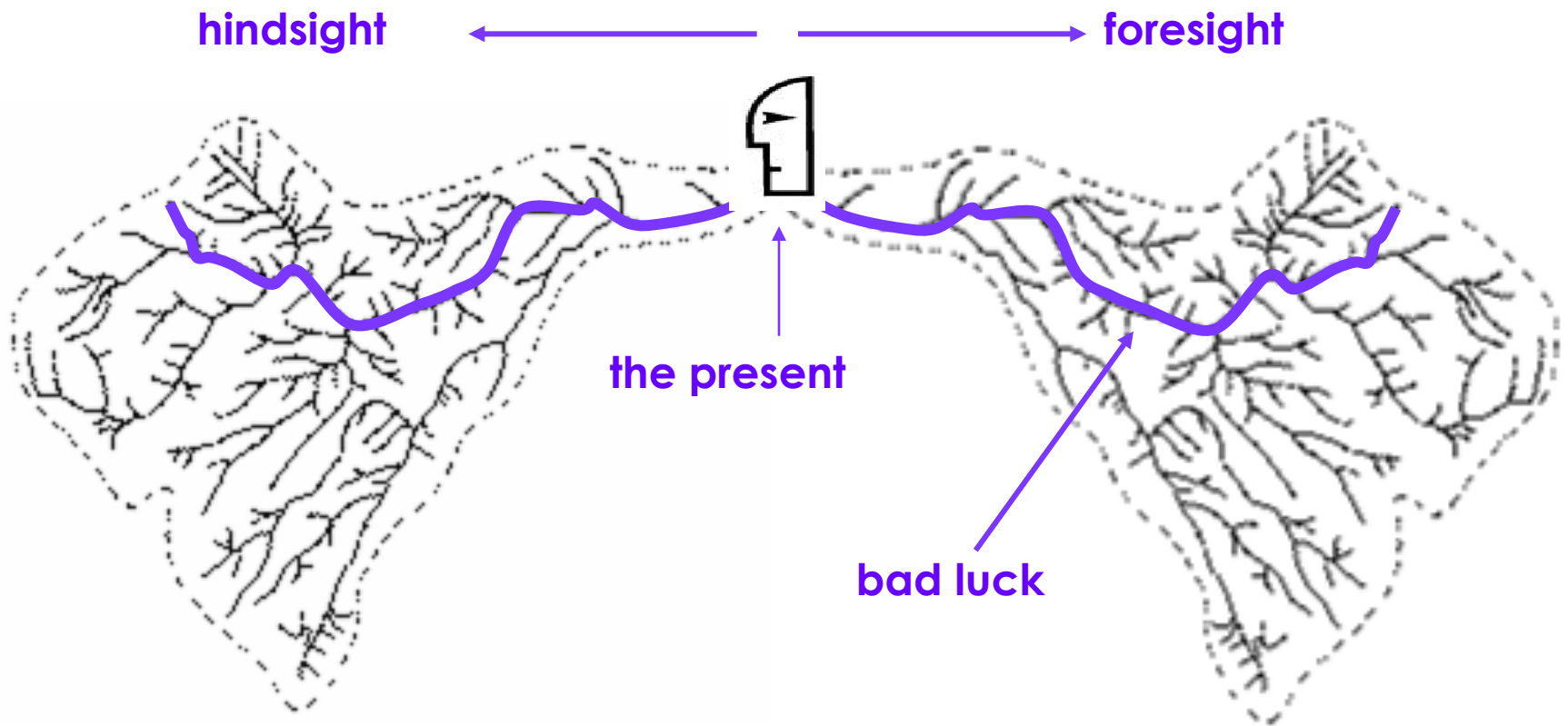
sequence of faults and causes
leading to a hazardous event

EVENT TREE (Consequences)



sequence of events and failures leading
to the escalation of a hazardous event





hindsight

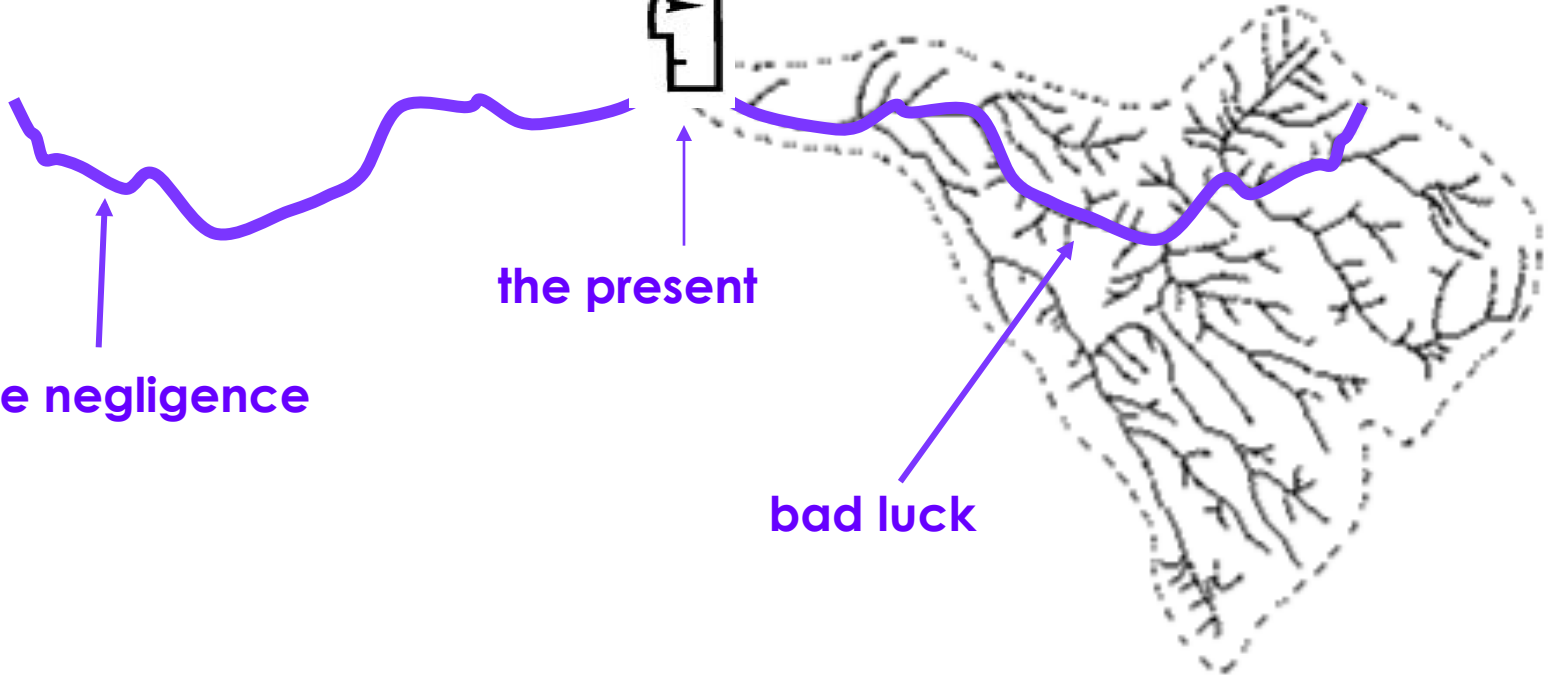
foresight



the present

Culpable negligence

bad luck



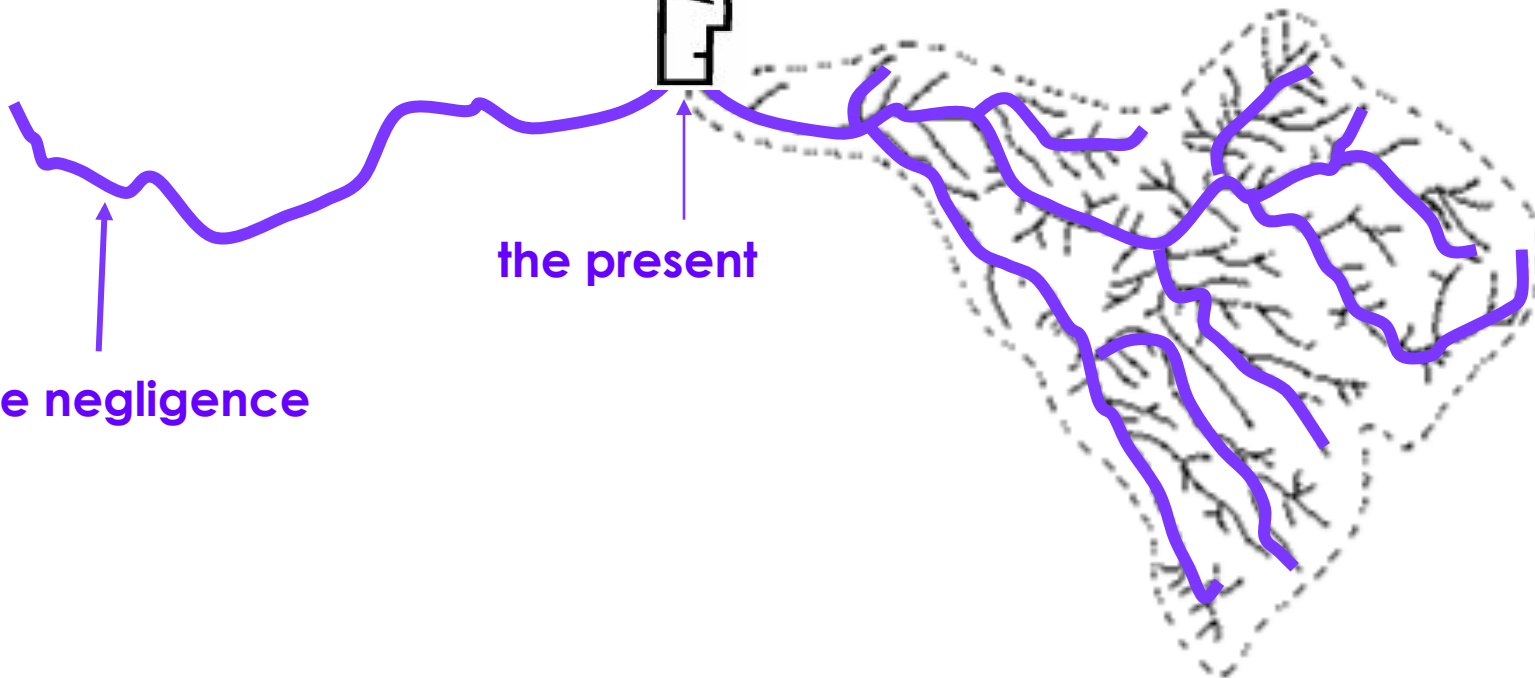
hindsight

risk assessment



the present

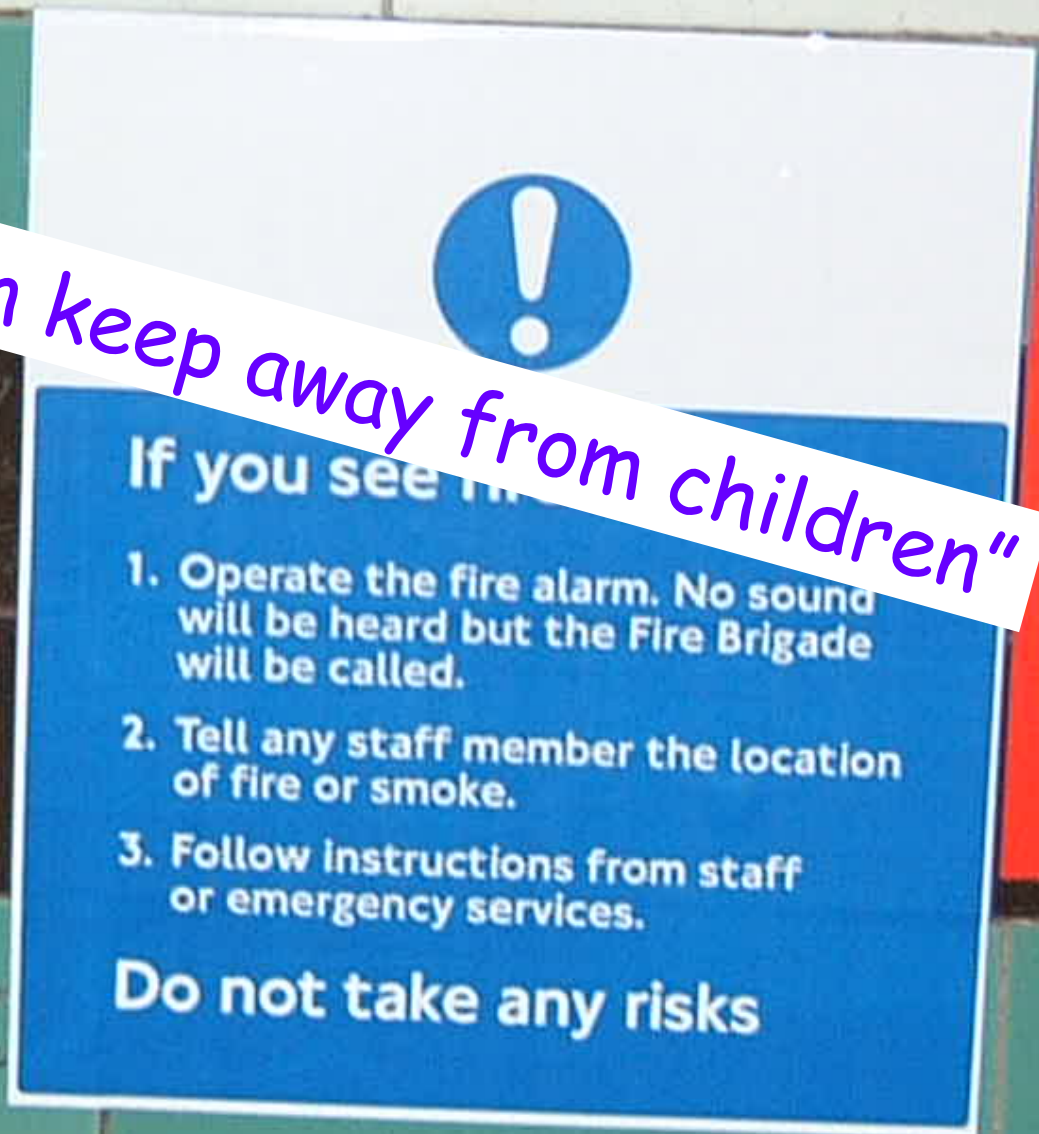
Culpable negligence



"To avoid suffocation keep away from children"



CAUTION
THIS DOOR
IS HEAVY



!

If you see fire

1. Operate the fire alarm. No sound will be heard but the Fire Brigade will be called.
2. Tell any staff member the location of fire or smoke.
3. Follow instructions from staff or emergency services.

Do not take any risks





No children



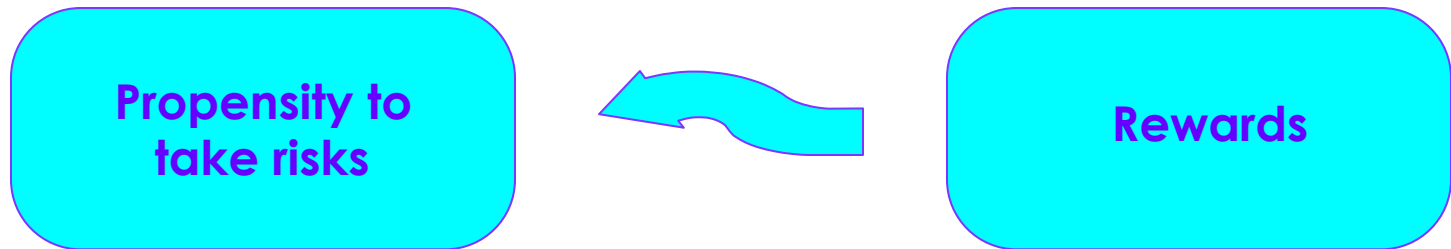
No swings

barriers

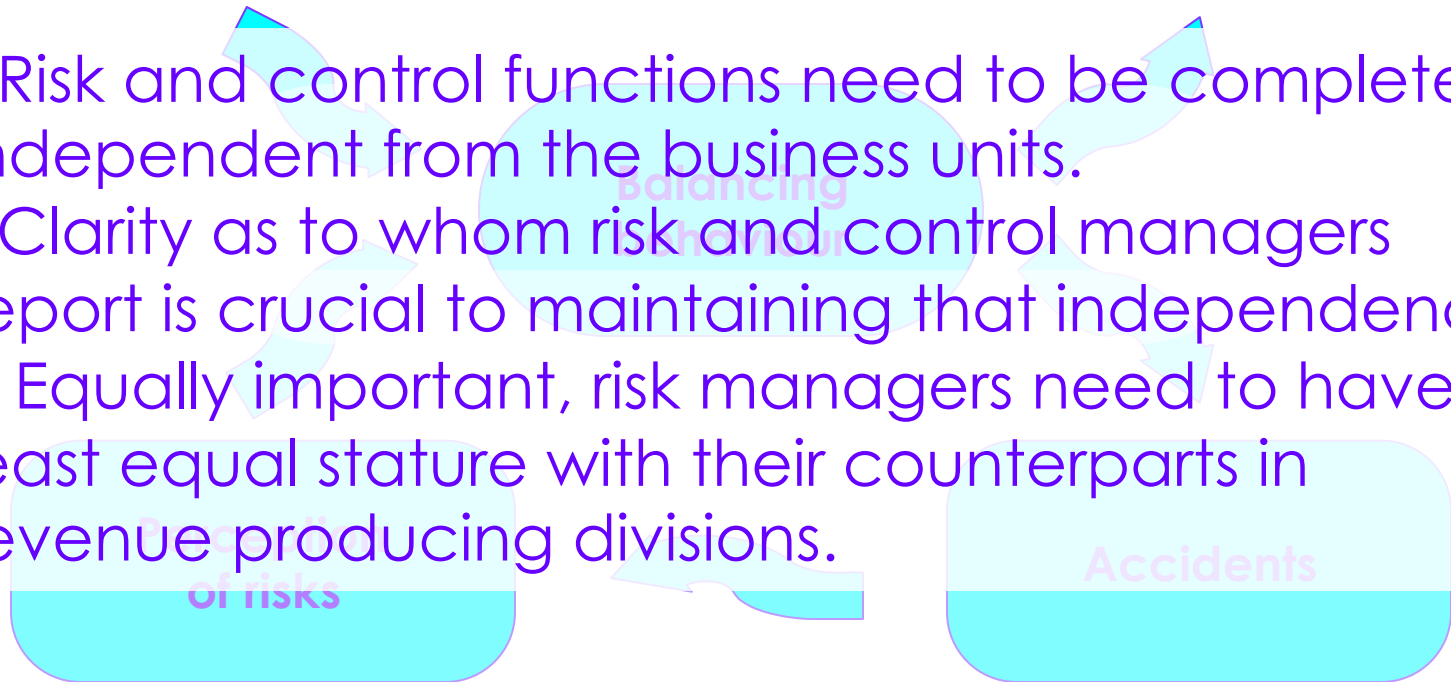
Rubberized matting

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

Top loop bias

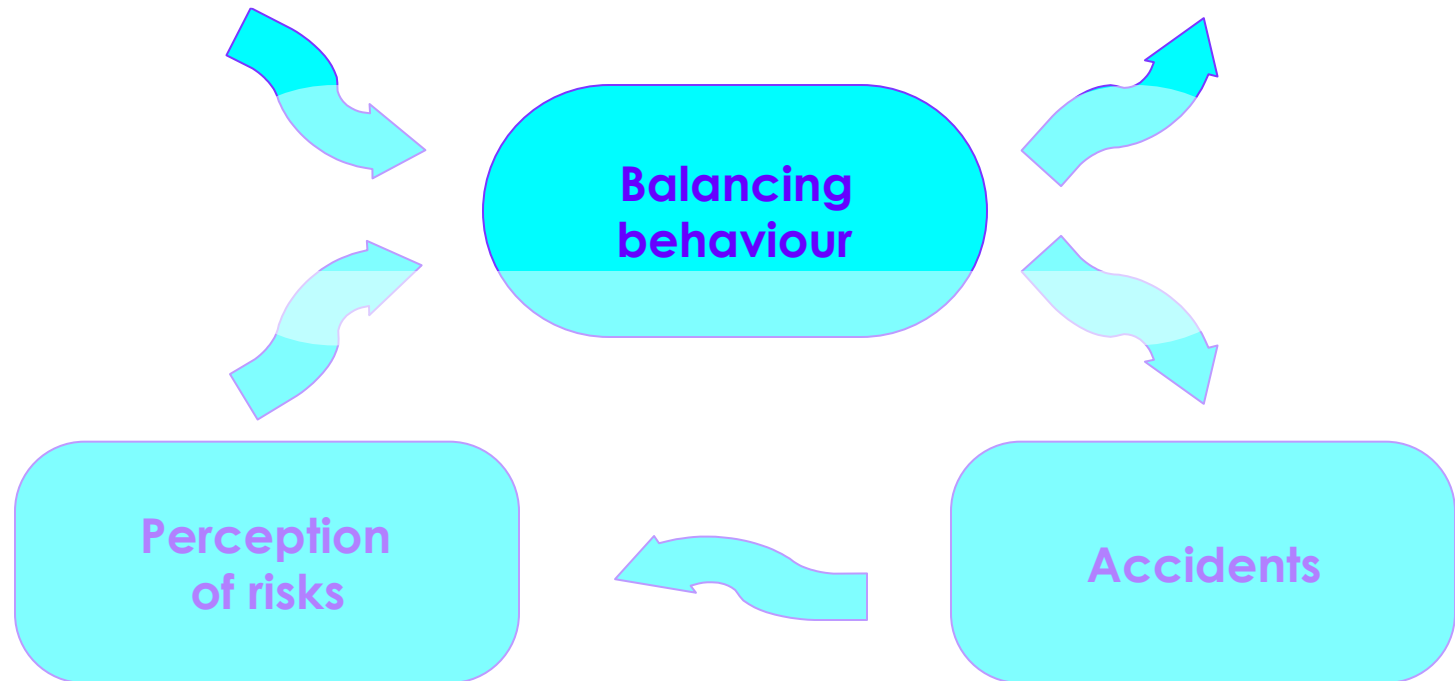


- Risk and control functions need to be completely independent from the business units.
- Clarity as to whom risk and control managers report is crucial to maintaining that independence.
- Equally important, risk managers need to have at least equal stature with their counterparts in revenue producing divisions.



Top loop bias

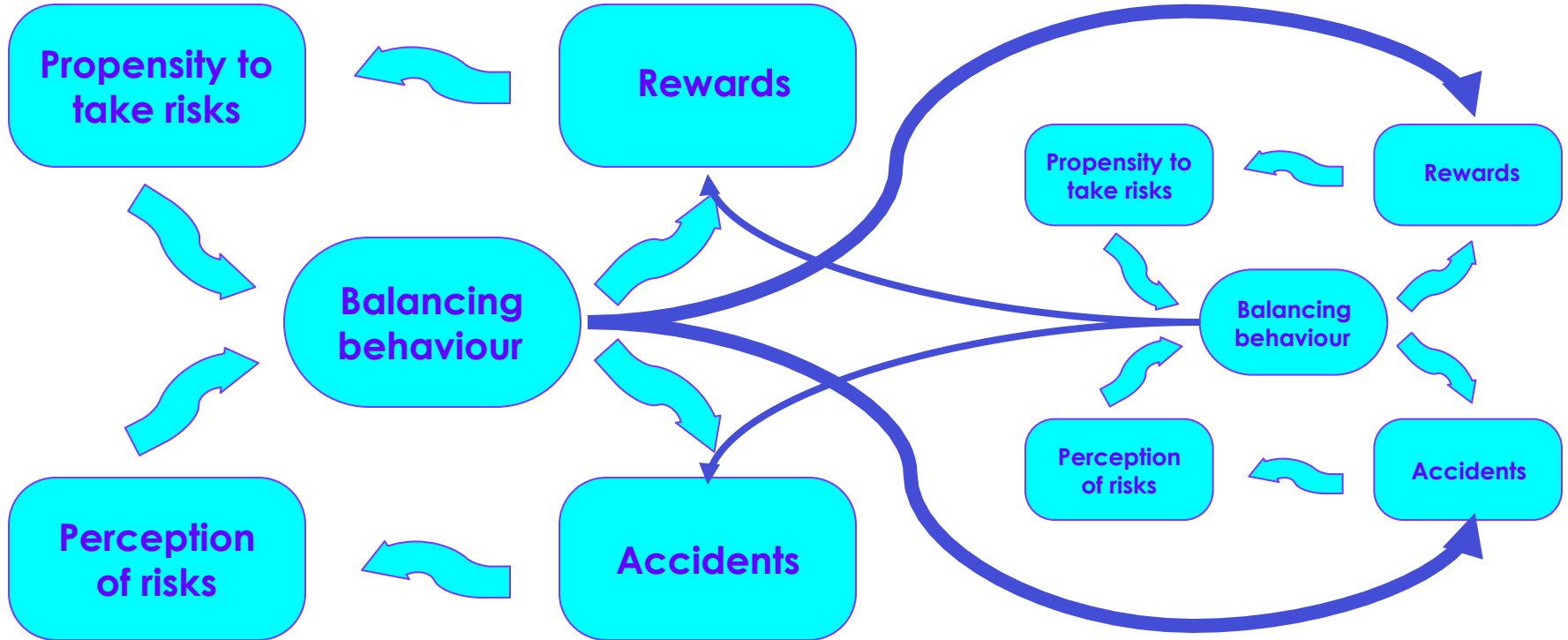
Worse, decisions on compensation and other actions taken and not taken, particularly at banks that rapidly lost a lot of shareholder value, look self-serving and greedy in hindsight.

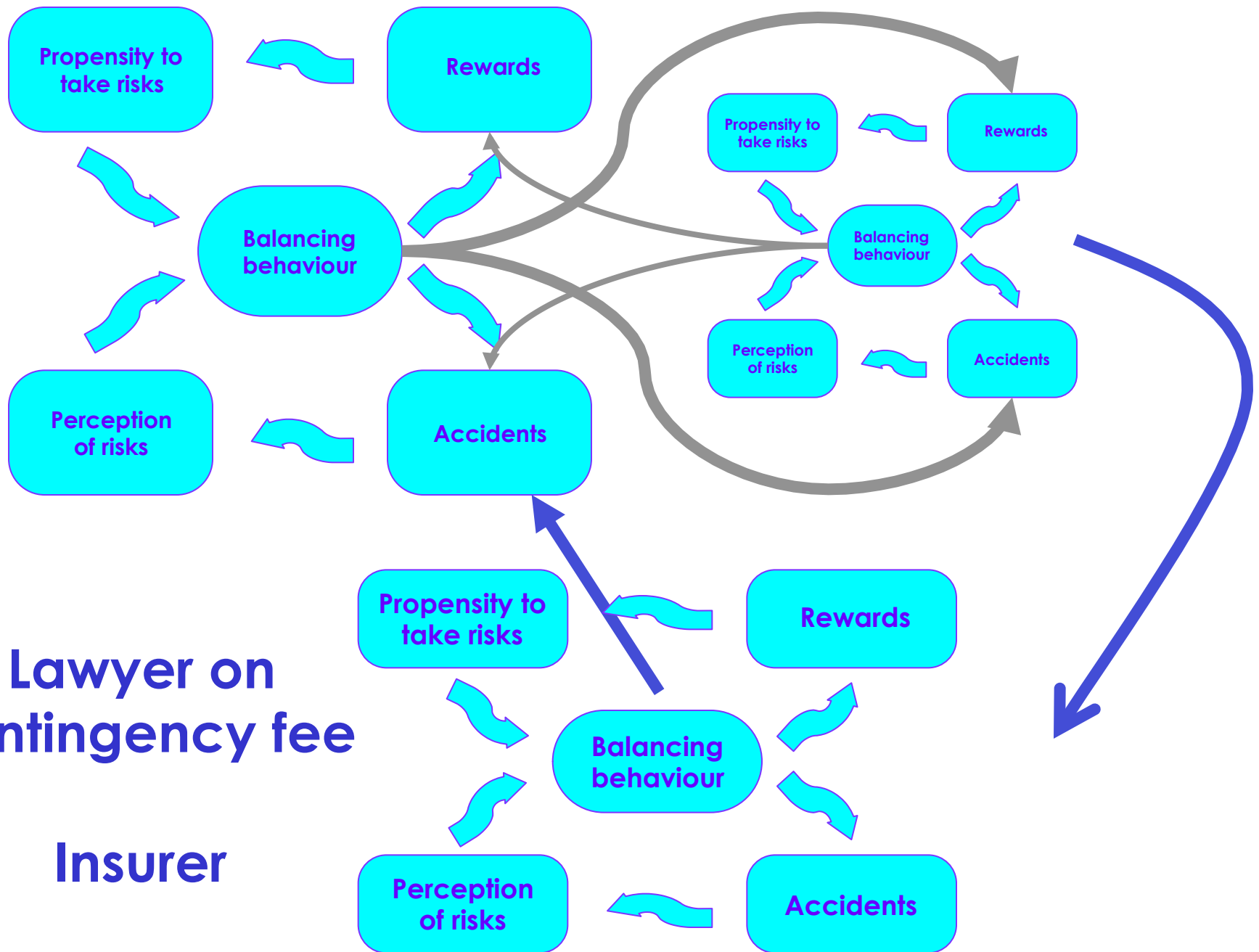


... complexity got the better of us.

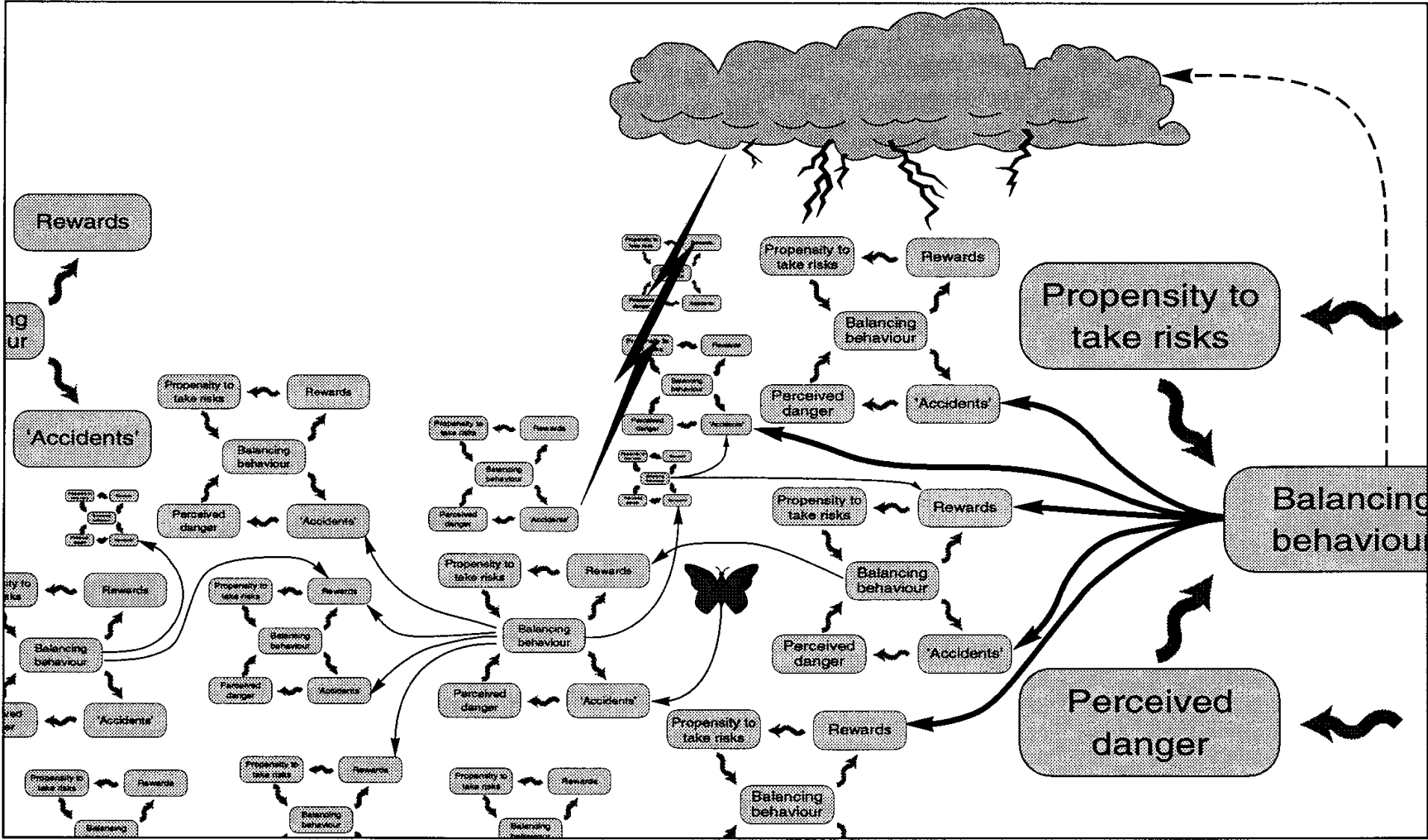
Risk is an interactive phenomenon

The lorry driver and the cyclist





69% of Americans believe in angels. 46% have their own guardian angel.



The dance of the risk managers



BS Investment Bank



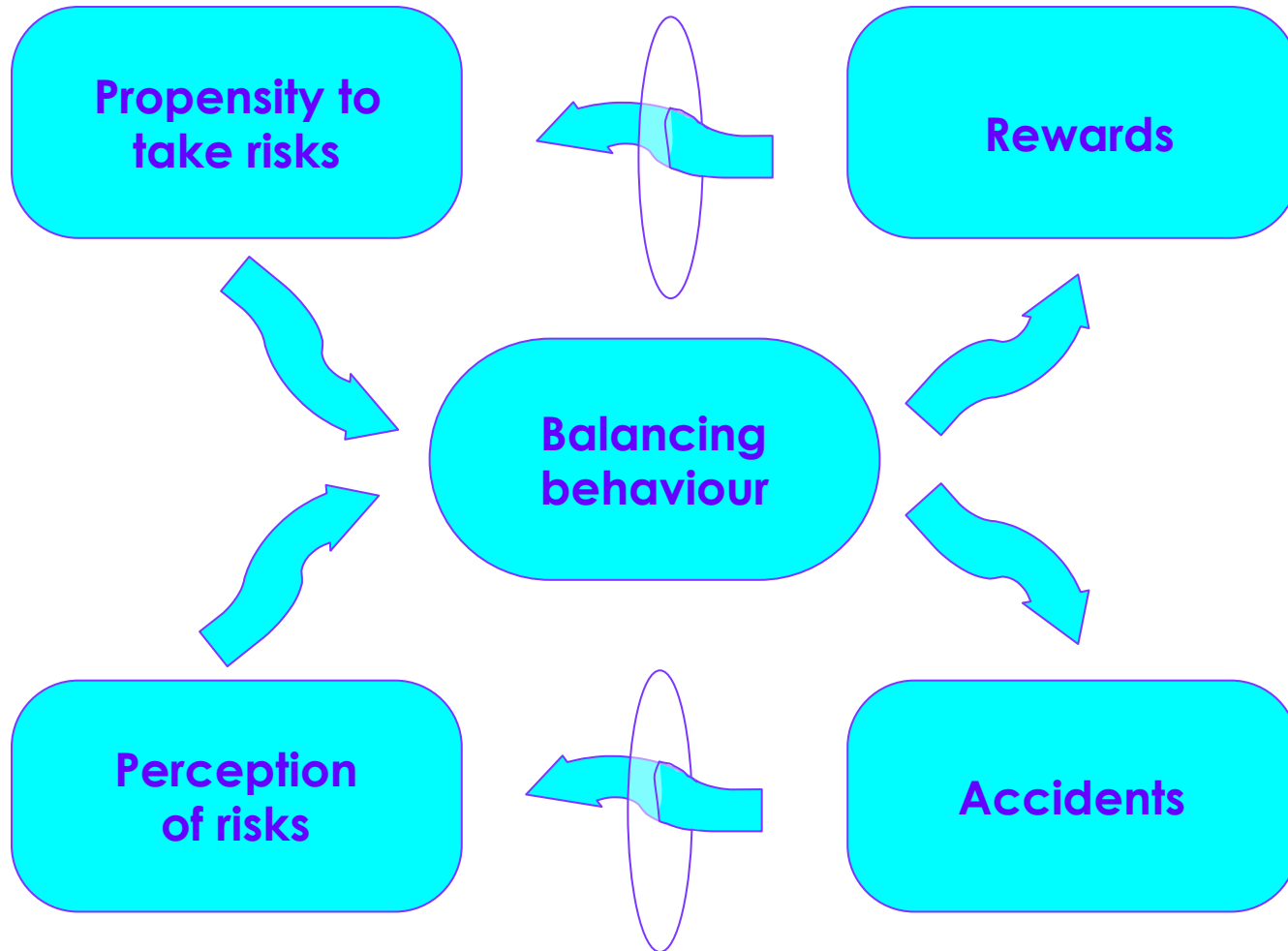
UBS Investment Bank

UBS Investment Bank

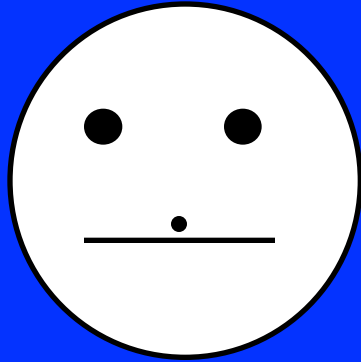
UBS Investment Bank

UBS Investment Bank

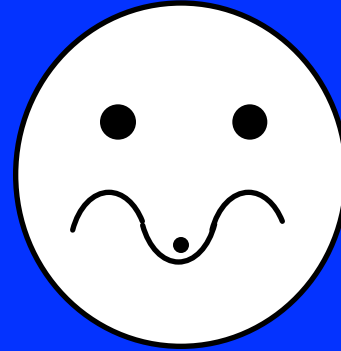
Perceptual Filters



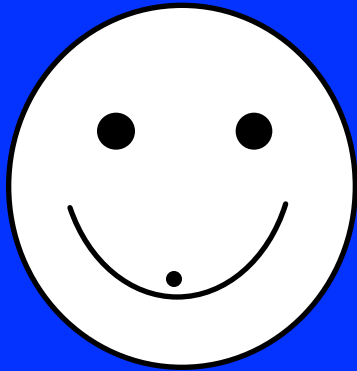
A typology of perceptual filters



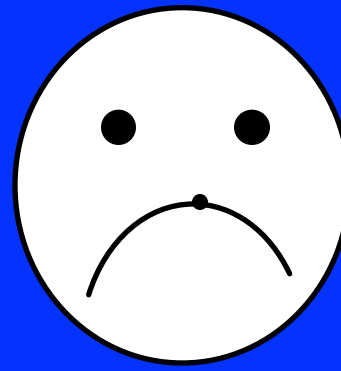
Fatalist



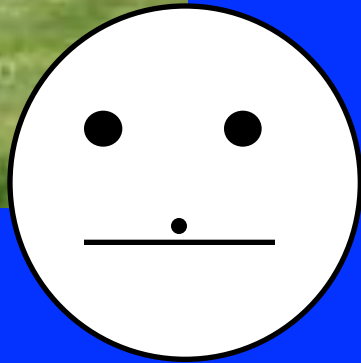
Hierarchist



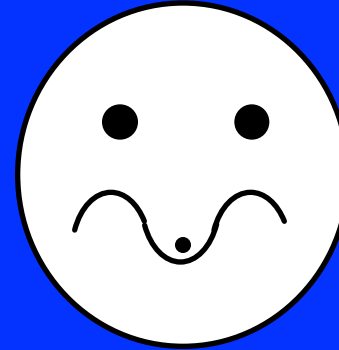
Individualist



Egalitarian



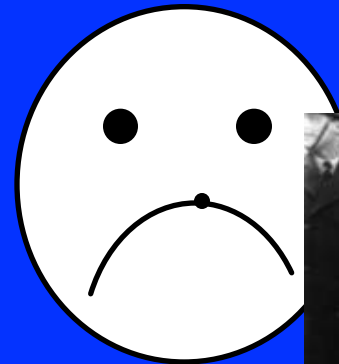
Fatalist



Hierarchist



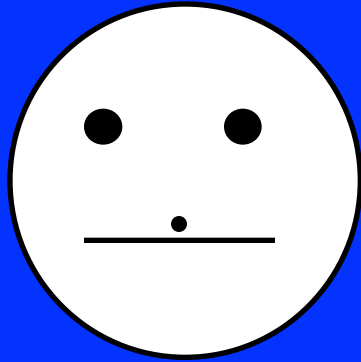
Individualist



Egalitarian

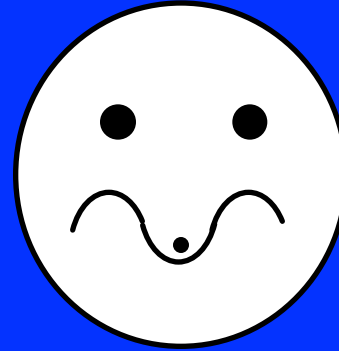


Prozac

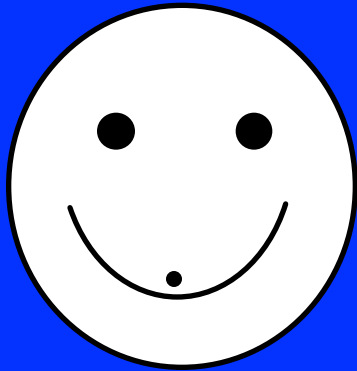


Fatalist

Alcohol?

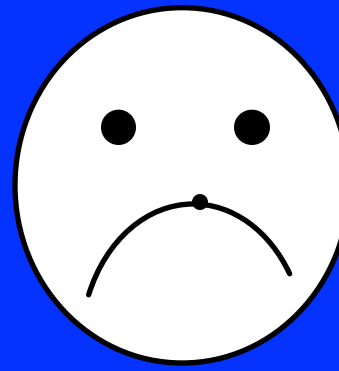


Hierarchist



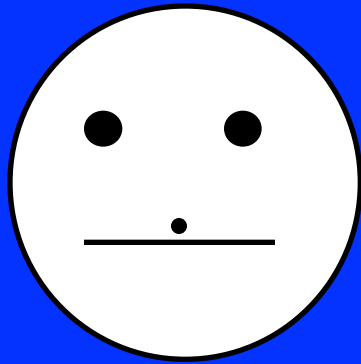
Individualist

Lithium



Egalitarian

Chlorpromazine



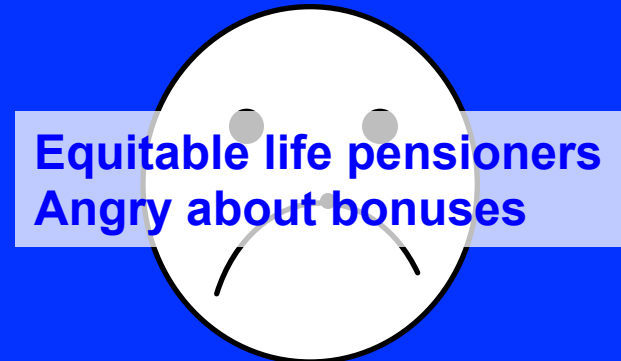
Fatalist



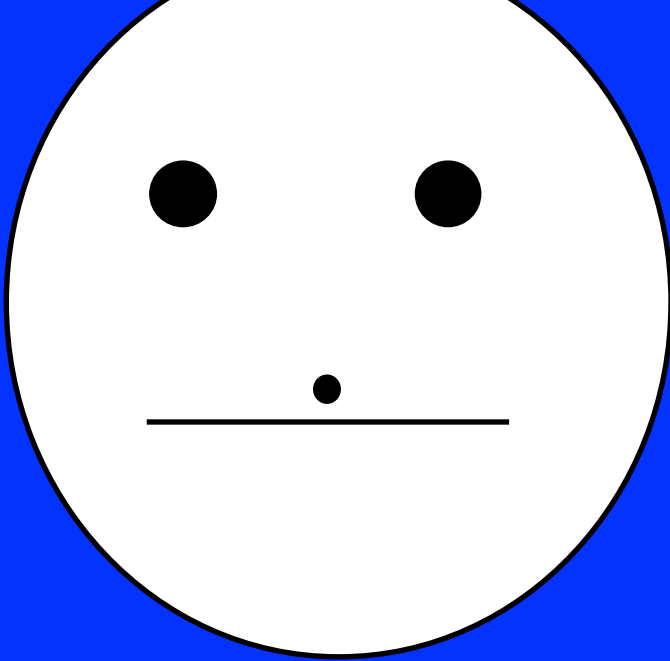
Hierarchist



Individualist



Egalitarian



Fatalist

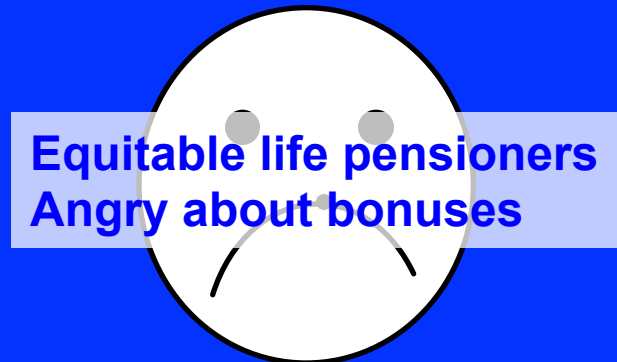
Prudence is a rich,
ugly old maid courted
by Incapacity.
William Blake
Proverbs of Hell

Individualist



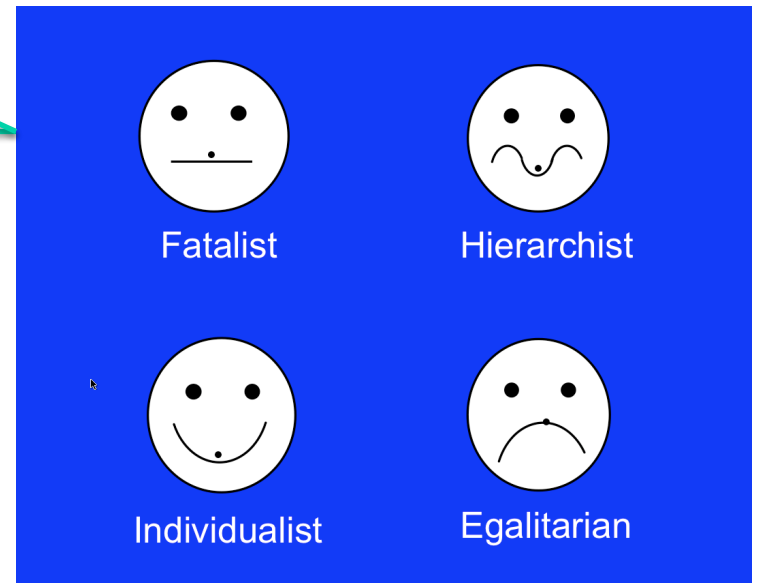
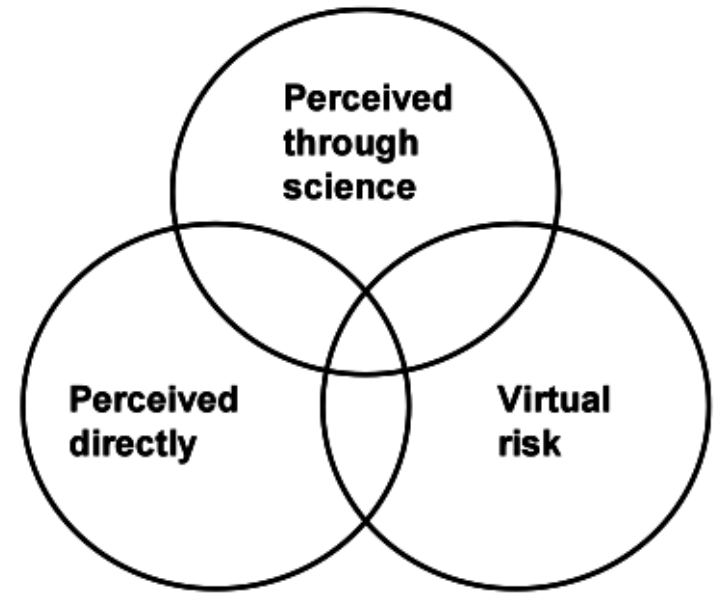
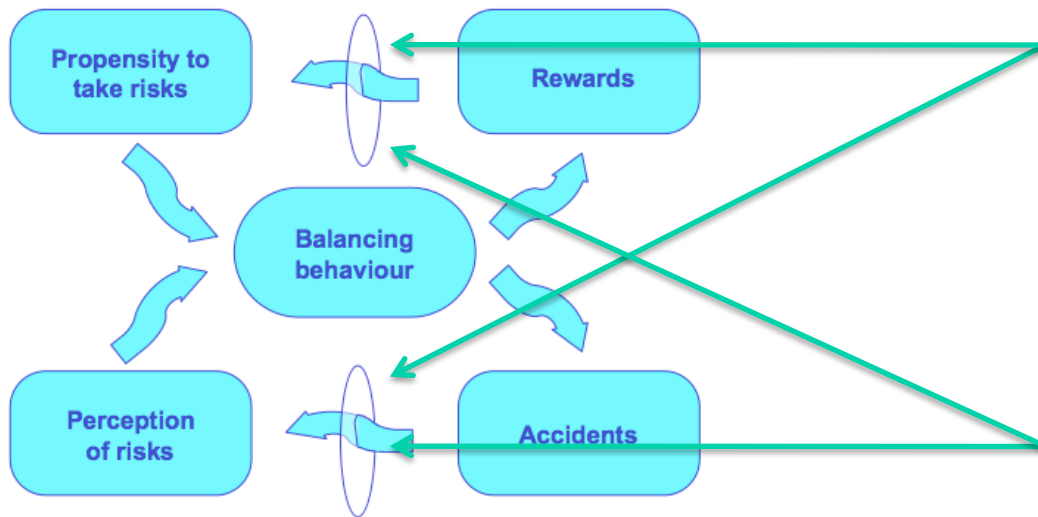
Legislators
Regulators
Compliance managers

Hierarchist



Equitable life pensioners
Angry about bonuses

Egalitarian



Risk management: where are the keys?

