## Tragedies and opportunities

#### Jop Groeneweg

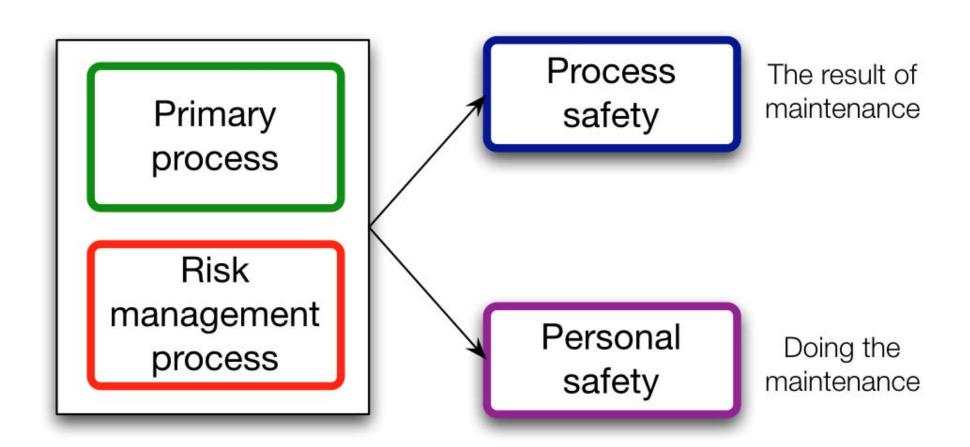
Leiden University Imperial College Safety Seminar: Tragedies and opportunities: Safety failures in Universities Baden Powell Conference Centre. London, 21 February 2017





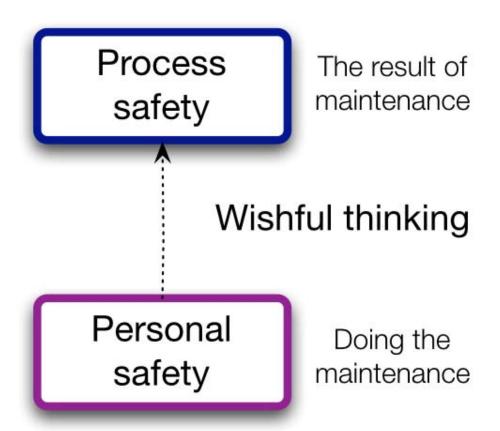


#### The main point: the management of safety

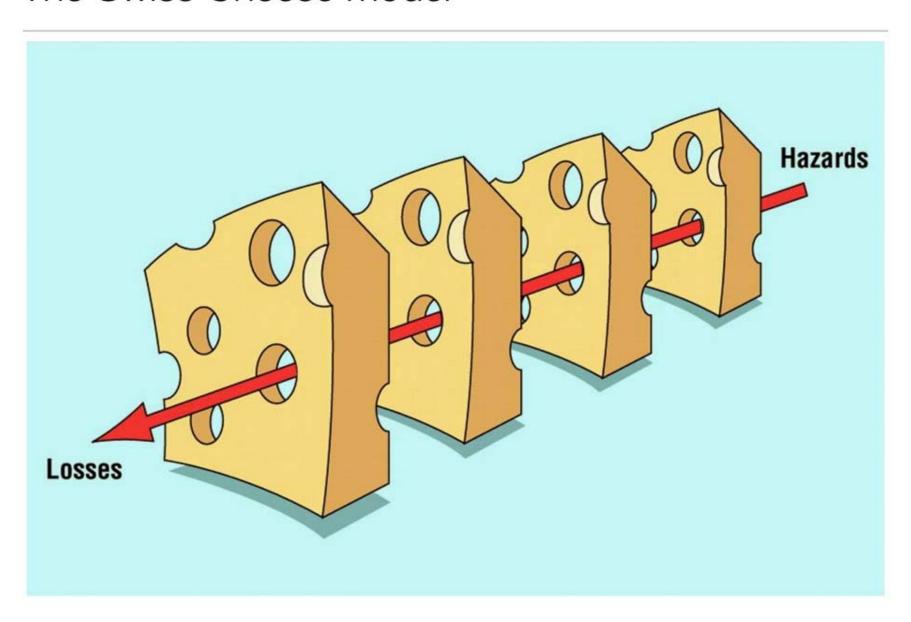


#### Unfortunately, this appears to be the trend

**Primary** process Risk management process

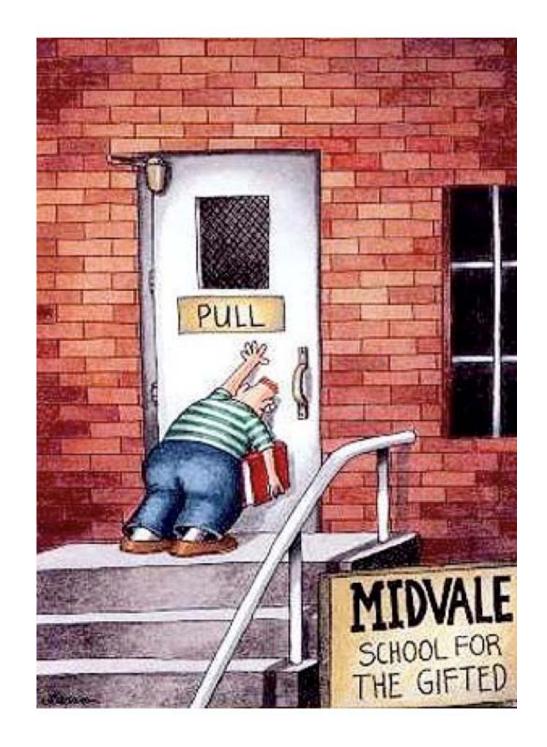


#### The Swiss Cheese model



### Human error: 99%

- · Stupid?
- · Lack of attention?
- · Negligent?
- · Poorly motivated?
- · Lacking safety awareness?

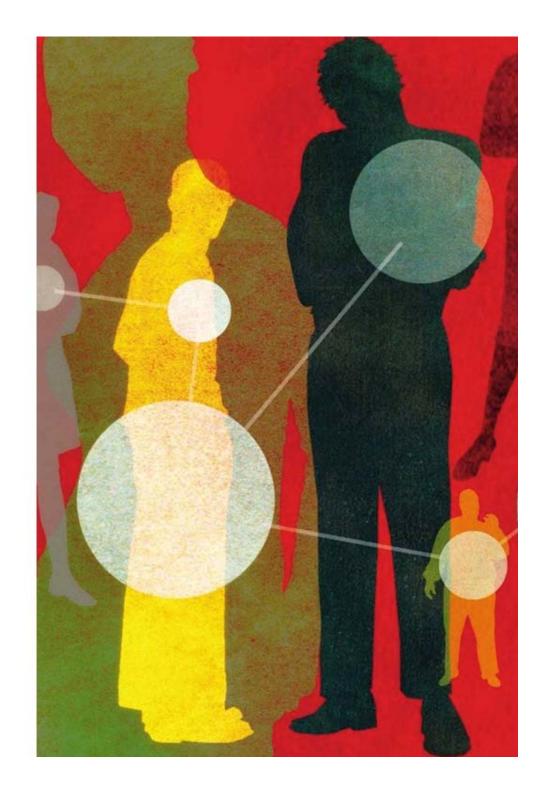


#### Ineffective

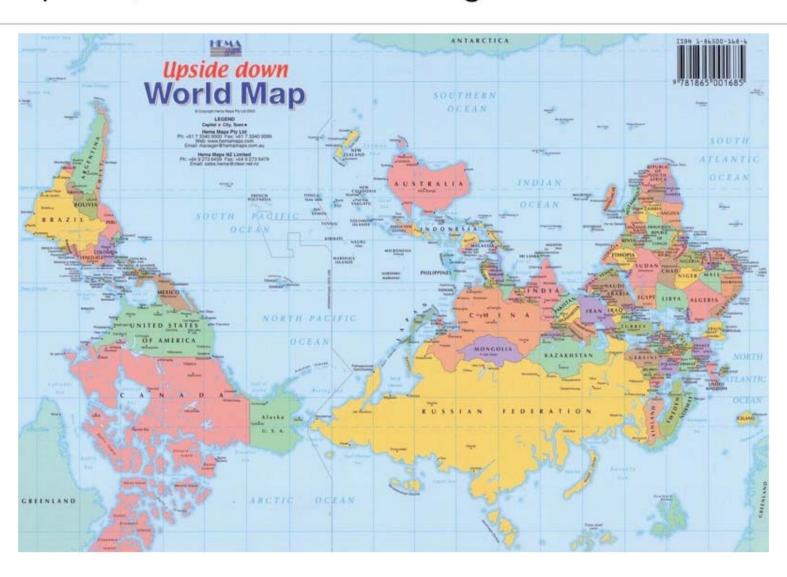


#### Human error

- Unintentional behaviour
  - Slips <-- 'Commission' (17%)</li>
  - Lapses <-- 'Omissions' (48%)</li>
- · Intentional behaviour
  - Mistakes <-- Strong but wrong (20%)
  - Violations <-- Mainly the supervisors (15%)



### Compliant, but difficult to navigate



#### Fatigue: Hours worked

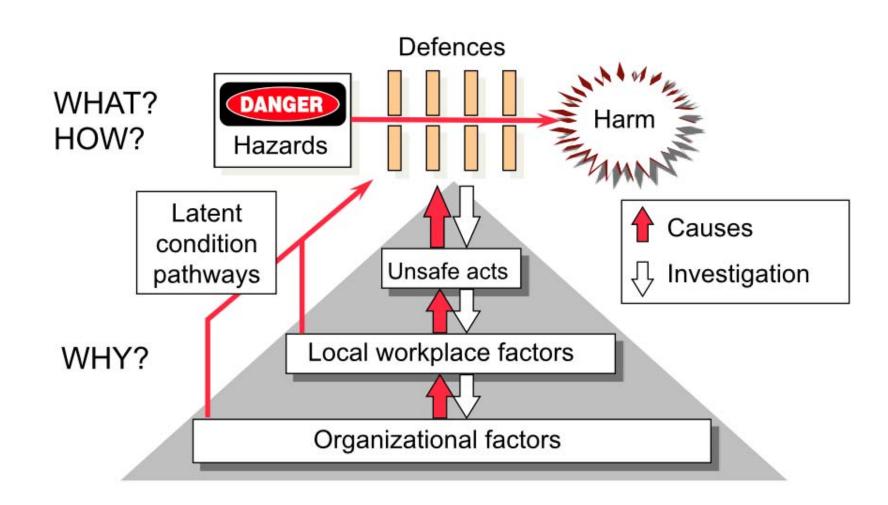
#### HOURS WORKED PER SHIFT



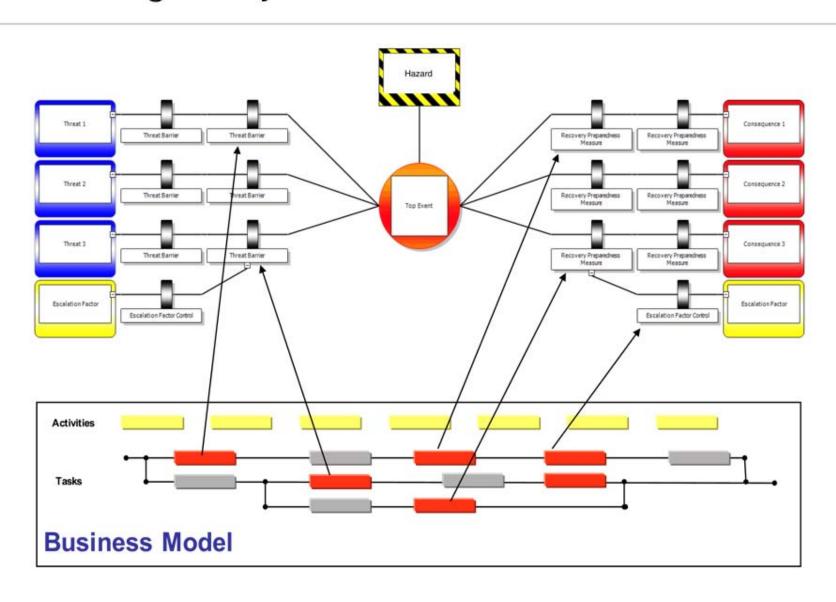
# Procedures, many, many procedures....



#### Human error, organisations and accidents



### Controlling safety: The 'bowtie' model



#### Successful application in Shell UK



#### Wells Operations Update from Olav M Skår, General Manager Wells Operations



Reflecting back, Wells UK/Ireland have come a long way since 2013/14 when the reality was operational mishaps, incidents, cost overruns and lack of delivery.

Many will recall the path we charted through the generation of a roadmap designed to take us to "recognised as leading" by 2017. A key insight was the conviction that if we could simply master our "primary process" of every day deliverables excellently, both operational and safety outcomes would improve.

In 2016, Wells UK/Ireland has delivered beyond plans and targets in all areas. Our safety performance to date is —I understand- the best on record with some margin, and we are in a place where we truly harvest the learning and improvement opportunities a Near Miss gives us.

We now know what good looks like, and I believe you are hungry and ready for Great!

#### Achieving effective, efficient and safe operations

- Accept that there are almost no '100% safety' incidents: Most are 'operational issues' with a safety outcome
- Getting everybody on board is in fact the key to success. We all take decisions that may lead to potential problems in the future
- Universities should not limit themselves to do it 'safe or not'. We should focus on 'good or not' (Frank and I will discuss this in more depth this afternoon)
- Be prepared to seriously commit yourself to support fixing the real issues and accept the world is complex and solutions sometimes 'long term'
- It will be hard work, but success can and must be achieved

# Questions?





