

Critical Conversations in a Crisis

July 2016

C. Northcote Parkinson
“Parkinson’s Law”

*“The void created by the failure to
communicate is soon filled with poison, drivel
and misrepresentation”*

Critical Conversations

Conversations :

- *in a crisis situation*
- *where the stakes are high*
- *time for debate is limited*
- *diagnosis of causality is difficult*
- *and strong emotions and opinions may be present*

Why did they not communicate ?



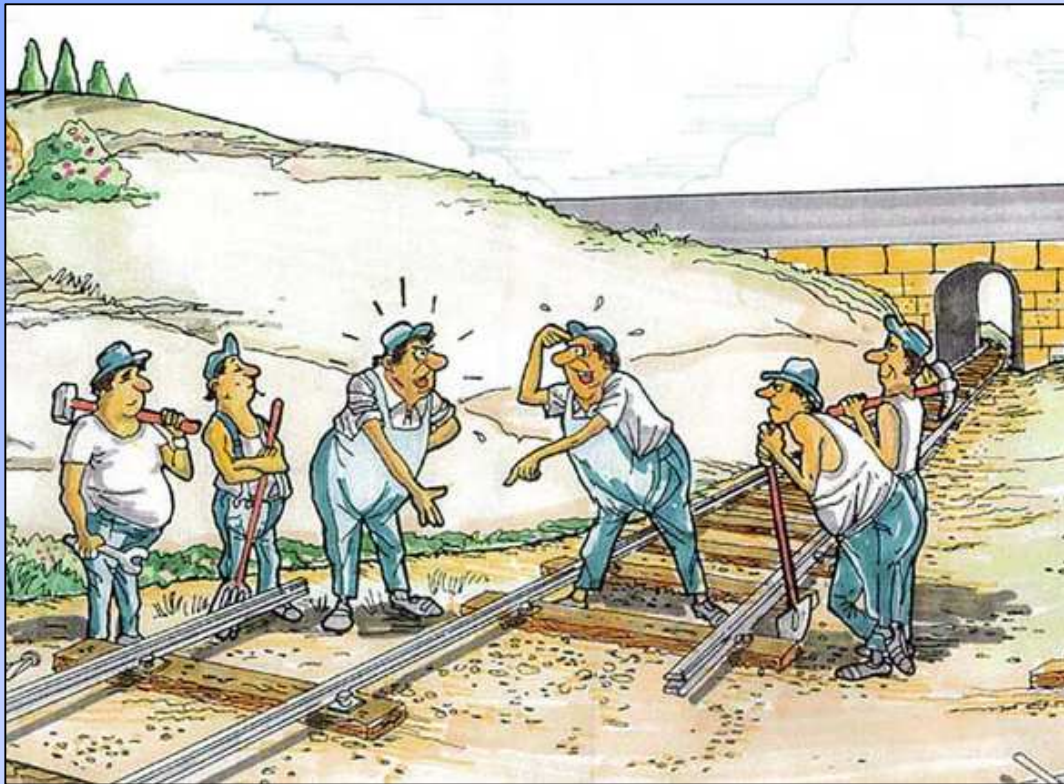
MH370



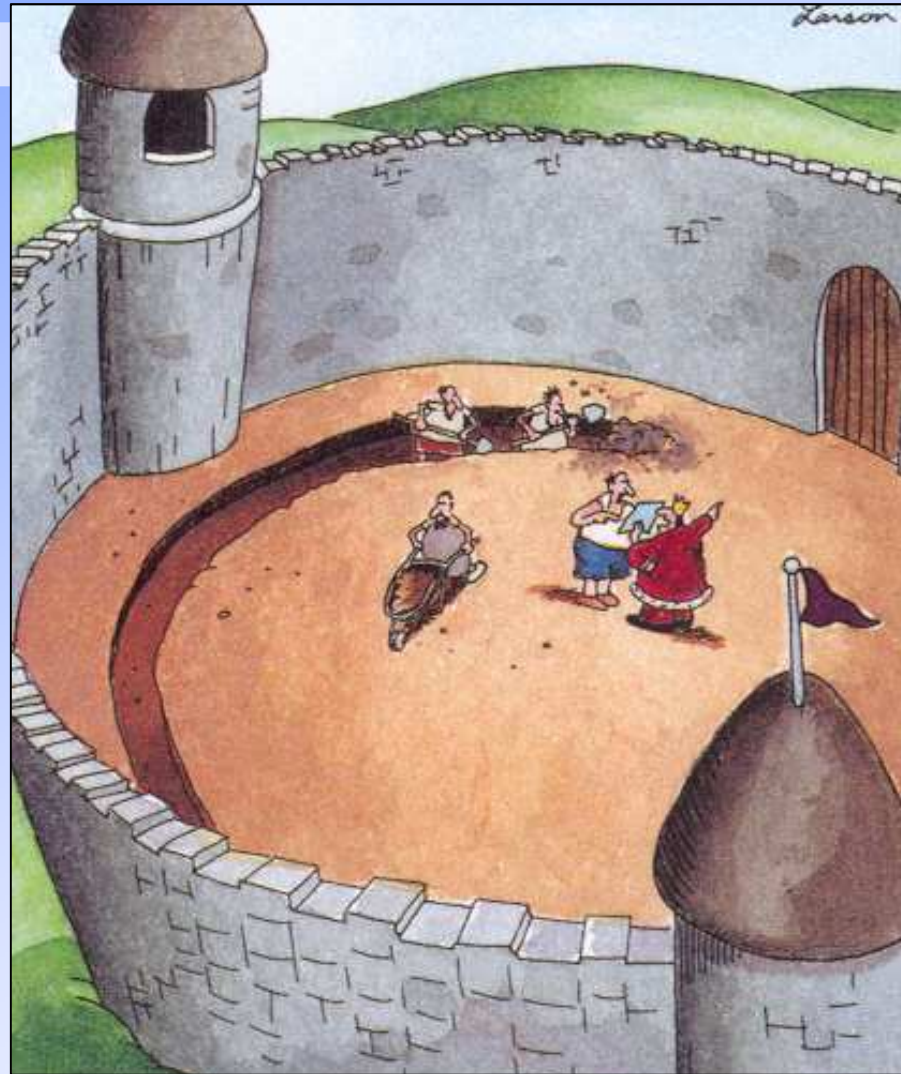
MS804



Humans are not error free



Suddenly a heated argument broke out between the King and the moat builder



And sometimes we let things slip ...



Behavioural basis for errors

- Slips - an unplanned action
 - *washing the windows instead of indicating a turn*
- Lapses - not completing a planned action
 - *leaving the mail on the kitchen bench*
- Mistakes - doing an action incorrectly
 - *Saturday morning - turning left to work instead of right to the kids sport*
 - applying knowledge incorrectly
 - *selecting an inappropriate action because of a faulty diagnosis*

Arising from

- Attention
- Memory
- Perception
- Habits
- Experience
- Knowledge
-

Medical Preventable Death

Calgary, February 2004:

The substitution of potassium for sodium chloride resulted in the unexpected deaths of two ICU patients undergoing continuous renal replacement therapy

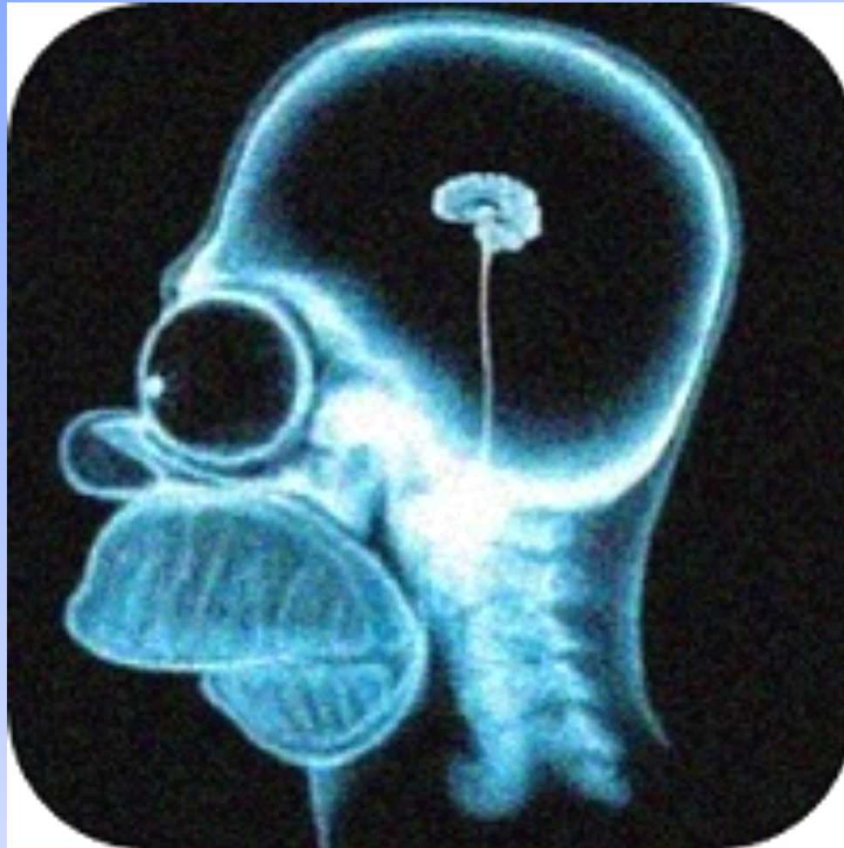
Try Harder - Simply read the label ...?



D'OH!



Neurological basis for errors





OUTPUT



**VISUAL
SPATIAL**



VERBAL



INPUT



Reinforcements/ Rewards :

Overt

- Chocolate
- Wine
- Food
- Shopping
- Sex
-

Covert

- Dopamine
- Norepinephrine
- Limbic system only
- Limbic system + Left prefrontal cortex



Startle :

- *Fight / Flight*
- Reticular Activating System
 - *Limbic dorsal (adrenaline)*
- Sympathetic NS dominates the Parasympathetic NS
 - *Pre-frontal cortex frozen out of the picture*

THE ABILITY TO REASON
IS ACTIVELY BLOCKED

Startle Recovery : *Start the Conversation*

- Unlock the road block in the RAS
- Recover the frontal cortex
 - Perceive / See
 - Recognise
 - Comprehend / Understand
 - Project / Think ahead

*N*otice *U*nderstand *T*hink *A*head

A Productive *NUTA* Conversation

- Be present in the conversation
 - ✓ Listen; don't judge or rehearse
- Be confident
 - ✓ Speak clearly and make eye contact
- Be empathic
 - ✓ Respect others feelings
- Be honest
 - ✓ State facts not emotions; identify your opinions

Enabling the Critical Conversation

Reducing the risk of a cortical roadblock:

- ✓ **Knowledge**
- ✓ **Training**
- ✓ **Experience**
- ✓ **Planning**
- ✓ **Briefing**
- ✓ **Open and Safe Communication**

Communication ?



Loss of airspeed and autopilots; no plan; no communication within the crew loop
They never recovered from the initial startle



Unknown, but assuming a competent crew, their focus was on flying the aircraft



Sudden on-board electrical fire disabling the flight computers creating a life-threatening situation plus an aircraft handling problem



*All three crews
were (probably)
overwhelmed by
the situation*