

# Making decisions better

- Looking towards the Sicily statement update

Change is good

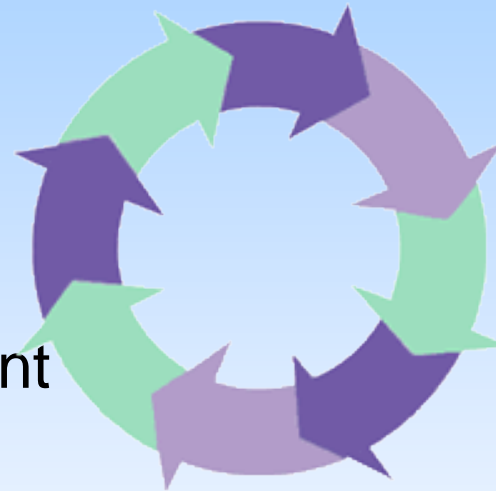
No change is better

Recognise lack of certainty

1. Formulate question

Searching is hard, takes time, lots of results or no results

2. Efficiently track down best available evidence



5. Evaluate performance

Time - again

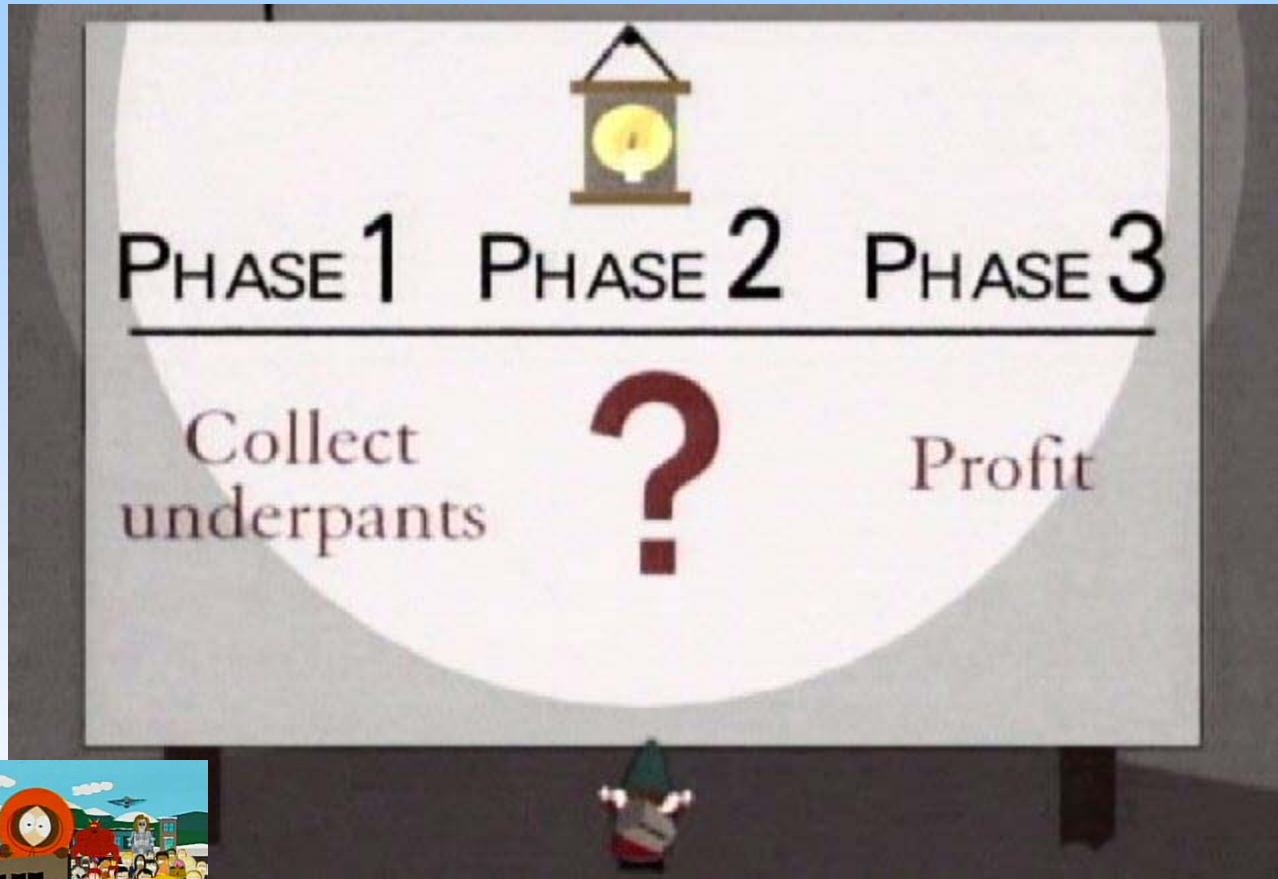
4. Implement changes in clinical practice

3. Critically review the validity and usefulness of the evidence

It's hard! I don't do it often enough and I don't have the time

**The MAJOR Underpants Gnomes step**

# Underpants Gnomes



# Dual process theory

Dual-dual process theory

When I change the slide say out

**loud** what you see





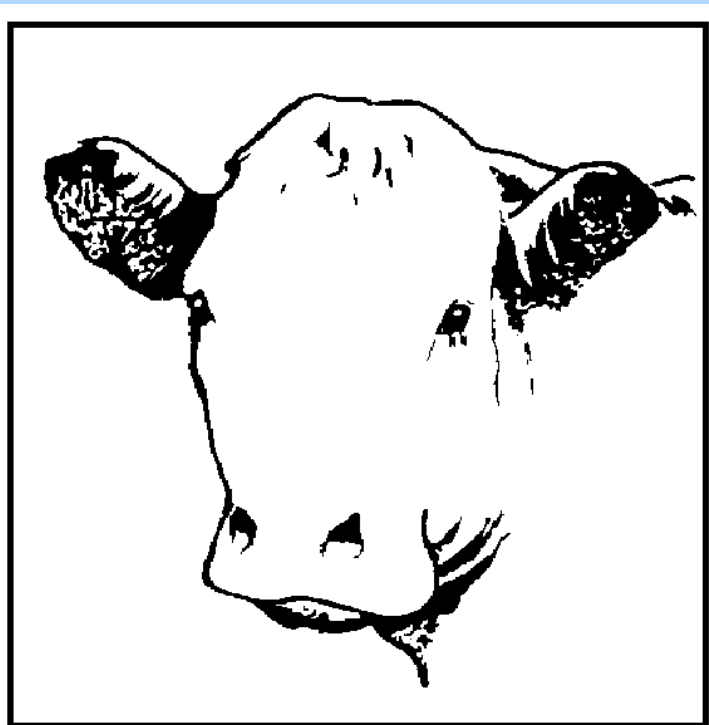




Vanderbilt University  
Basic Course in Medical Decision Making



# Learn the Basic Patterns





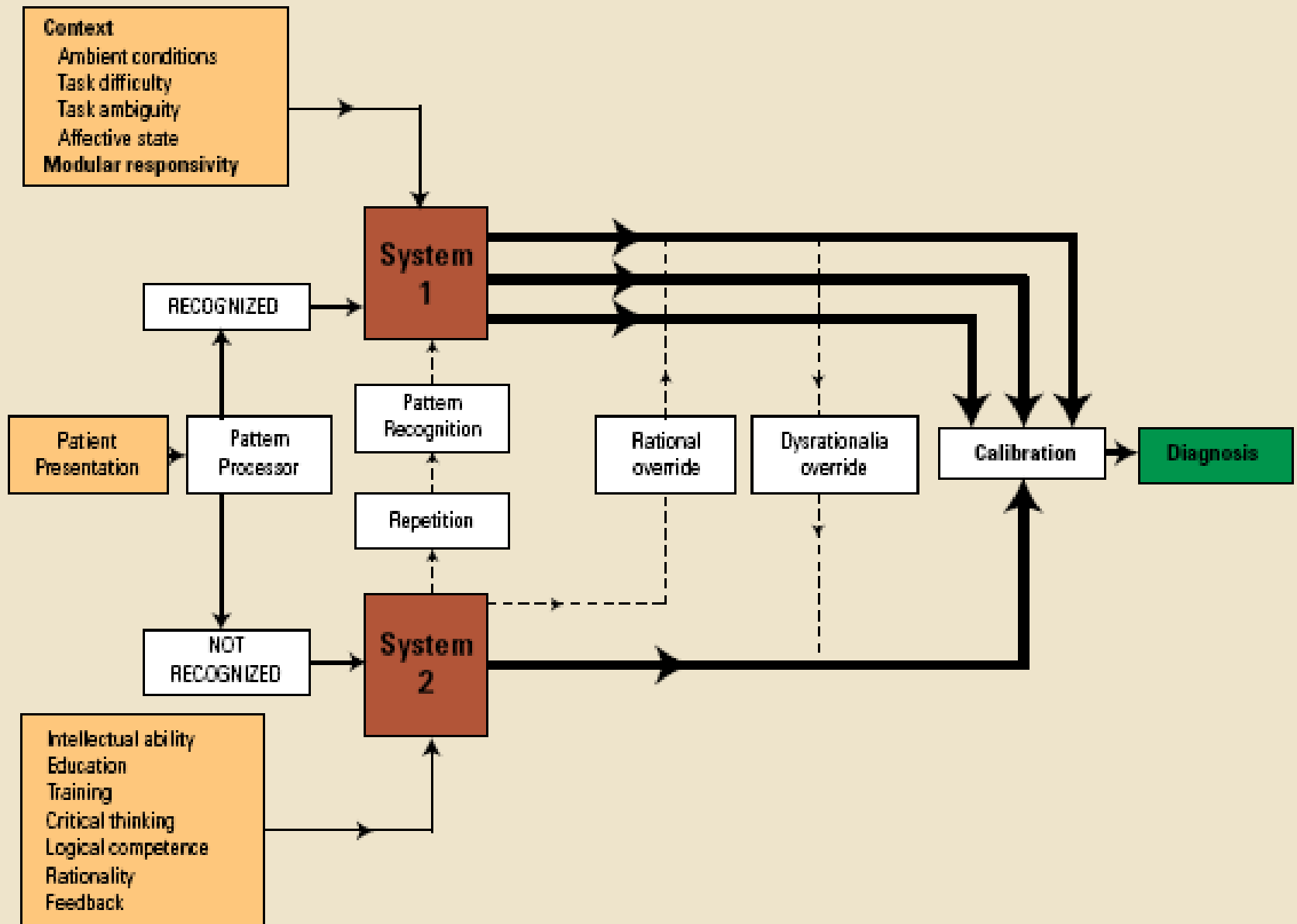






# Information and decision making

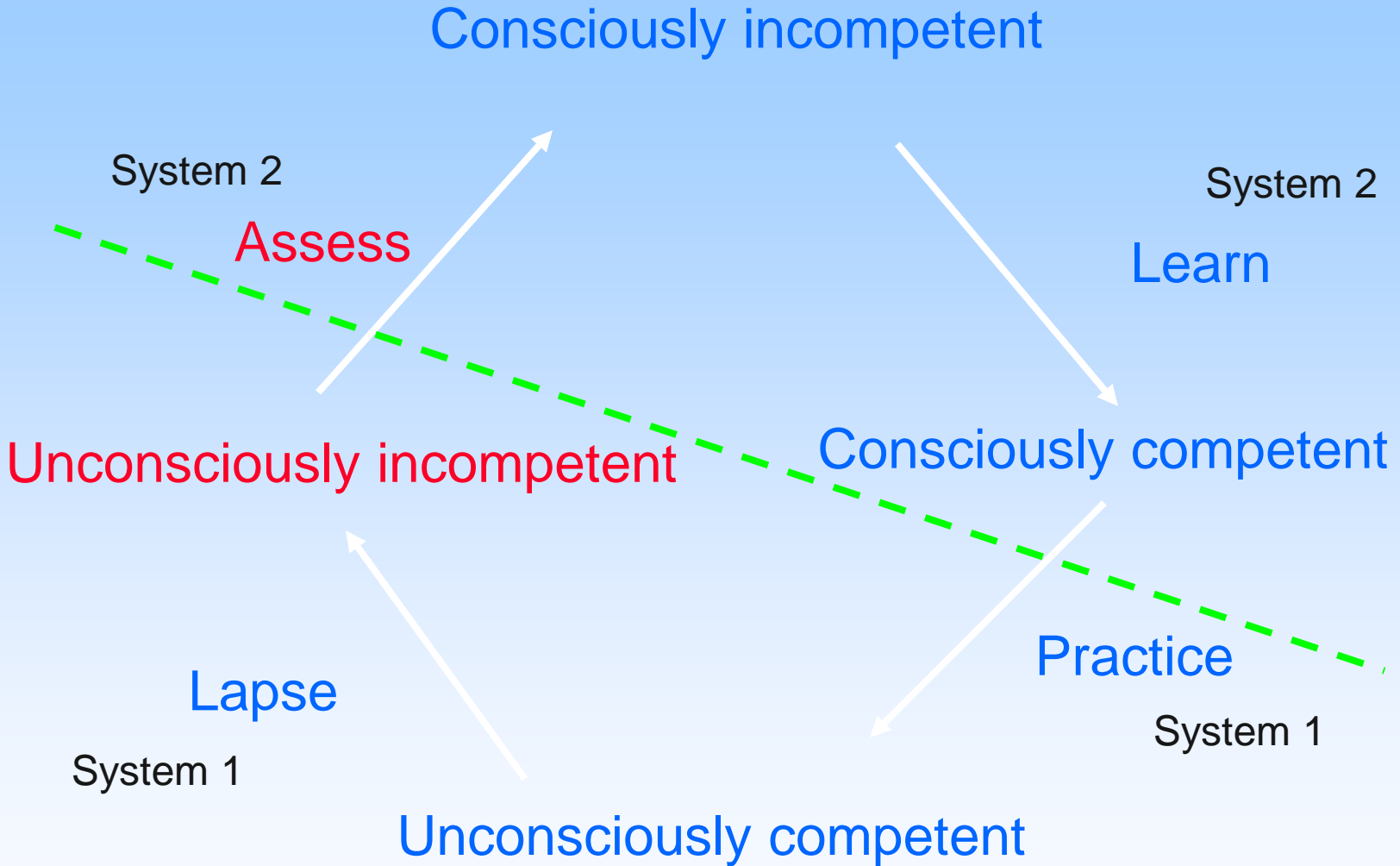
- # Most decisions are based on what we think is the evidence, not what we know is the evidence
- # No one has time to appraise all of the evidence on everything, and even if that were possible the human brain can't recall and compute it, and certainly not in a 10 minute primary care consultation
- # We use brief reading and talking to other people as our information sources
- # We often use patterns to make a diagnosis
- # We create mindlines ( = patterns) of what to do in common situations

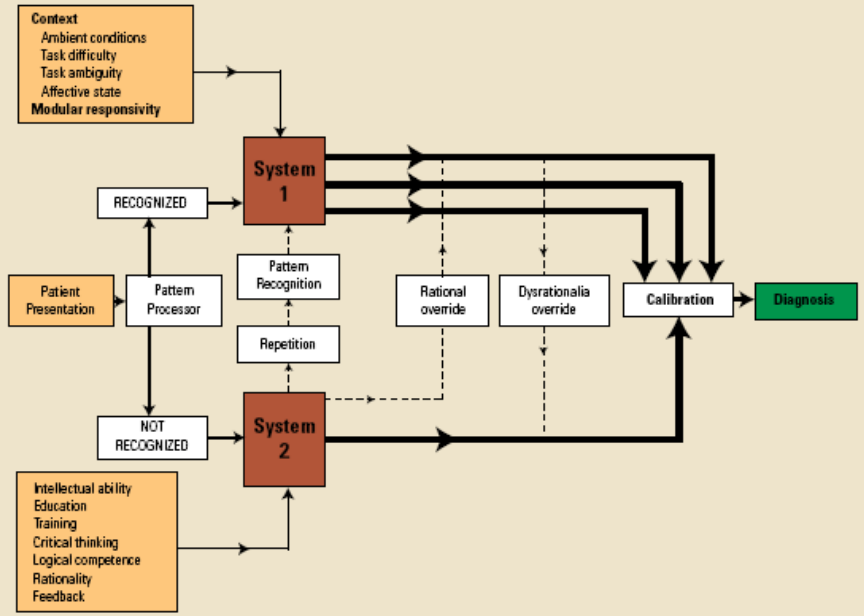


Broken lines indicate significant interactions between System one and System two.

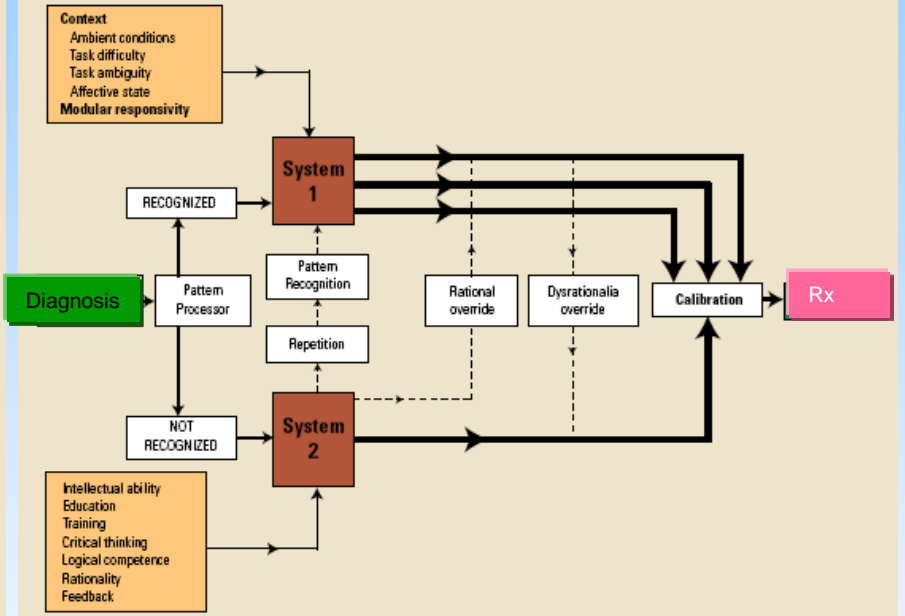
Source: Adapted from Croskerry (2009) with permission.







Broken lines indicate significant interactions between System one and System two.  
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# 43 cognitive biases (OMG!)

- ✦ Anchoring bias – early salient feature
- ✦ Ascertainment bias – thinking shaped by prior expectation
- ✦ Availability bias – recent experience dominates evidence
- ✦ Bandwagon effect – we do it this way here
- ✦ Omission bias – natural disease progression preferred to those occurring due to action of physician
- ✦ Sutton's slip – going for the obvious
- ✦ Gambler's fallacy – I've seen 3 recently; this can't be a fourth
- ✦ Search satisficing – found one thing, ignore others
- ✦ Vertical line failure – routine repetitive tasks leading to thinking in silo
- ✦ Blind spot bias – other people are susceptible to these biases but I am not

# blink

*By the author of* THE TIPPING POINT

Thin-Slicing, Snap Judgments,  
and the Power of Thinking  
Without Thinking

Malcolm Gladwell

Facing American culture and society,  
one mind at a time

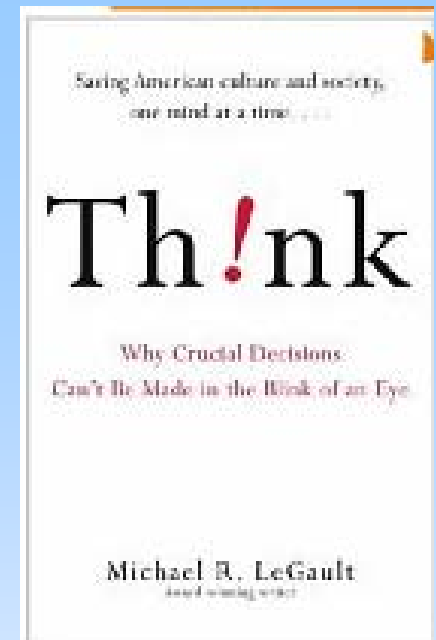
# Th!nk

Why Crucial Decisions  
Can't Be Made in the Blink of an Eye

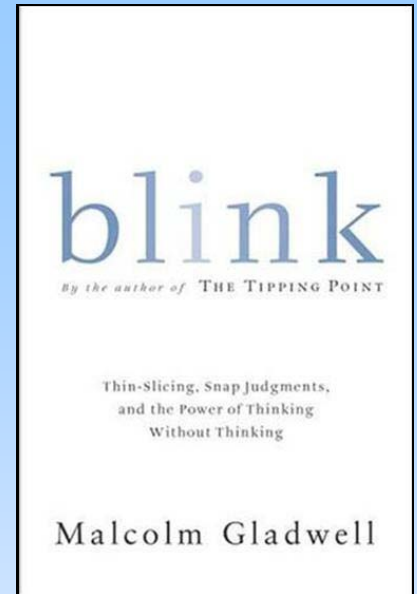
Michael R. LeGault  
*award-winning writer*

“The technique by which we make good decisions and produce good work is a nuanced and interwoven mental process involving bits of emotion, observation, intuition, and critical reasoning. The emotion and intuition are the easy, “automatic” parts, the observation and critical reasoning skills the more difficult, acquired parts. The essential background to all this is a solid base of knowledge. The broader the base, the more likely one is to have thought through and mastered difficult concepts, models and ways of interpreting the world.”

p12



“....snap judgements and first impressions can be educated and controlled.....Just as we can teach ourselves to think logically and deliberately, we can also teach ourselves to make better snap judgements. In *Blink* you’ll meet doctors and generals and coaches and furniture designers and musicians and actors and car salesman and countless others, all of whom are very good at what they do and all of whom owe their success, at least in part, to the steps they have taken to shape and manage and educate their unconscious reactions. The power of knowing, in that first two seconds, is not a gift given magically to a fortunate few. It is an ability we can all cultivate for ourselves”



How?



Think as well as blink

- ✚ The biggest protection comes from being aware of how we try to use system 1, yet need to sometimes check out system 2
- ✚ And of course adding the Information Mastery tactic of hot synching for common conditions means system 2 ought to be mobilised more often than it otherwise would

# Mrs Armitage's bicycle



- ✚ On balance we need EBM techniques that have greater utility of application for graduates than we currently teach
- ✚ Where will we be heading if we don't increase utility?



“Knowledge is knowing a tomato is a fruit; “Wisdom is not putting tomatoes in a fruit salad”