

- 1) Flash: the “10 minute intro” age is over. More useable (ugh) interfaces required! Can Use cognitive neuroscience to explain feeling of intuitiveness. (even if your homer / gran)
- 2) Severely under qualified!
- 3) As any builder / GCSE teacher will tell you
- 4) Optically correct
- 5) Not how vision works
- 6) Fovea - 1 degree, 50% visual processing. Thumbnail at arms length. Brain constructs world view. The Matrix!
- 7) **ATTENTION.** Herman Grid. Mexican hat response curve
- 8) Donald Broadbent, 1950s. Crashing test pilots
- 9) Filter theory. Brain processing has limited bandwidth.
- 10) Many Stimuli
- 11) Early selection model. Now refined theories.
- 12) Crashing pilots ignoring popups!
- 13) SEP – Douglas Adams was right!
Inattentional blindness

14)Pop-out - catches your attention

15)Shape, not easy

16)3d, easy!

17)Color, easy!

18)Bevel button – practical use of 3d illusion

19) **EYE MOVEMENT?** Saccades. Impossible to move smoothly...

20)...unless something to track

21)Text is not tracked (fantastic greek again!)

22)How much time wasted in saccades?
600wpm – not great. Similar “Times square”

23)Change blindness - can miss stuff during a saccade.

24) **Go!**

25)Flicker Zeitgeist problem

26)Interrupt can have the same effect

27)Go!

28)Without interrupt

29)Go!

30)Firefox change blindness

31)Go!

32) **GROUPING:** Subitizing. How many? (no counting!)

33)Go!

34)Go!

35)Go!

36) Counting Stars game forces you to group. Memory like grouping too

37)Phone numbers

38)Postcodes

39)Abacus - Do test 583914689 compared to 475 263 810

40)Visual grouping – columns and rows

41)Windows list view good

42)Windows tile view bad

43)Train timetable: Colors can help when both directions needed

- 44) **MAPPING:** faster if matching direction
- 45) Neurological test, two buttons
- 46) Blue
- 47) Two points
- 48) Green, same side
- 49) Clear
- 50) Green , opposite side
- 51) Interface parallel – alert box (Windows)
- 52) Alert box (Mac). Other way round. Why?
- 53) Orientation of keyboard
- 54) Shortcut keys match
- 55) Magma zone – when alerts go wrong
- 56) **CONCLUSION:** Do these neurological habits...
- 57) ...lead to Intuitiveness? Hope so!