Fun

C.W. Johnson,

University of Glasgow, Glasgow, G12 8QQ. Scotland. johnson@dcs.gla.ac.uk, http://www.dcs.gla.ac.uk/~johnson

October 2001

CS-1Q HCI

CS-1Q: HCI (Lecture 10) ©C.W. Johnson, 2001

Fun and Games

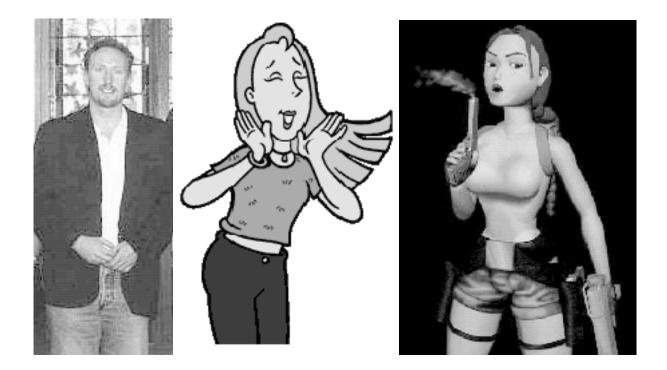
• Why Learn from Games?

- How to Transfer Strengths of Games:
- steal superficial design features;
- derive heuristics from successful games?
- understand the psychology of play?

• Physiology and Affective Computing...

Fun and Games

• Use strengths of games in other interfaces?

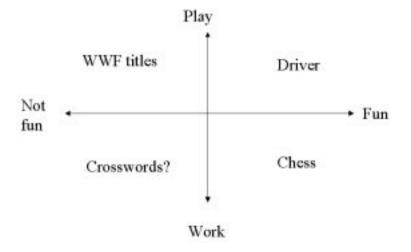


- MS Word as much fun as TombRaider?
- Holy grail of HCl?

CS-1Q: HCI (Lecture 10) ©C.W. Johnson, 2001

Fun and Games?

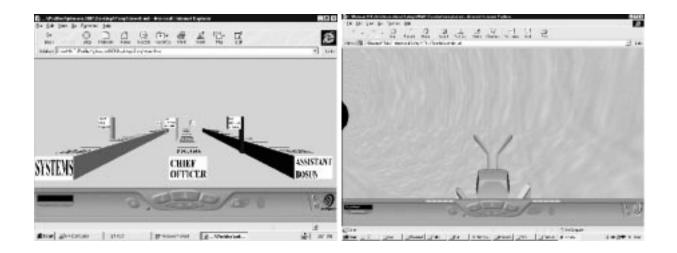
• Not all games are the same...



• We don't understand much about games...

Why Learn from Games?

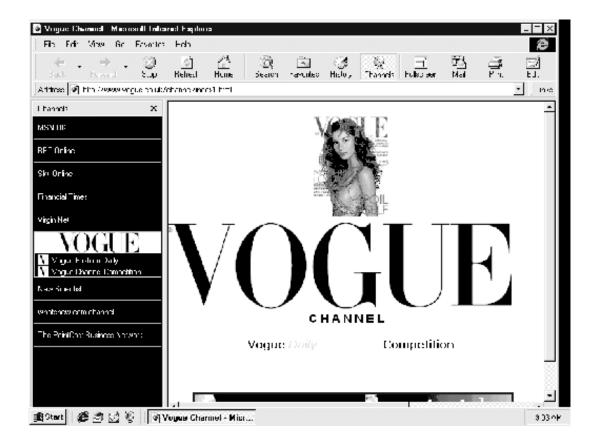
• Technology is now easy to access (eg VRML)



Increase creativity in interface design;
go beyond the usual menu based structures.

Why Learn from Games?

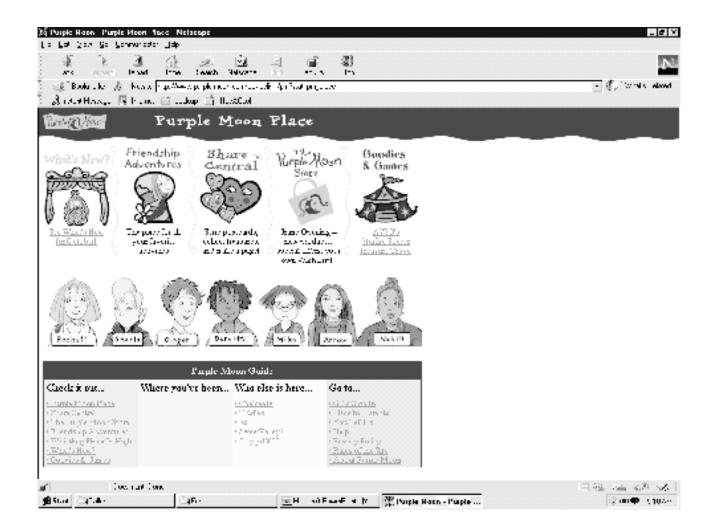
• Subjective satisfaction is very subjective.



• Task analysis does not always help here.

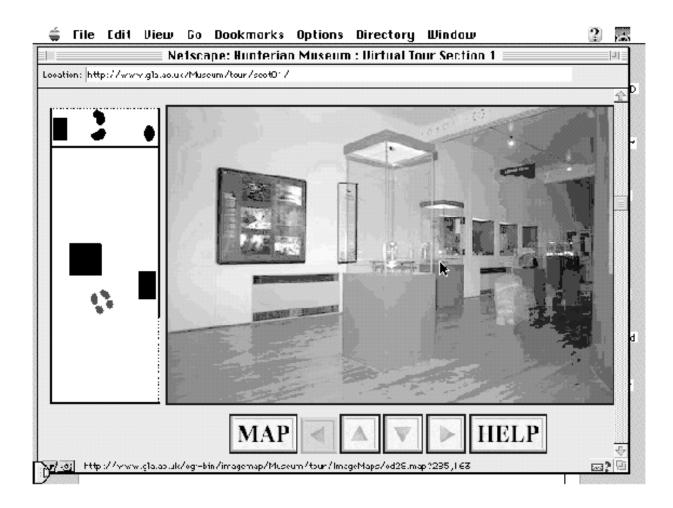
Why Learn from Games?

• Games open up new markets.



• Target new users, young, old etc.

How Can We Transfer Ideas from Games?Steal superficial screen components.



- But:
- unlikely to radically increase motivation;
- what can we steal? Scores? Punishments?
- how can we predict which features will work?

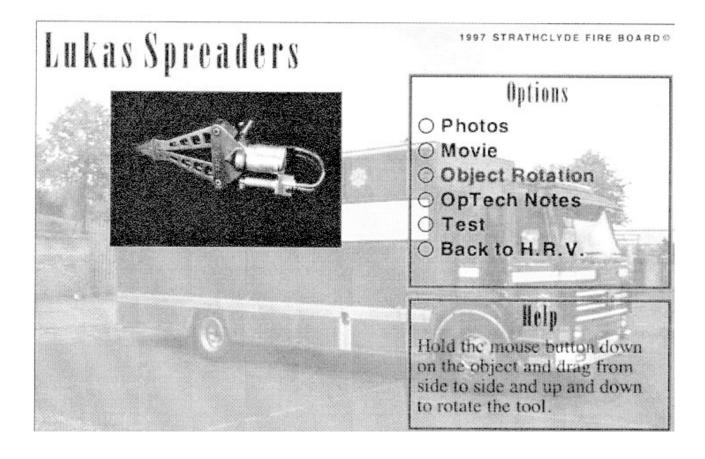
• Lisa Neal (1990) looks for generic ideas.

• A sense of control.

• Opportunity for discovery.

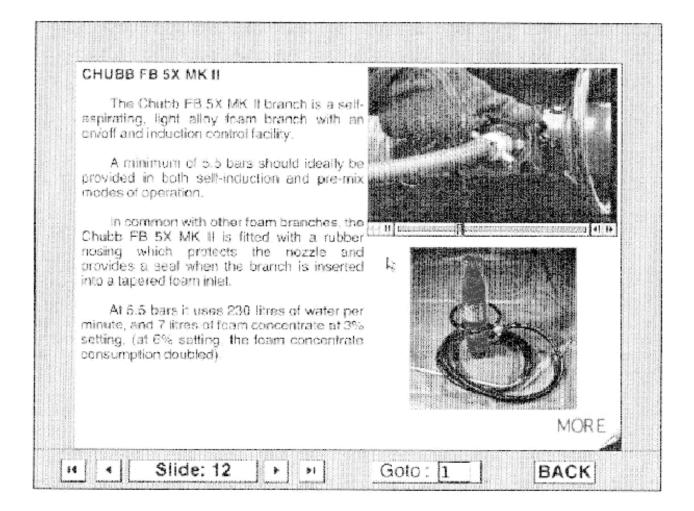
Non-goal activities support learning?
some users just want to have fun...

• Strathclyde Regional Fire Brigade.



Heavy rescue Vehicle (Mathers et al.);
uses desktopVR to explore inside the vehicle.

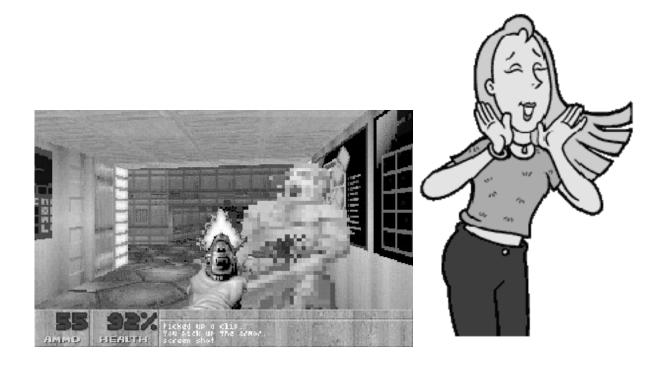
• Sometimes heuristics don't work.



• Foam training procedures have strict sequence; - can't explore in an undirected way and learn sequence?

Psychology of Play

- Neal still looking at surface issues;
- need to understand the underlying psychology.



Morris and 'mood congruence'
behaviour and mood is linked to self-image.

• Csikzentmihalyi and 'flow theory' - optimal challenge and control (risk?).



• Change levels of challenge to user expertise.

- Mood congruence:
- Picard and affective computing;
- computers might adapt to your moods;
- 'you do it, I can't be bothered.

• Flow theory:

- force users to explore new functionality;
- ok so you did it this way last time, so now...

Great interest in physiological computing;
sense user's pulse, galvanic skin resistance etc.

Summary

• Why Learn from Games?

- How to Transfer Strengths of Games:
- steal superficial design features;
- derive heuristics from successful games?
- understand the psychology of play?

• Physiology and Affective Computing...

Further reading

• Shneiderman doesnt look at this issue.

http://www.hcibib.org

• Look up Fun or Games on the Perlman database.

• Some brief papers by Rosalind Picard.