# Ch 6 SAQs (Pop Quiz)

- 1. What is the significance of the Xerox Star interface?
- 2. What are the five main principles proposed by the Xerox Star team?
- 3. What does GOMS stand for and what does it involve?
- 4. What are the ten main principles of efficient design?
- 5. How do these principles differ from Shneiderman's rules?



# UX from 30,000ft Principles of Affective Experience (part 1)

Chapter 7 - Lecture 11 (50 minutes) @sharpic http://sharpic.github.io/COMP33511/

### **Principles of Efficient Experience**

Affective<sup>1</sup> use, or emotional<sup>2</sup> use/design, both mean the same thing, and in reality were going to be using both terms interchangeably. However, you should be thinking of emotional use in more specific terms; the more specialised term of affective use. This is because the concept of emotional design is much broader than we need to address at the interface / interactive level. What we are trying to get to is 'emotional engagement' and to begin with, let me ask you a question...

- 1. Of or relating to the affections or emotions, esp. as contrasted with the intellect or rational faculty; emotional. Psychol. and Psychiatry. Of, relating to, or involving feelings, emotion, or mood. AFFECT Philos. An emotional, unreflective response. Psychol. (and Psychiatry). A feeling or subjective experience accompanying a thought or action or occurring in response to a stimulus; an emotion, a mood. In later use also (usu. as a mass noun): the outward display of emotion or mood, as manifested by facial expression, posture, gestures, tone of voice, etc --- OED.
- 2. Of or relating to the emotions; based on or appealing to the emotions. any strong mental or instinctive feeling, as pleasure, grief, hope, fear, etc., deriving esp. from one's circumstances, mood, or relationship with others --- OED.

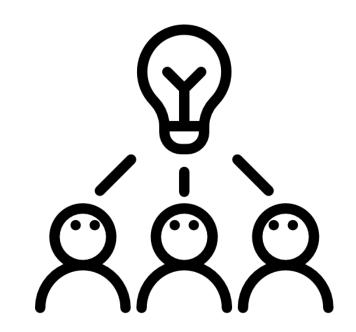
## People Love or Hate the Same Thing



Why Do Different People Love or Hate the Same Thing? MicroSoft

#### Visceral, Behavioural, and Reflective

# 1 minute



### Visceral, Behavioural, and Reflective

- **Visceral**: is equated with appearance, and ties into how we have evolved within our environment, which drives our perceptions of aesthetic and pleasure at an internal and unconscious level;
- Behavioural: relates to the pleasure and effectiveness of use, <u>we have</u> seen this previously, however, Norman contends that there is pleasure in efficiency (we're back to form following function again); and
- **Reflective**: is more complicated and coupled with self-image, personal satisfaction, and memories, it is about message, culture, and the *meaning* of a product.

### Experience by Committee

#### Design of a visceral or reflective experience by committee:

"The brilliant conceptual artist Vitaly Komar and Alex Melamaid conducted surveys asking people questions like, what's your favourite colour? Then they produced exhibitions of perfectly 'user centred art.' The results were profoundly disturbing.

The works were completely lacking in innovation or finesse of craftsmanship, disliked even by the very same survey respondents. Good art is not an optimal point in a multi dimensional space; that was, of course, their point. Perfectly 'user centred design' would be disturbing as well precisely because it would like that artistry."

#### Aesthetics? Lavie and Tractinsky

Aesthetics is commonly defined as the appreciation of the beautiful or pleasing but the terminology is still controversial [Lavie and **Tractinsky**, 2004]. Visual aesthetics is 'the science of how things are known via the senses' which refers to user perception and cognition. Current findings suggest that good visual aesthetics enhances positive feelings toward applications. Several studies have established that aesthetic opinions about interfaces are formed quite quickly, and do not wane immediately; this suggests that aesthetic considerations should be seen as an important aspect of any application life cycle.

# Psychology of Aesthetics



Jacobsen's Framework for Psychology of Aesthetics. Jacobsen <u>@sharpic</u> | UX from 30,000ft | COMP33511 | http://sharpic.github.io/COMP33511/

- **Diachronia**: Aesthetic preferences may change with time;
- Ipsichronia: Social/cultural processes may shape a person's aesthetic opinions;
- **Mind**: An individual's mental model of the visual stimulus or emotions could influence aesthetic judgements;
- **Body**: Brain activities could affect aesthetic evaluation processes;
- **Content**: The stimulus being evaluated could influence aesthetic processing;
- **Person**: The evaluator's background may play a role in aesthetic preference; and
- **Situation**: The surrounding circumstances (this includes time and place) could influence aesthetic choices.

#### Notes - In your own words!

# 3 minutes



# Manipulating Experiences

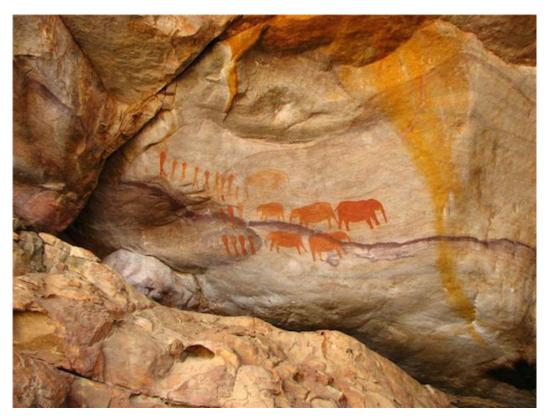
- 1. The use of visual aesthetics can alter the perceptions of the viewer by manipulating visual components such as colours, text style and size, images and animations.
- 2. In this way the user is unknowingly or unconsciously involved with the message of the software artefact.
- 3. The visual appeal of an interface can be assessed within 50 milliseconds in which time users make their impression about the software.

## **Clarity and Richness**

Visual clarity and richness was shown to be two of the most important aesthetic dimensions that strongly influence software users:

- Visual clarity refers to 'classical' aesthetic qualities pointing to clean, clear, and symmetric designs.
- 2. Visual richness refers to '**expressive**' aesthetics such as creativity, originality of the interface's aspects and designers' finesse and ability to '**break design conventions**'.

#### Narrative Art



Hunters with Elephants -- Cederberg Mountains, South Africa. Wikipedia @sharpic | UX from 30,000ft | COMP33511 | http://sharpic.github.io/COMP33511/

#### Models of Visual Attention

Selective visual attention is a complex action composed of conscious and subconscious processes in the brain that are used to find and focus on relevant information quickly and efficiently. There are two general visual attention processes, bottom-up and top-down, which determine where humans next locate their attention.

#### **Bottom-Up**

Bottom-up models of visual attention suggest that low-level salient features, such as contrast, size, shape, colour, and brightness correlate well with visual interest. For example, a red apple (a source of nutrition) is more visually salient, and therefore attractive, than the green leaves surrounding it.

#### **Top-Down**

Top-down models, on the other hand, explain visual search driven by semantics, or knowledge about the environment: when asked to describe the emotion of a person in a picture, for instance, people will automatically look to the person's face.

#### Notes - In your own words!

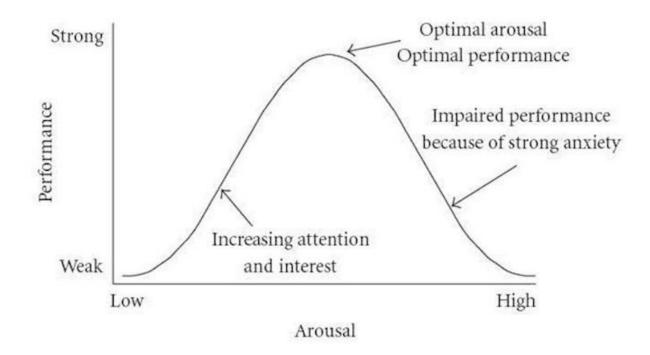
# 3 minutes



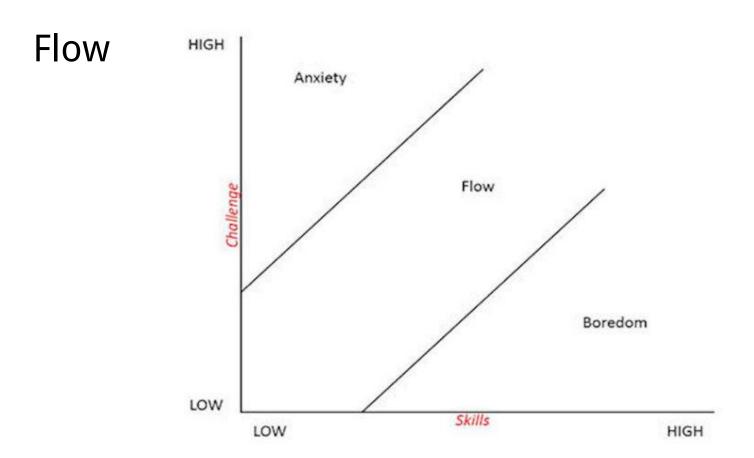
## Berlyne's Arousal Theory

Berlyne's theory holds that people love to experience aesthetic pleasure at moderate levels. There are also studies that have focused more on investigating the relationship between visual aesthetics and different aspects of user experience. Some of the aspects of user experience investigated so far include **usability, credibility, desirability, complexity and accessibility**.

The Sweet Spot



Hebbian version of the Yerkes Dodson Law (this version leaves out that hyper-arousal does not adversely impact simple tasks) Wikipedia



Flow: the psychology of optimal experience M. Csikszentmihalyi. Harper & Row, New York, 1st ed edition, 1990

# A Word of Warning



To Do

- 1. Read Next Chapter.
- 2. Be Ready to Answer the Chapter SAQs (Pop Quiz).
- 3. Is there a Discussion Topic.



#### See You Next Time!

Open House / Surgery - 2.60

Friday 09:00-11:00

@sharpic



## Break Time - Pause Recording

Back in 10 Minutes!

Come see me now if you have Questions Regarding this Lecture!



