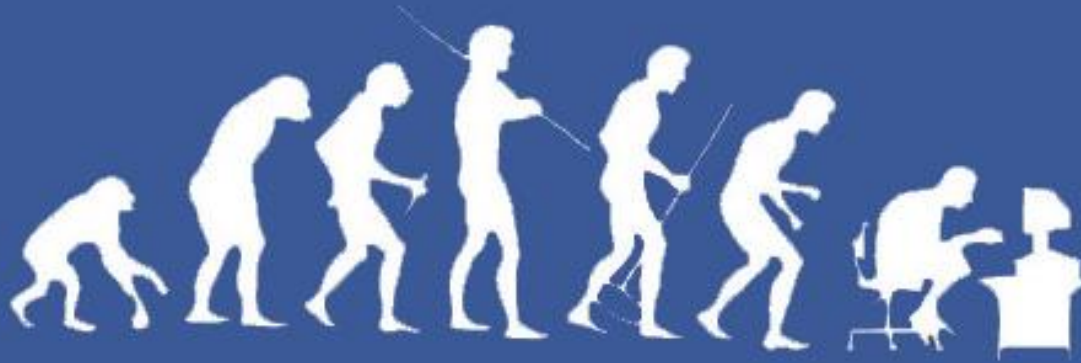




User Experience

Less is more, more or less...

Rebekah Rousi

Postdoctoral Researcher

Cognitive Science

Structure

- User Experience (UX, UE)
 - HCI paradigm shift
 - Approaches and views
 - Heuristics
- Some thoughts...
- Case: The Facebook Experience

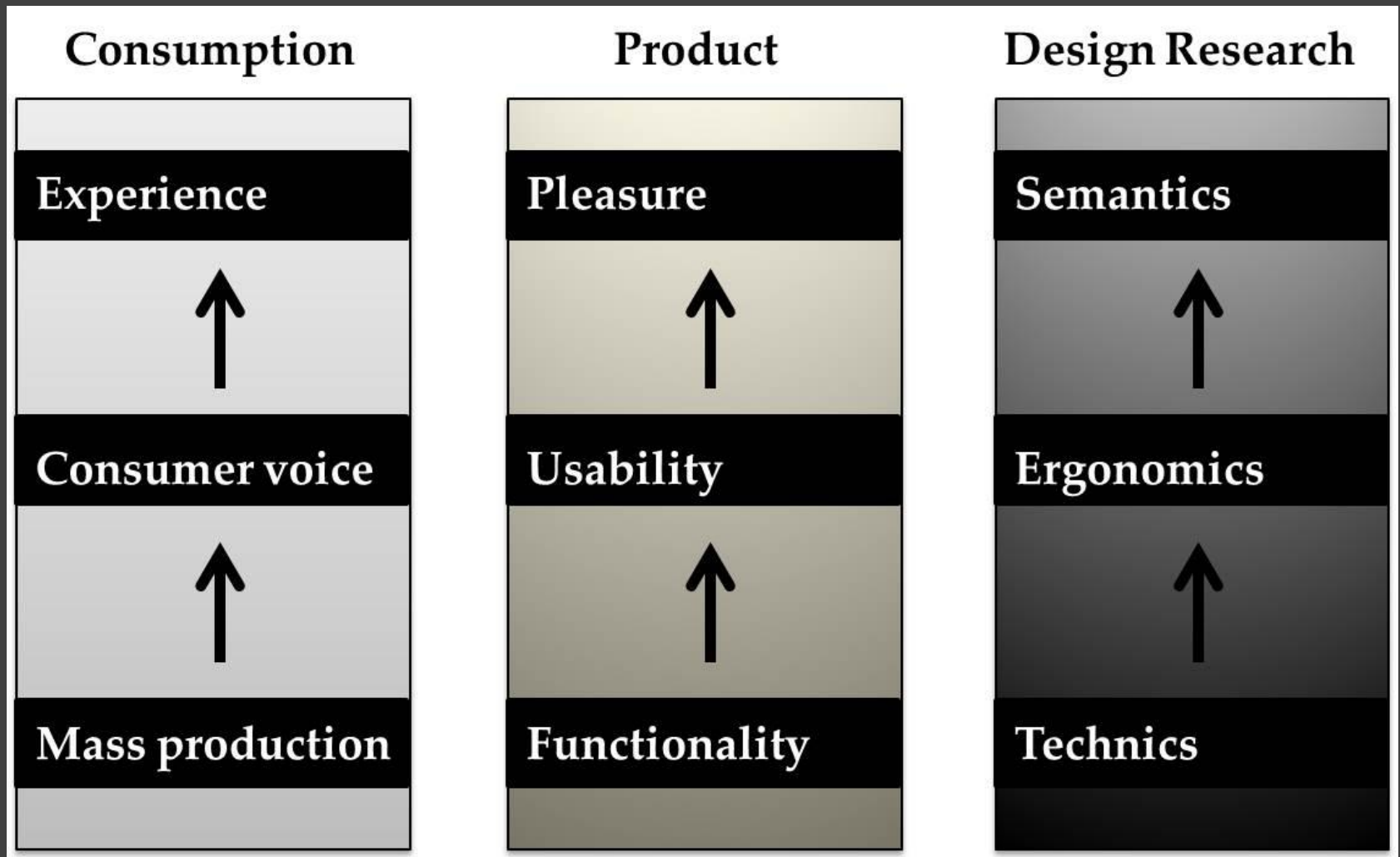
HCI early days

- Behavioural goals (work settings)
- Task-based usability testing
- Task as central

Usability Waves

(Lindgaard and Dudek 2002)

- **1st Wave**
 - improve cockpit design (WWII)
- **2nd Wave**
 - Computers from mainframes to PCs
 - PC user performance
- **3rd Wave**
 - Wider customer experience



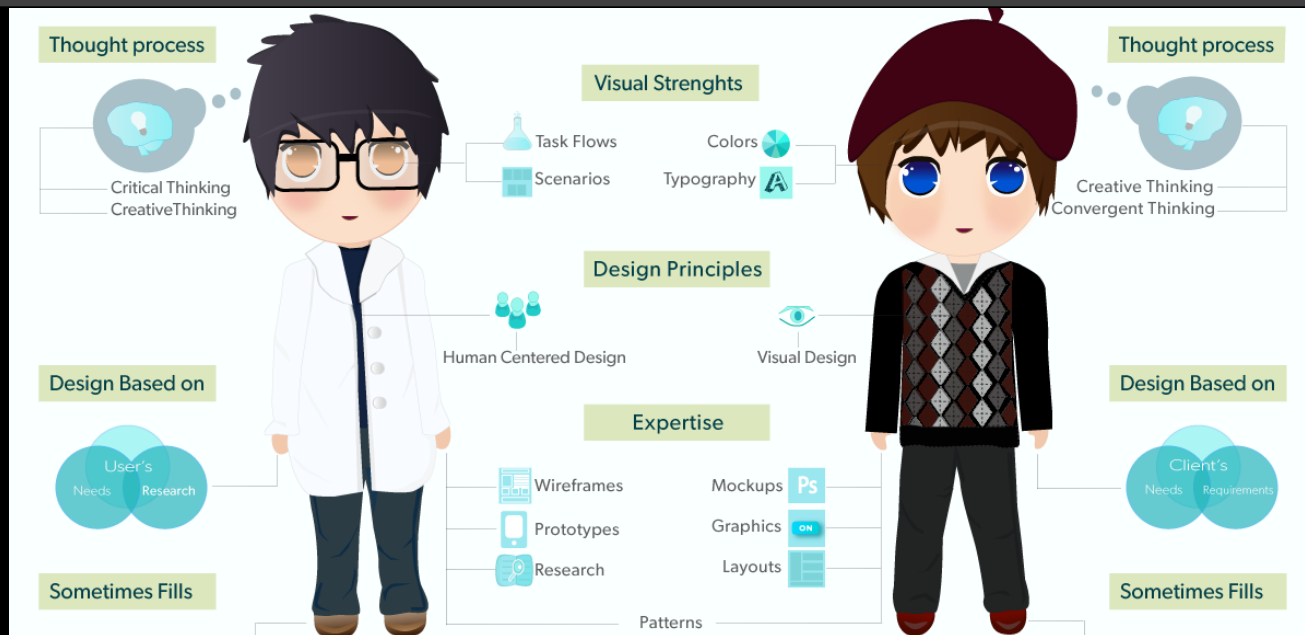
Fundamental shifts in nature of consumption, Karjalainen 2004

Rebekah Rousi, Human-Technology
Interaction

UX

(Kuniavsky 2005)

- Aggregates and contextualizes HCI

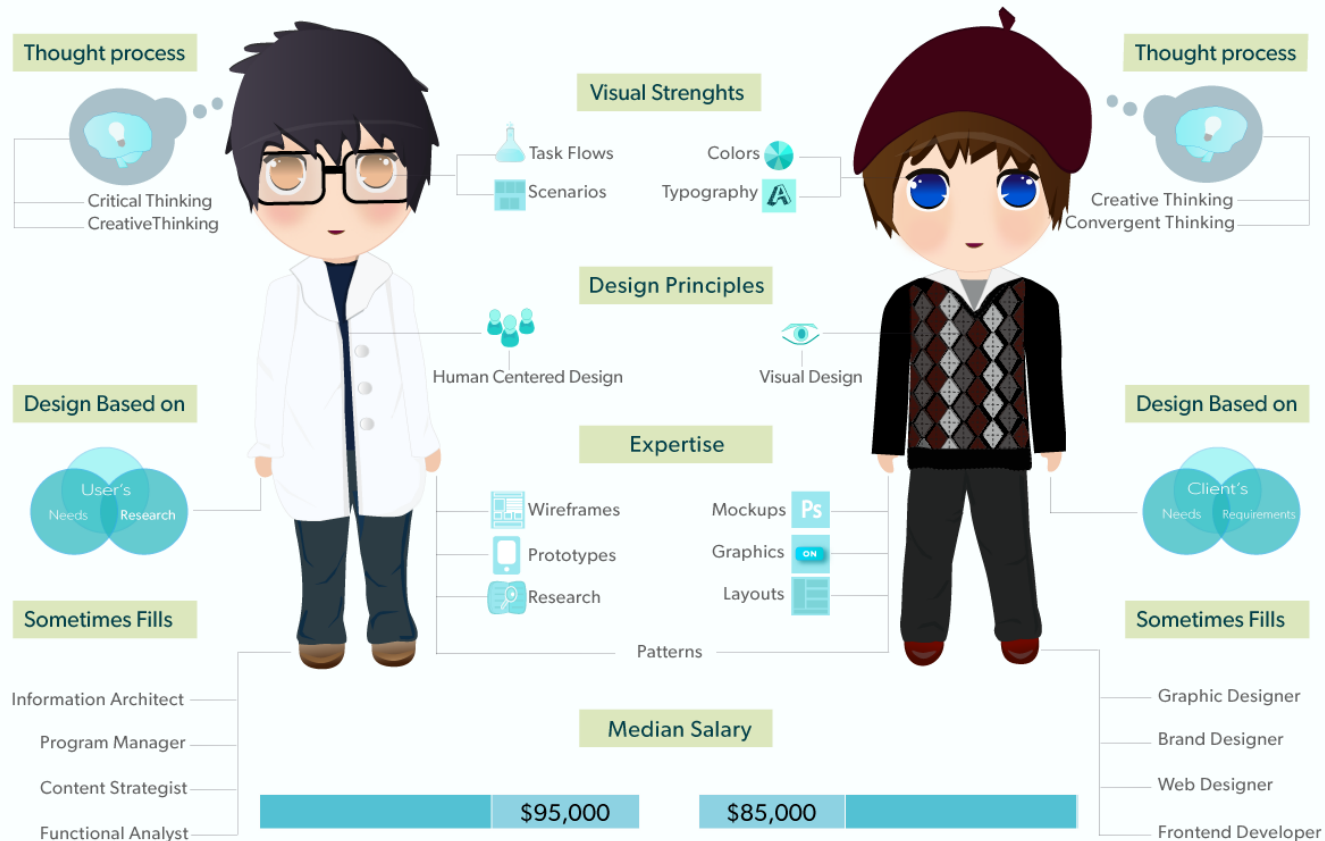


- User-system relationship as a whole

UX Designer

VS

UI Designer



Infographic created by Ana Harris
UXdesigner21.com

Rebekah Rousi, Human-Technology
Interaction

User Experience

(Roto et al. 2011)

- A field of study
 - design methods, how and what a person experiences

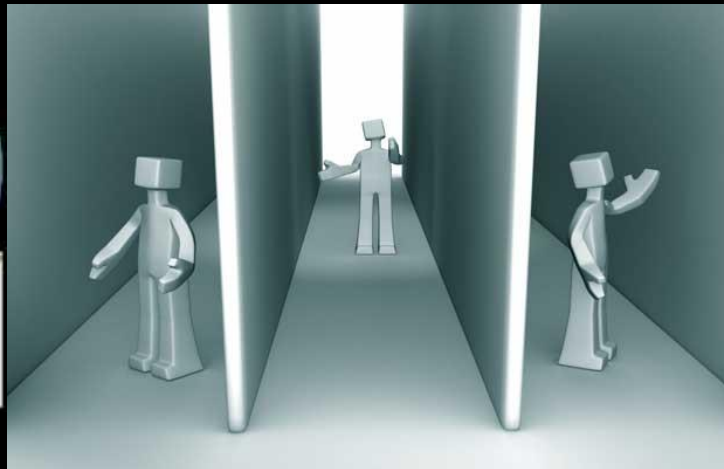


Image sources: <http://www.newlearner.com/courses/hts/cln4u/clnfieldstudy.htm>;
<http://www.security-faqs.com/which-security-field-is-more-interesting-to-you-network-penetrating-or-malware-analysis.html>;
<http://www.puregraceful.com/field-wallpapers/>

User Experience

(Roto et al. 2011)

- A phenomenon
 - parameters of UX described
 - types of UX, conditions and implications



Source: <http://www.rebelcircus.com/blog/incredible-natural-phenomenons/>

User Experience

(Roto et al. 2011)



Source: <https://momentumdesignlab.com/10-your-graphic-designer-is-your-ux-designer-top-10-signs-your-ux-stinks/>

- A practice
 - design and evaluation techniques

Main models of UX

(Rousi 2013)

- **Holistic approaches**
- **Non-instrumental qualities**
- **Psychological approaches**
- **Social approaches**
- **Cross-cultural issues**

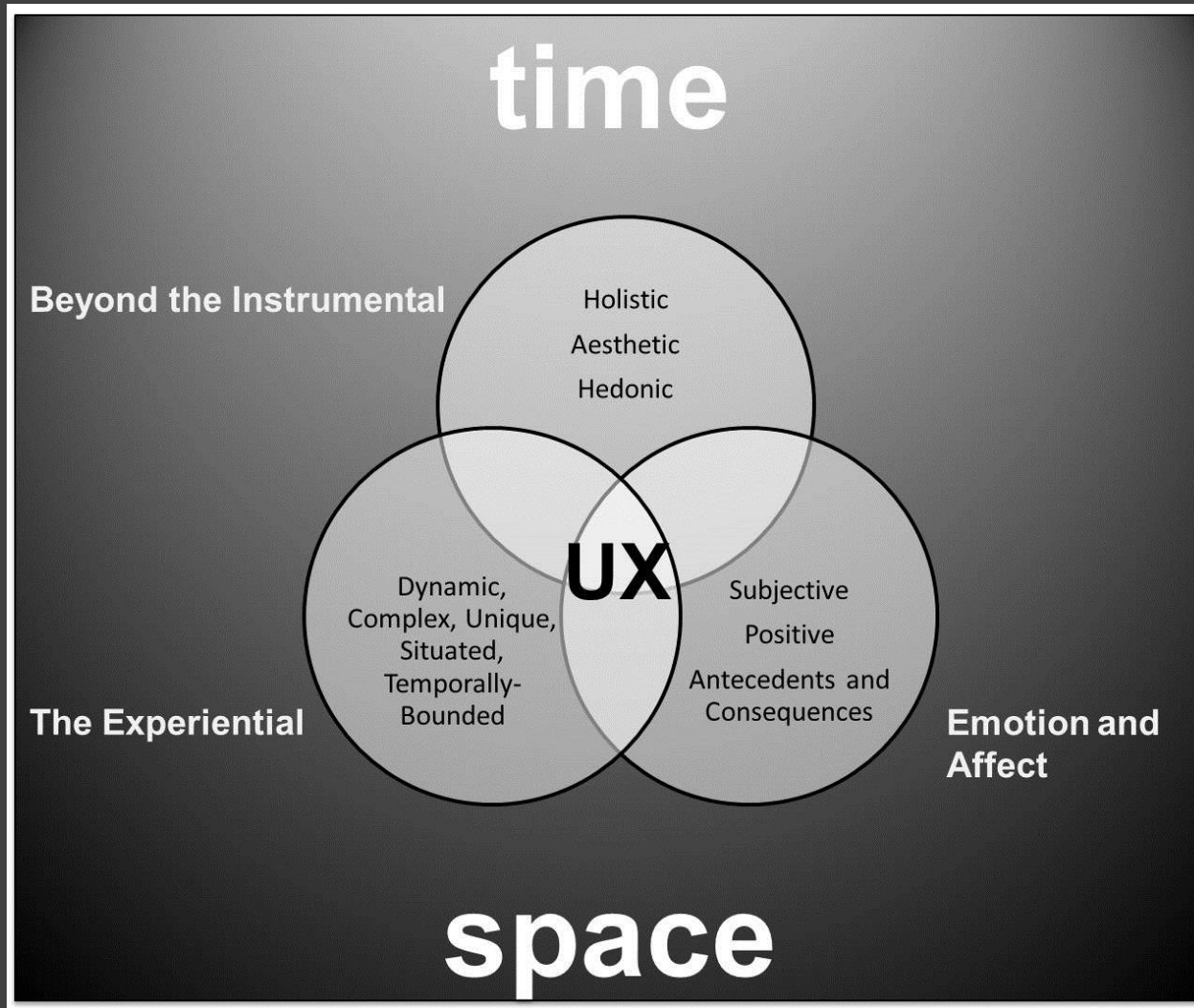
Holistic approaches

- Treat UX as a broad approach to HCI
- Use holistic approaches to define and describe UX
- Create a complete picture of UX
- Some key scholars:
 - Marc Hassenzahl, Katja Battarbee, Ilpo Koskinen, Shannon Ford, Jodi Forlizzi, Noam Tractinsky, Virpi Roto, Effie Lai-Chong Law, Kaisa Väänänen-Vainio-Mattila, Arnold Vermeeren, Joke Kort, Mike Kuniavsky, Mark Blythe, Sari Kujala ...

Holistic approaches

Some key texts:

- “**User Experience – A Research Agenda**” (Hassenzahl and Tractinsky 2006);
 - <http://www.uio.no/studier/emner/matnat/ifi/INF5590/h12/undervisningsmateriale/hassenzahl---tractinsky-2006-user-experience-research-agenda.pdf>
- “**Towards a UX Manifesto**” (Law, Vermeeren, Hassenzahl and Blythe 2007);
 - http://www.bcs.org/upload/pdf/ewic_hc07_wopaper6.pdf
- “**Understanding, scoping and defining user experience: a survey approach**” (Law et al. 2009);
 - https://www.academia.edu/1975947/Understanding_scoping_and_defining_user_experience_a_survey_approach
- *Observing the User Experience – a practitioner’s guide to user research* (Kuniavsky 2003);
- “**User Experience White Paper – bringing clarity to the concept of user experience**” (Roto et al. 2011).
 - <http://www.allaboutux.org/files/UX-WhitePaper.pdf>

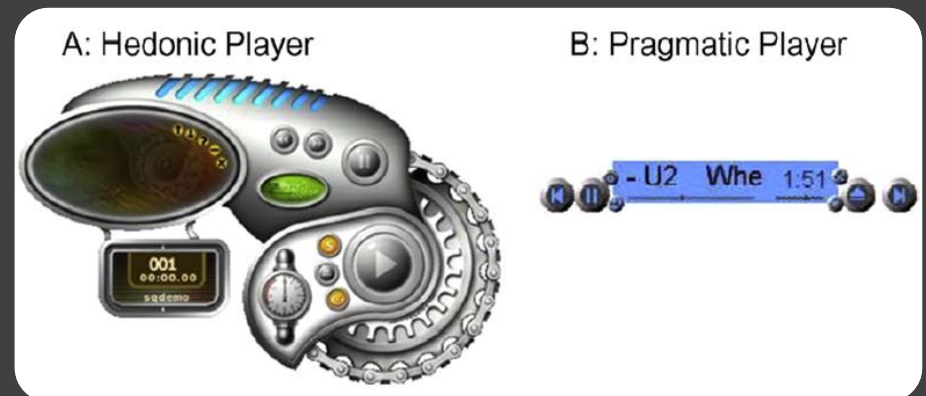


Hassenzahl and Tractinsky's (2006) Facets of UX

Non-instrumental qualities

- Fun, surprise, intimacy, pleasure, beauty, ludic and diversion
(Draper 1999; Gaver 2002; Gaver and Martin 2000; Jordan 1998; Mahlke and Thüring 2007)
- Jordan's (2000) hierarchy of user needs
 - enhancing users' interactions with systems
- Rafaeli and Vilnai-Yavetz (2004)
 - three quality dimensions: instrumentality, symbolism and aesthetics

Image source: Hassenzahl, M., Schöbel, M., & Trautmann, T. (2008). How motivational orientation influences the evaluation and choice of hedonic and pragmatic interactive products: The role of regulatory focus. *Interacting with Computers*, 20(4), 473-479.



But, is it misleading to refer to these as non-instrumental?

They are instrumental in that they:

- 1) entice a user to engage in interaction
(Angeli, Sutcliffe and Hartmann 2006; Overbeeke, Djajadiningrat, Hummels and Wensveen 2002);
- 2) induce a sense of capability within the user – they feel as if they can utilise the design
(Lavie and Tractinsky 2004; Tractinsky, Katz and Ikar 2000; Tractinsky and Zmiri 2006);
- 3) allude to a sense of quality and thus trust within the user
(Dion, Berscheid and Walster 1972; Norman 2002, 2004);
- 4) instil a sense of identification – the user (or potential user) can recognise the product, and when using it they identify with and through it, consolidating the user-design relationship
(Hassenzahl 2003)

Psychological approaches to UX

Mental experiential event

(Forlizzi and Battarbee 2004; Jordan 2000; Hassenzahl 2003; Lavie and Tractinsky 2004; McCarthy and Wright 2004)

Result of numerous interacting factors including:

- sensorial input (the five senses),
- cognition (thinking and acting),
- affect (emotions and feelings),
- temporality (time), spatiality (inhabited space),
- relationality (social relationships)
- and corporeality (the body and physicality)

(Coxon 2007; Hassenzahl and Tractinsky 2006; Wang, Young, Love and Coxon 2013)

Psychological approaches to UX cont...

Some psychological approaches:

- 1) the role of emotions in forming memorable experiences and affective relationships between product and brand;
- 2) the role of positive emotion in enhancing usability, or perceived usability;
- 3) identification and articulation through design and brand consumption;
- 4) usage intention and facilitation of design in achieving (social) ends

(Diefenbach and Hassenzahl 2011)

Thus...

UX design is not all about the design itself, rather what the design should be doing to assist its user in everyday situations and social interactions.

Social approaches

Three main streams:

- 1) Co-experience

(Battarbee and Koskinen 2005)

- a social quality of UX which enhances interaction

- 2) UX as a social manifestation

(Duan, Gu and Whinston 2008; McCarthy and Wright 2004; Mäkelä, Giller, Tscheligi and Sefelin 2000)

- product (design) meaning, and experience is generated through social interaction

- 3) Design strategies

(Kankainen 2002)

- Designer-user design strategies

Cross-cultural issues

Technologies, their usage and interactions are cultural by nature

- Cross-cultural comparison of design preferences and UX
(Cyr 2008; Cyr and Trevor-Smith 2004; Marcus 2006; Marcus and Gould 2000; Tractinsky 1997)
- Theoretical models comprising cultural dimensions to their own cross-cultural evaluative framework
(Cyr and Trevor-Smith 2004; Lee et al. 2008; Marcus 2006; Marcus and Gould 2000)
 - Need to be used with caution
 - Do they fit to the field of study in question?
 - Theories are also, geographically and culturally located
 - These pose fixed notions of cultures and cultural characteristics

Studies

An empirical approach

Quick look: Nielsen's (1995) 10 Usability Heuristics

- Visibility of system status
- Match between system and the real world
- User control and freedom - "emergency exit"
- Consistency and standards
- Error prevention
- Recognition rather than recall
- Flexibility and efficiency of use – short-cuts
- Aesthetic and minimalist design
- Help users recognize, diagnose, and recover from errors
- Help and documentation

10 UX heuristics

Leena Arhippainen (2009 & 2013)

- Ensure usability
- Provide utility matching with the user's values
- Surpass the user's expectations
- Respect the user
- Design the product or service to fit the intended contexts
- Provide several ways to interact, leave choice for the user
- Respect the user's privacy and security
- Support the user's activities - do not force
- Go for a perfect visual design
- Give a surprise gift

Some of my thoughts

UX is the mental interpretation of technologies, their usage and affect/effects in people's lives.

Why instead of designing for emotions, we
should be focusing on designing for no
emotional experience

Some tips to reduce *emotion*

- If it's not broke, don't fix it
 - Requires re-learning
 - Risk that things that did work, no longer work

The many faces of Facebook



The screenshot shows the original Thefacebook website. The header features a pixelated profile picture of Mark Zuckerberg on the left and the site's name "[thefacebook]" in a large, blue, monospace-style font on the right. Below the name are links for "login", "register", and "about". The main content area is titled "Welcome to Thefacebook!" and contains a large heading "[Welcome to Thefacebook]". The text describes the site as an online directory for college social networks, specifically mentioning Harvard University. It lists four features: searching for people at your school, finding out who is in your classes, looking up friends' friends, and seeing a visualization of your social network. At the bottom of the main content area are "Register" and "Login" buttons. A footer at the very bottom contains links for "about", "contact", "faq", "terms", and "privacy", followed by the text "a Mark Zuckerberg production" and "Thefacebook © 2004". On the left side of the page, there is a registration form with fields for "Email:" and "Password:", and "register" and "login" buttons.

[thefacebook]
login register about

Welcome to Thefacebook!

[Welcome to Thefacebook]

Thefacebook is an online directory that connects people through social networks at colleges.

We have opened up Thefacebook for popular consumption at **Harvard University**.

You can use Thefacebook to:

- Search for people at your school
- Find out who are in your classes
- Look up your friends' friends
- See a visualization of your social network

To get started, click below to register. If you have already registered, you can log in.

Register Login

about contact faq terms privacy
a Mark Zuckerberg production
Thefacebook © 2004

Email:
Password:
register
login

The homepage of Thefacebook on February 12, 2004



2004



2005



2006



2007



2008



2009



2010



2011



2012



2005



2006



2007

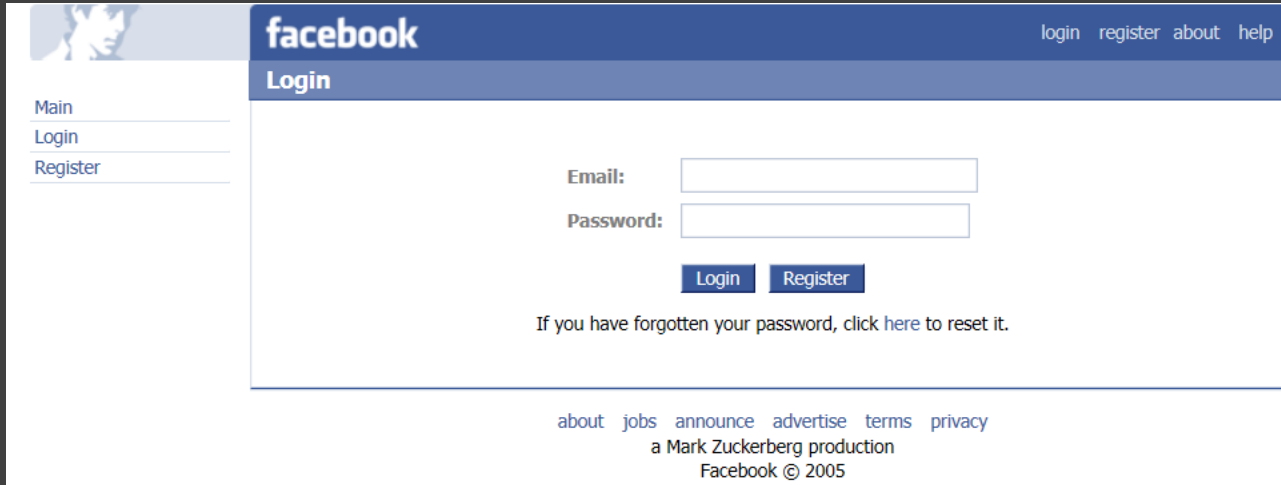


2008



2009





A screenshot of the Facebook login page from 2005. The page has a blue header with the Facebook logo and navigation links. A left sidebar contains links to Main, Login, and Register. The main content area is titled 'Login' and contains input fields for Email and Password, along with Login and Register buttons. A link for password reset is provided below the buttons. The footer contains additional links and copyright information.

facebook login register about help

Login

Main
Login
Register

Email:

Password:

Login Register

If you have forgotten your password, click [here](#) to reset it.

[about](#) [jobs](#) [announce](#) [advertise](#) [terms](#) [privacy](#)
a Mark Zuckerberg production
Facebook © 2005

<http://web.archive.org/web/20051128005847/http://www.facebook.com/login.php?>



facebook [login](#) [register](#) [help](#)

Welcome to Facebook!

Email:

Password:

[Login](#)

Facebook is a social utility that connects you with the people around you.

Facebook is made up of many networks, each based around a [company](#), [region](#), [high school](#) or [college](#).

You can use Facebook to:

- Share information with people you know.
- See what's going on with your friends.
- Look up people around you.

[▶ Register](#)
Everyone can join.

[▶ Take the Tour](#)
Learn about Facebook.

[▶ Who's on Facebook?](#)
Find friends before you join.

[about](#) [blog](#) [developers](#) [jobs](#) [terms](#) [privacy](#) [advertise](#)
a Mark Zuckerberg production
Facebook © 2007

<http://web.archive.org/web/20070123155902/http://www.facebook.com/>



Use Facebook to...

-  Keep up with friends and family
-  Share photos and videos
-  Control privacy online
-  Reconnect with old classmates
-  Discuss interests and hobbies
-  Plan parties and other events

Facebook is a **social utility** that **connects you** with the people around you.

JavaScript is disabled on your browser.

Please enable JavaScript on your browser or upgrade to a Javascript-capable browser to register for Facebook.

<http://web.archive.org/web/20080326234750/http://www.facebook.com/>

facebook

Email or Phone

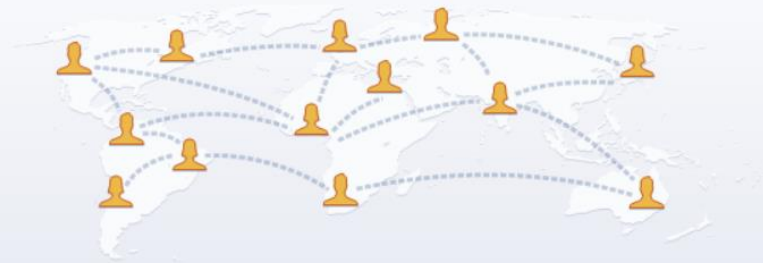
☐ Keep me logged in

Password

[Forgotten your password?](#)

Log In

Facebook helps you connect and share with the people in your life.



Create an account

It's free and always will be.

First name

Surname

Email or mobile number

Re-enter email or mobile number

New password

Birthday

Day

Month

Year

[Why do I need to provide my date of birth?](#)

☐ Female ☐ Male

By clicking Create an account, you agree to our [Terms](#) and that you have read our [Data Policy](#), including our [Cookie Use](#).

Create an account

CNN

MSN

Yahoo!

Google

2001

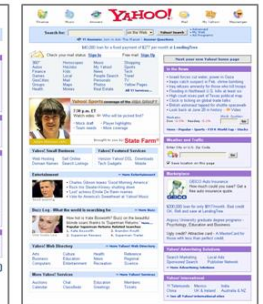
2002

2003

2004

2005

2006



If it is broke, do fix it

- University library:
 - Repetitive actions – some information multiple times
 - Difficult to trace – lack of visibility in path history

The screenshot shows the login page of the University of Jyväskylä library. At the top, there is a header with the university logo and name, and a navigation bar with links: Haku, Omat tiedot/Uusinta, Omat haut, Omat viitteet, Lopetus, and Opastus. Below the header, there is a button labeled "In English". The main section is titled "Kirjaudu" (Log in) and contains a form with the following fields: "Tunniste:" (Username) with a dropdown menu showing "Kirjastokortin nro", "Sukunimi:" (Surname), "PIN (oletus 12345):" (PIN), and "Oma kirjasto:" (My library) with a dropdown menu showing "Jyväskylän yliopiston kirjasto". A "Kirjaudu" button is at the bottom of the form. A small text note above the form says: "Anna kirjastokorttisi numero, PIN-tunnuksesi ja sukunimesi. Paina sen jälkeen **Kirjaudu** -painiketta."

UX as people-people interaction



UX as people-people interaction – case Facebook

Facebook: engineering world-class and business increasingly robust

But,

- Little sensibility or empathy for human condition
- Human behaviour that can't be averaged, or aggregated or predicted.
- Regular controversies, inappropriate content:
 - two graphic videos of beheadings
 - Facebook did not remove for more than a week
 - defended publishing a video of a woman beating a baby
- Facebook's stance:
 - Due to scale it relies on users to flag content
 - poor and inconsistent decisions are made by individuals when extreme cases surface in the media.

Ethics

Corporate philosophy – “move fast and break things”

- Ignoring ethical and interpersonal implications of rapid developments

Data provided in Facebook can be used to...

- Identify sexuality, religion, politics and IQ from ‘likes’

And, is being used to match advertisements with users

facebook by FDP (s.o.b.)



Two thumbs up!



For God's sake,
no more "MyCalendar"



So, time to have a beer?



Awesome!!



Yo! I dig that!



OK, OK, whatever,
I'll click "like"



That's just crap.



Kindda stupid.



Ma che cazzo?!



Do u wanna fight me?



This is good stuff!



You can say THAT again!



F*** you!!!



Charlie bit my finger!



Kick ass!

Image source: <http://mytechquest.com/interesting/evolution-of-facebook-like/>

UX, to be continued....

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