User experience (UX) for interfaces

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Image: Fritz Lang, Metropolis (1927)

Plan for this hour is:

Theories about UX for interfaces
&
3 group tasks

Outcome:…

How and where is knowledge created with interfaces

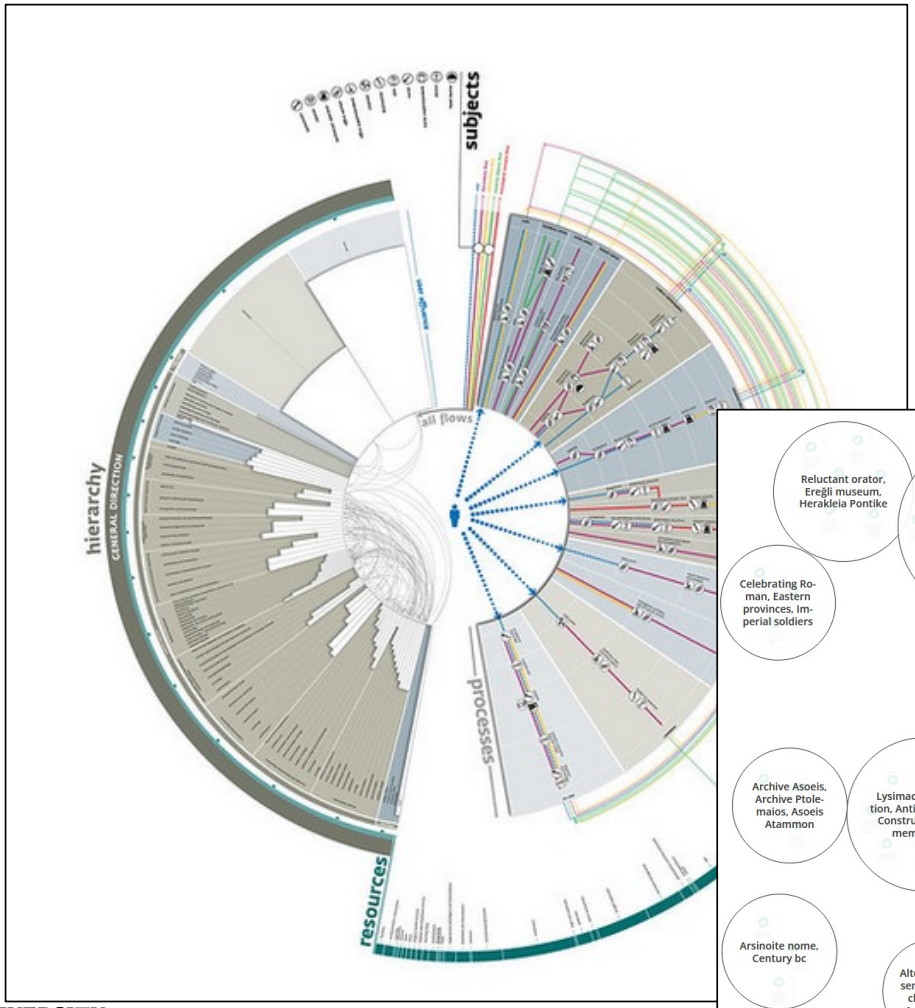
A promising approach for designers emerges when visualizing datasets:

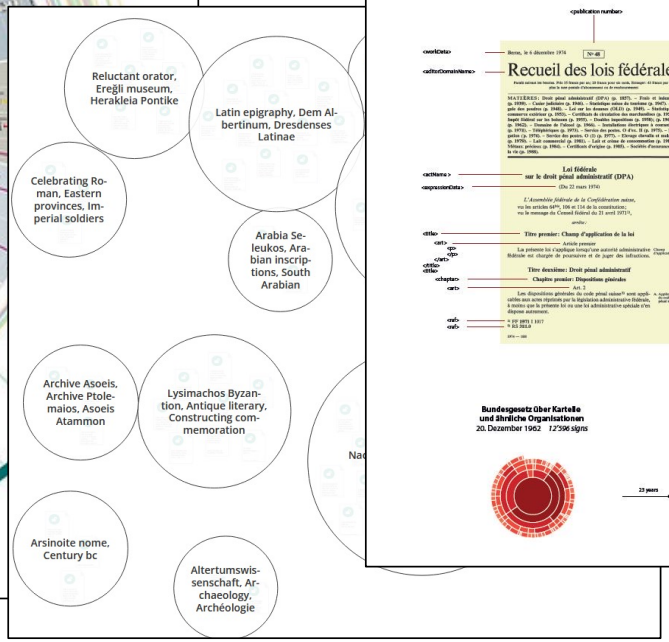
Interfaces become performative environments where scholars can play with the data and build their own interpretations, mingling “reading” and “making”, “thinking” and “building” (Ramsay, 2011)

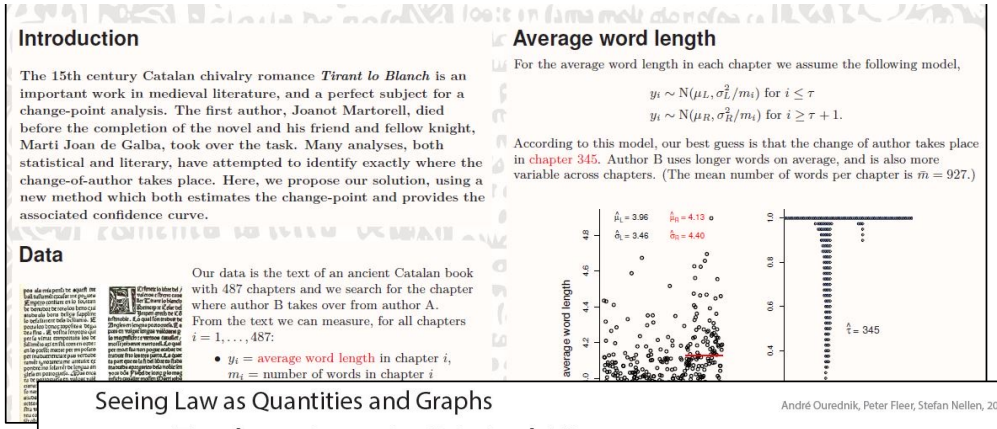
The interface becomes a design tool (Ciuccarelli, 2014).

S. Ramsay. “On Building”. <http://stephenramsay.us/> (2011, January 11) Retrieved September 8, 2013, from http://stephenramsay.us/text/2011/01/11/on-building/
Ciuccarelli, P. Mind the graph: From visualization to collaborative network constructions. Leonardo 47, 268–269 (2014).

Some examples







Introduction

The 15th century Catalan chivalry romance ***Tirant lo Blanch*** is an important work in medieval literature, and a perfect subject for a change-point analysis. The first author, Joanot Martorell, died before the completion of the novel and his friend and fellow knight, Marti Joan de Galba, took over the task. Many analyses, both statistical and literary, have attempted to identify exactly where the change-of-author takes place. Here, we propose our solution, using a new method which both estimates the change-point and provides the associated confidence curve.

Data

Our data is the text of an ancient Catalan book with 487 chapters and we search for the chapter where author B takes over from author A. From the text we can measure, for all chapters $i = 1, \ldots, 487$:

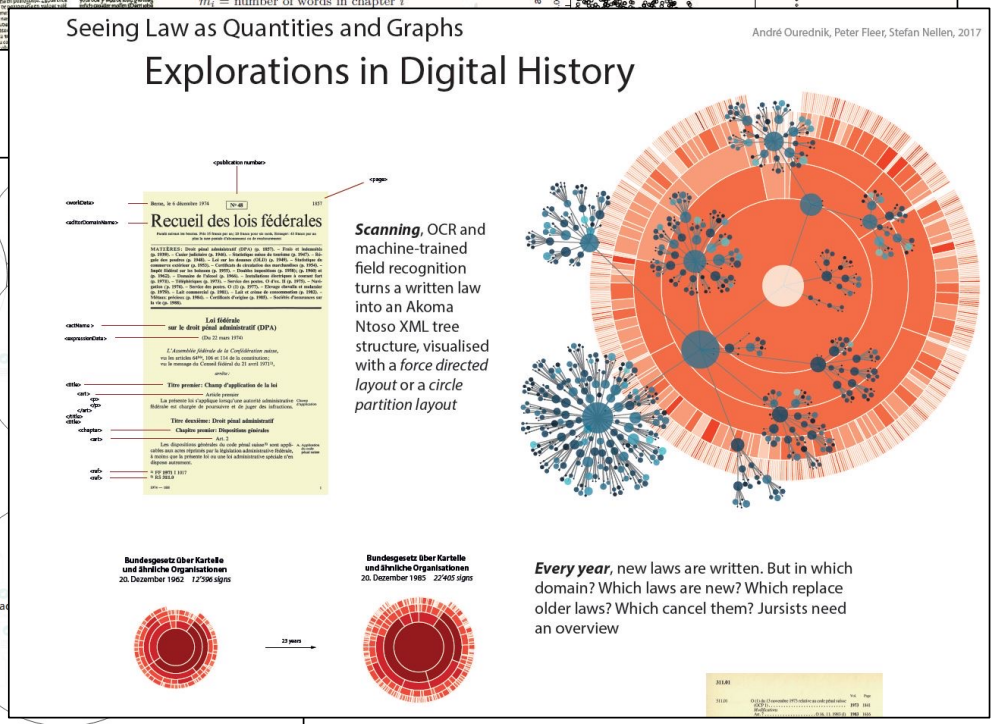
- y_i = average word length in chapter i,
- m_i = number of words in chapter i

Average word length

For the average word length in each chapter we assume the following model,

$$y_i \sim \mathrm{N}(\mu_L, \sigma_L^2/m_i) \text{ for } i \leq \tau$$
$$y_i \sim \mathrm{N}(\mu_R, \sigma_R^2/m_i) \text{ for } i \geq \tau + 1.$$

According to this model, our best guess is that the change of author takes place in chapter 345. Author B uses longer words on average, and is also more variable across chapters. (The mean number of words per chapter is $\bar{m} = 927$.)



Images: Density design lab, open knowledge maps, University of Oslo, Ourednick et al. 2017.

Motivation for using UX: From a research project to drift

Make your database interface more user friendly

Avoid only moving text from physical to digital format (incremental changes)

Databases developed during a research project *should* become public and easy to access for researchers (Open Science & sustainability)

Support an interdisciplinary use of your database (sustainability)

Why UX?

Often we are met with barriers in digital systems. Reflect on how often you “jump” out of websites or service that does not work well!

We need UX because technology has traditionally been in the driver's seat, and the graphical user interface has been added afterward!

User experience (UX)

The **user** experience (UX) addresses a person's

Behavior

Attitudes

Emotions

when using a specific service, system, or product.

A user **experience** (UX) may have the connotation of being

complex,

unique,

and **contextual**

(Hassenzahl and Tractinsky, 2006).

Hassenzahl, M., & Tractinsky, N. (2006). User experience—A research agenda. *Behaviour & Information Technology*, *25*(2), 91–97.
Hornbæk, K., & Hertzum, M. (2017). Technology Acceptance and User Experience: A Review of the Experiential Component in HCI. *ACM Transactions on Computer-Human Interaction*, *24*(5),

User experience (UX)

So, what makes your interface **unique**, and **contextual**?

The User Experience of your data

The User Experience of your data

The User Experience of your data

The User Experience of your data

The User Experience of your data

Images: tripadvisor

So how to understand the user's **Behavior** and **Attitudes**, so your interface works well

Task 1: Sabotage

What should my database interface **do** so I am sure users will never come back?

10 minutes

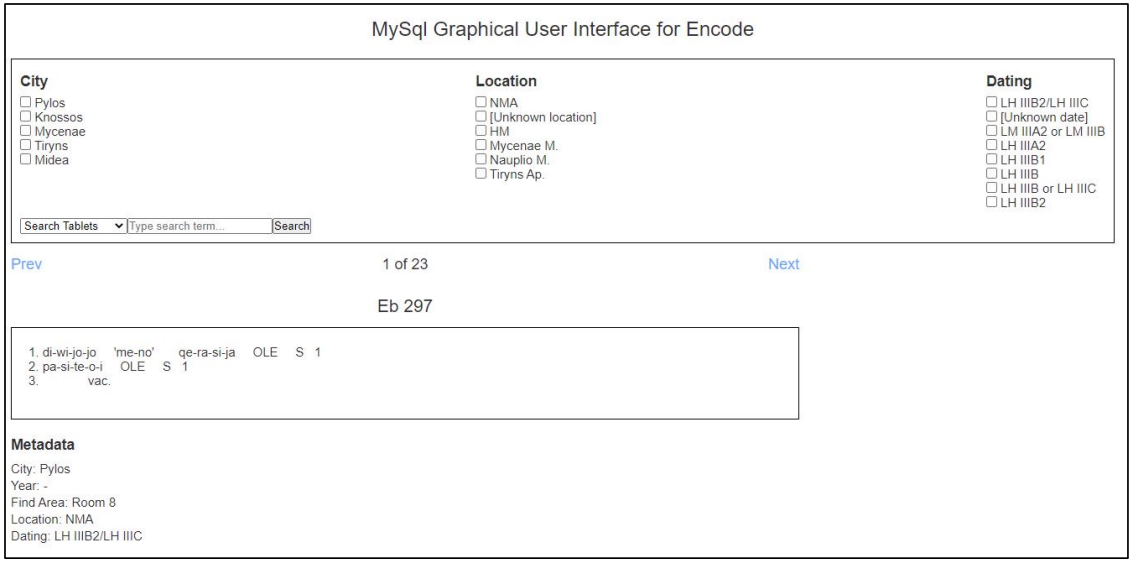
work together!

First phase: understand the user

What if another researcher wishes to use your database?

What kind of considerations have you been taken?

What are you taking for granted?



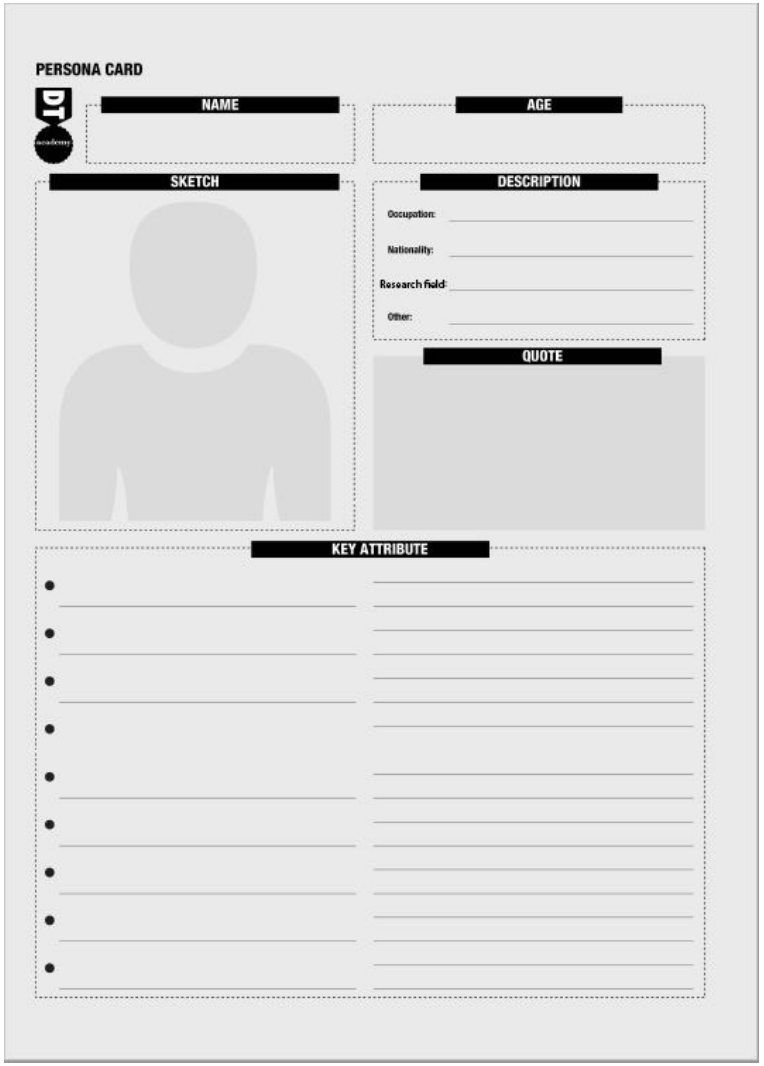
Personas

One way to understand your users is to create a persona:

Is a composite character, but includes attitude and goals

The goal is to be empathic with your users

Task 2: develop a persona



For “Key Attributes”, think:

What catches your attention?

What makes you curious?

Work for yourself x 10 minutes!

Wireframes

Paper or digital based approach to design the UX of using an interface.

Helps to look and refine the structure and flow!

Also used to create Information Architecture (e.g. structure of the site), content, layout, and so on.

Image: FOCA stock

Task 3 : wireframing

Based on the P*ersonas* and the *Sabotage* task, try to make a wireframe of your interface.

Possible components:

Site features, navigation, information, closed area, visualization of data, small videos

It is ok to borrow ideas from other sites.

Wrap-up

Comments?

Mille grazie!

Quesions?