

#### Introduction

This presentation summarizes the testing process for the Universal Language Selector prototypes

- Logistics. What, when and by whom were prototypes tested.
- **Lessons learned.** What worked, what not, and the solutions applied or proposed.

### The testing process

### On May 21 we presented the ULS designs to the community

- 17 Users were initially interested in participating
- 16 Were contacted for participation
- 10 Tests were finally performed

#### Users background in Wikimedia projects:

- 2 content consumers
- 8 content contributors (and consumers)
- 2 WMF employers (for pilot tests)

### The testing process

#### Users spoke from 2 to 5 languages including

Hindi, Tamil, Marathi, Gujarati, English, Hebrew, Dutch, French, German, Catalan, Spanish, Italian, Nepali, and Esperanto.

5

Hindi speakers

From India, USA, UK, and Nepal

One also spoke Esperanto

4

Dutch speakers

From Netherlands

1

Hebrew speaker

From Israel

1

Catalan speaker

From Spain

### The testing process







May

June

2 users for pilot tests

5 - 6 May

4 users for 1st round

25 May - 4 Jun

6 users for 2nd round

11 - 22 Jun

Update designs based on feedback

### The prototypes

Interactive prototypes were elaborated to test the following:

- Content language change. View prototype
- Input method change. <u>View prototype</u>
- UI language change. <u>View prototype</u>
- Edit context support. <u>View prototype</u>
- Language-specific versions for Dutch, Hindi, and Hebrew
- Adaptation to different locations: inter-language and topright.

YouEye was used initially but due to compatibility issues, the screen sharing capabilities of Google Hangouts were used instead.

### The prototypes

Tests were based on the user profiles we defined earlier in the project.



George

Architect from Georgia.

- Georgian is his only language.
- Reads content from his tablet.
- He is not aware of language tools.



Nambi

Nurse from Paraguay.

- Native Guaraní speaker, also speaks Spanish.
- Contributes content in Guaraní from her laptop.



Rakha

Musician from India visiting Belgium.

- Speaks Tamil and has a little notion of English.
- Searches and reads content from a desktop computer at the hotel.



Lev

Professor from Israel.

- Speaks Hebrew and Russian, and studies Old Aramaic
- Makes extensive use of language tools and contributes content.

#### Related documents:

- Test scenario definition. View
- User scenarios solved with the ULS design. View

#### The results

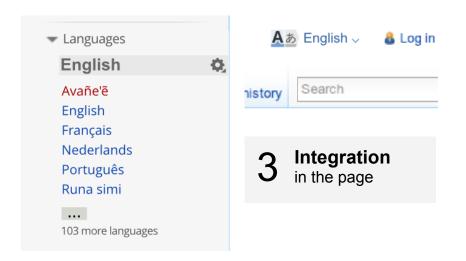
Observations are organized according to the different aspects of the designs:

ULS = Language picker + settings + integration

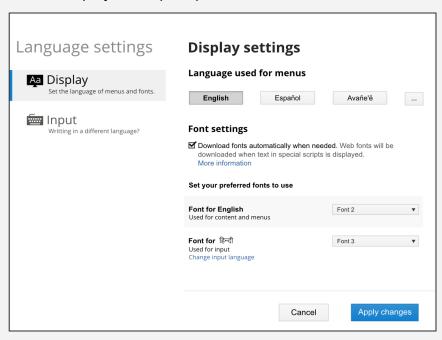
- Language picker. How can the user find a language between more than 400 options?
- Settings. How can the user change Content, Input and UI languages?
- Integration. At which placement works the ULS better?

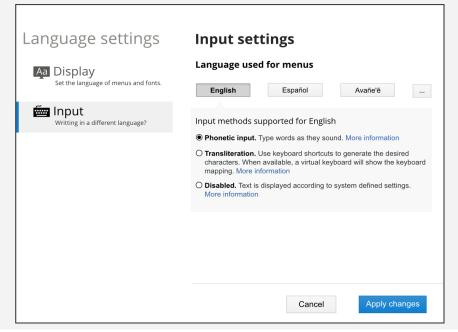
#### 1 Language picker Languages and navigation aids



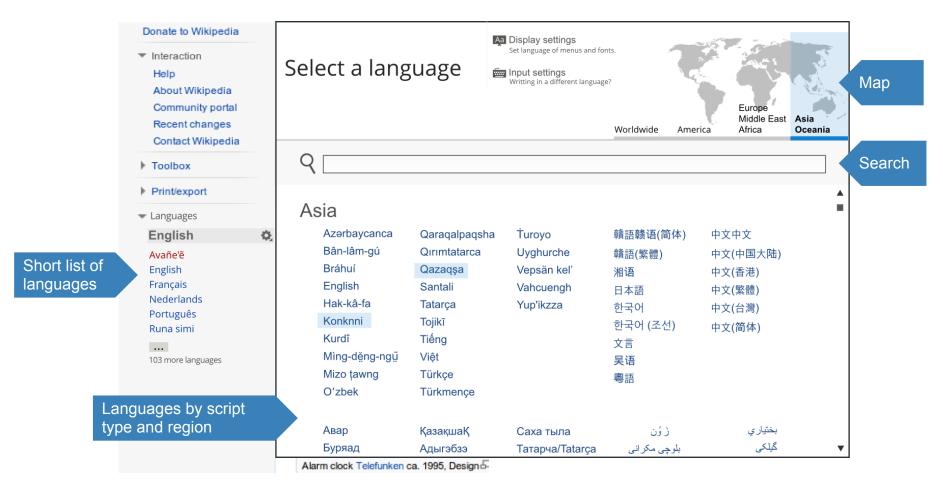


#### 2 Settings Display and input options





### Language picker



This component can be used in any context that requires language selection (in the same way that a Date or Color picker are context-independent).

# Fact #1: Short lists work better than long ones

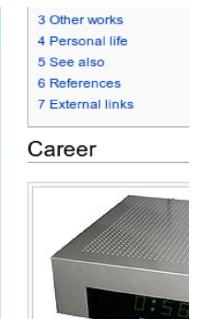
When a short list with few options is presented, it is noticed and used by the user.

If the language is not in the list, the user knows how to access the rest of languages.

By optimizing the options presented to the user, time to select a language is dramatically reduced.



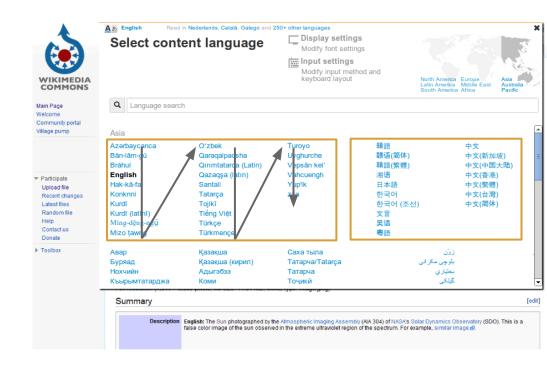




## Fact #2: Layout and grouping help the user

Grouping languages by region and script help when scanning the list.

Division in 10-item chunks communicates the alphabetical order correctly.



Users were able to discard big groups of languages based on their grouping.

It was important to preserve vertical scrolling and avoid long reading jumps.

#### Fact #3: Search, Search, and Search

Users preferred to search most of the time as the first option for looking up a language.

The more flexible search is, the better.

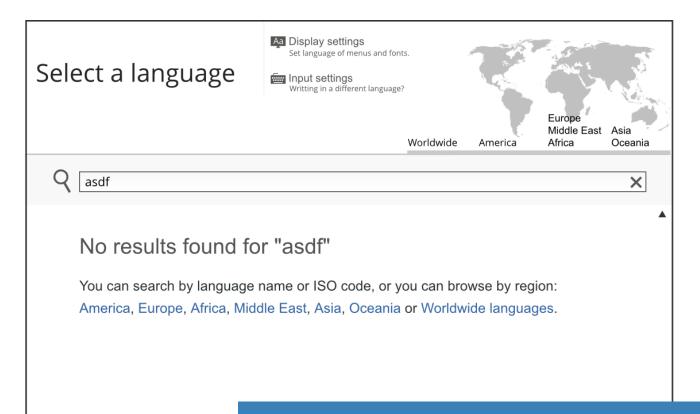
Map and browsing were first options for some users

Users try different search terms before using the map or exploring the list.



User making several attempts for searching before using the map. 32 seconds

### Fact #3: Search, Search, and Search



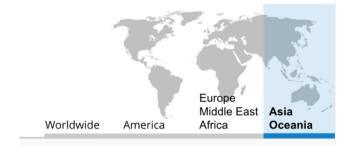
A "no results found" message was added to make the user aware of any typo in the search and provide alternative mechanisms for search.

### Fact #4: A small map is enough

A 4-region map was enough as an index for the list of languages.

A special "Worldwide" region was added to include constructed languages such as Esperanto. Esperanto speaker confirmed location.

Map and list scroll are synchronized. Acting in one updates the other to provide users a good sense of current location.



World languages were also added to the Worldwide region for quick access.

### Change Input language

Users were asked to modify an article to include content with some characters in Ancient Greek.

Language settings Input settings Language used for input Aa Display Set the language of menus and fonts. Español Avañe'ē English Input Input methods supported for English Writting in a different language? Phonetic input. Type words as they sound. More information O Transliteration. Use keyboard shortcuts to generate the desired characters. When available, a virtual keyboard will show the keyboard mapping. More information O **Disabled.** Text is displayed according to system defined settings. More information Apply changes Cancel

For illustration purposes, two input methods were associated with English in this example. Languages lacking input methods, will not show this part of the UI.

# Fact #5: Setting sections can be difficult to distinguish

It was not clear for some users whether they were changing input or display settings.

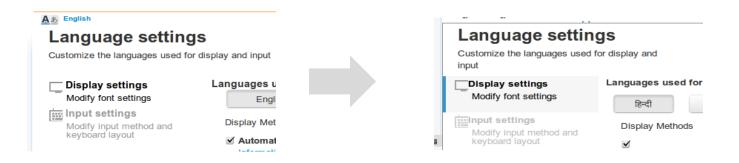
The language buttons attracted the user attention more than the setting sections menu.



User do not realizes he is at display settings instead of input settings. 31 seconds

# Fact #5: Setting sections can be difficult to distinguish

We made current selection more prominent and the problem was solved in the second round of tests:



More changes are defined in the specification such as providing feedback on language change:



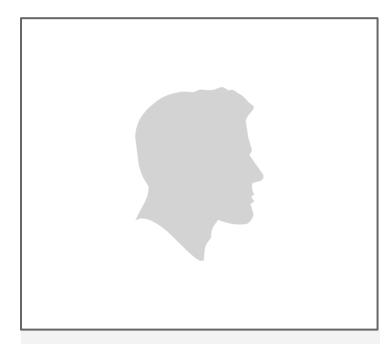
The style for tooltips and notification is still under consideration.

# Fact #6: Input settings are expected to be closer to input

Users expect to find input-related settings closer to the text area. For example, at the Special Character section.



User unable to find input settings to write in a different language. 41 seconds



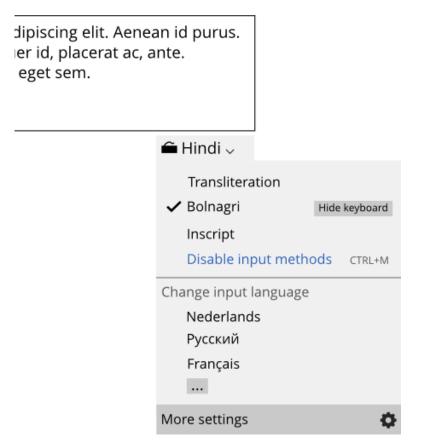
Top-right location works slightly better since it is associated with settings more easily.

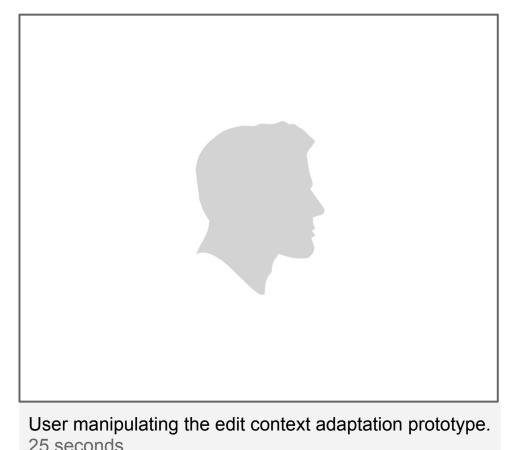
35 seconds

# Fact #6: Input settings are expected to be closer to input

A contextual menu was designed to be placed

closer to edit areas.

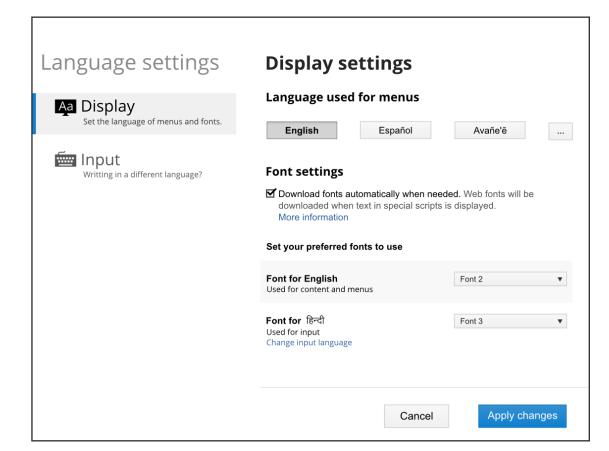




### Change UI language

Users were asked to print the Greek version of an article for a friend. To locate the "export to PDF" link, UI language

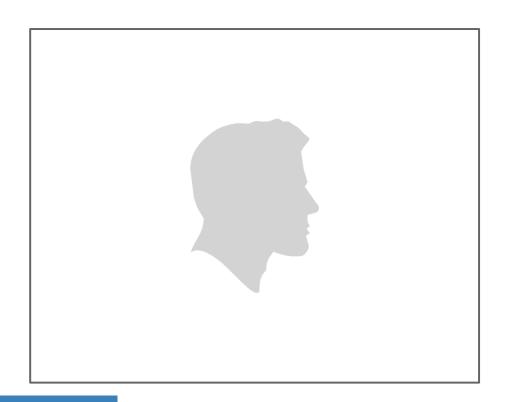
change was needed.



# Fact #7: Language selector can be used even in a foreign language

Users were able to change the UI language from Greek to English despite not knowing Greek.

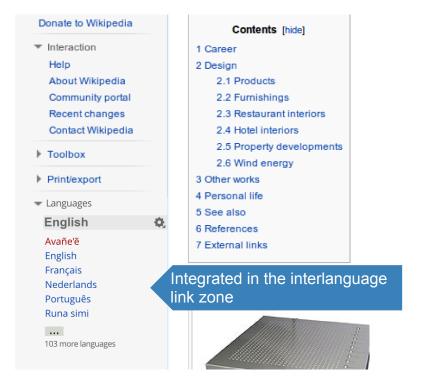
Users had used the ULS previously for content and UI selection.



When the user changes the language, the ULS previews it immediately allowing users to confirm or revert the change.

### **Content language**

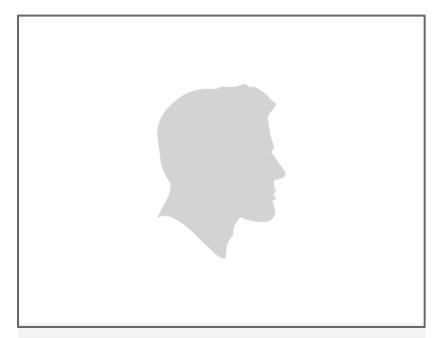
Users were asked to move between their local language and English for a Wikipedia article and a Commons image. Two alternative locations were tested:





# Fact #8: Left and top-right locations work for the ULS

Left bar and top-right locations work well if all the language selection is in the same zone



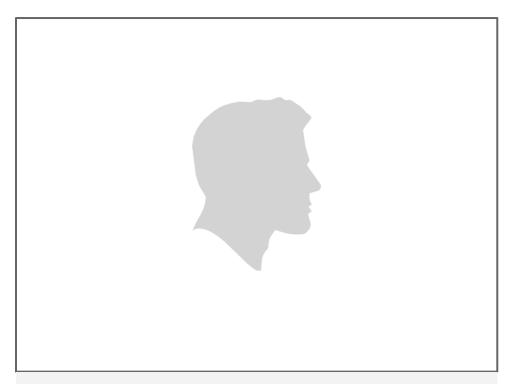
Inter-language integration for content language selection. 30 seconds



Top-right integration for content language selection. 32 seconds

# Fact #9: Confusion is produced with multiple entry points

When the language selector is placed at the top-right (for input and UI) and interlanguage links are at the left (for content), the purpose of each element becomes confusing to the user.



User confused with top-right location and inter-language links. 50 seconds

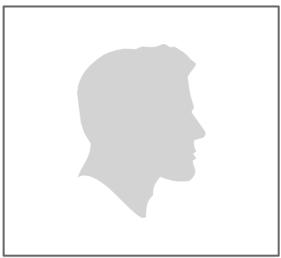
# Fact #9: Confusion is produced with multiple entry points

#### Inter-language integration

- Familiar to users
- Input methods not expected there for some users.
- Integrates with current solution

#### **Top-right location**

- Incompatible with inter-language links (all language selection needs to be in the same place).
- Users notice the big change but they adapt well
- Overloaded region



User: "The icon certainly gets the attention" 10 seconds

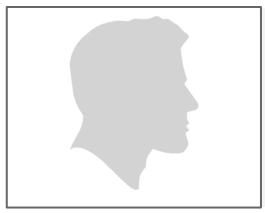
# Fact #10: Each user finds it useful according to their needs



"This looks very good and promising because in Nepali Wikipedia users don't find the input settings they want [...] and get away."

"[With the ULS] there are multiple ways I can find the language I want. "

37 seconds



"I think it's pretty neat. Separation of those three [language-related settings] can be very useful."

"Separation between content and menus may only be useful in limited situations, but the process is pretty straightforward"

39 seconds

### **Next steps**

- Development started
- A PhD student offered to perform Eye Tracking tests
- Other adaptations
  - Multiple selection
    - Considered already, <u>examples in the desig</u> <u>documentation</u>.
    - Will be tested internally
  - Mobile devices
    - The designs were made considering desktop and tablets. So, touch was considered but not small screen size.
  - Wikidata team showed interest
    - Adapt to edit list of languages

#### More information

#### More information is available on

- Test observations
- Interaction specification details