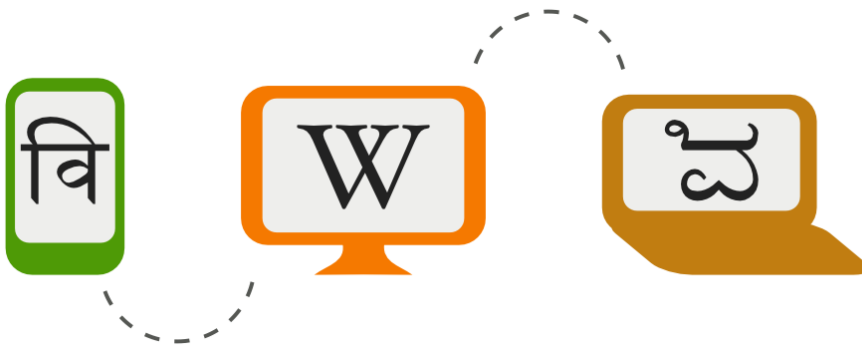


Video recording of this talk  
available at  
[http://youtu.be/RFC2A\\_zTQ3s?t=44m57s](http://youtu.be/RFC2A_zTQ3s?t=44m57s)



# Multilingual design and testing

For improving the  
Translate extension

Pau Giner  
Interaction Designer  
 @pauginer

# We need our designs to work globally

Igloos are great, but don't work everywhere



# 5 steps

Personas & scenarios

Explore solutions

i18n guidelines

Prototype

Test with users

# 5 steps

Personas & scenarios

Explore solutions

i18n guidelines

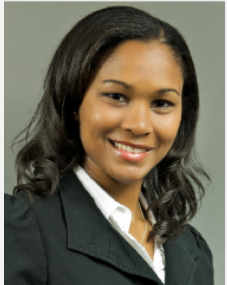
Prototype

Test with users

# Personas allow us to keep the design focused



**Markus**  
Speed  
Fun



**Anne**  
Safety  
Comfort

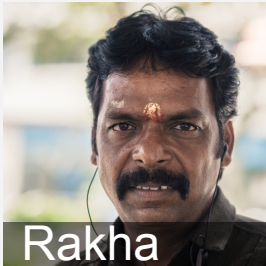


**Mike**  
Space  
Reliability



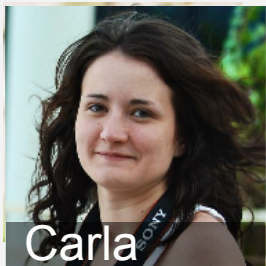
Image sources:  
<http://www.flickr.com/photos/bigd2112/5026685215/>  
<http://www.flickr.com/photos/tinou/393800080/>  
<http://www.flickr.com/photos/bigd2112/5028522377/>  
<http://www.flickr.com/photos/gregwest98/5299714861/>  
<http://www.flickr.com/photos/sbeebe/2849271610/>  
<http://www.flickr.com/photos/lhoon/195520547/>

# Embrace diversity with your personas



## **New translator from India**

- Wants to correct a typo from the UI
- Finds a message lacking translation



## **Casual translator from Italy**

- Look for untranslated French and Italian messages in her project
- Verify the quality of translations for her project



## **Expert Hebrew and Russian translator**

- Translate for different projects
- Review quality of Hebrew translations

# 5 steps

Personas & scenarios

Explore solutions

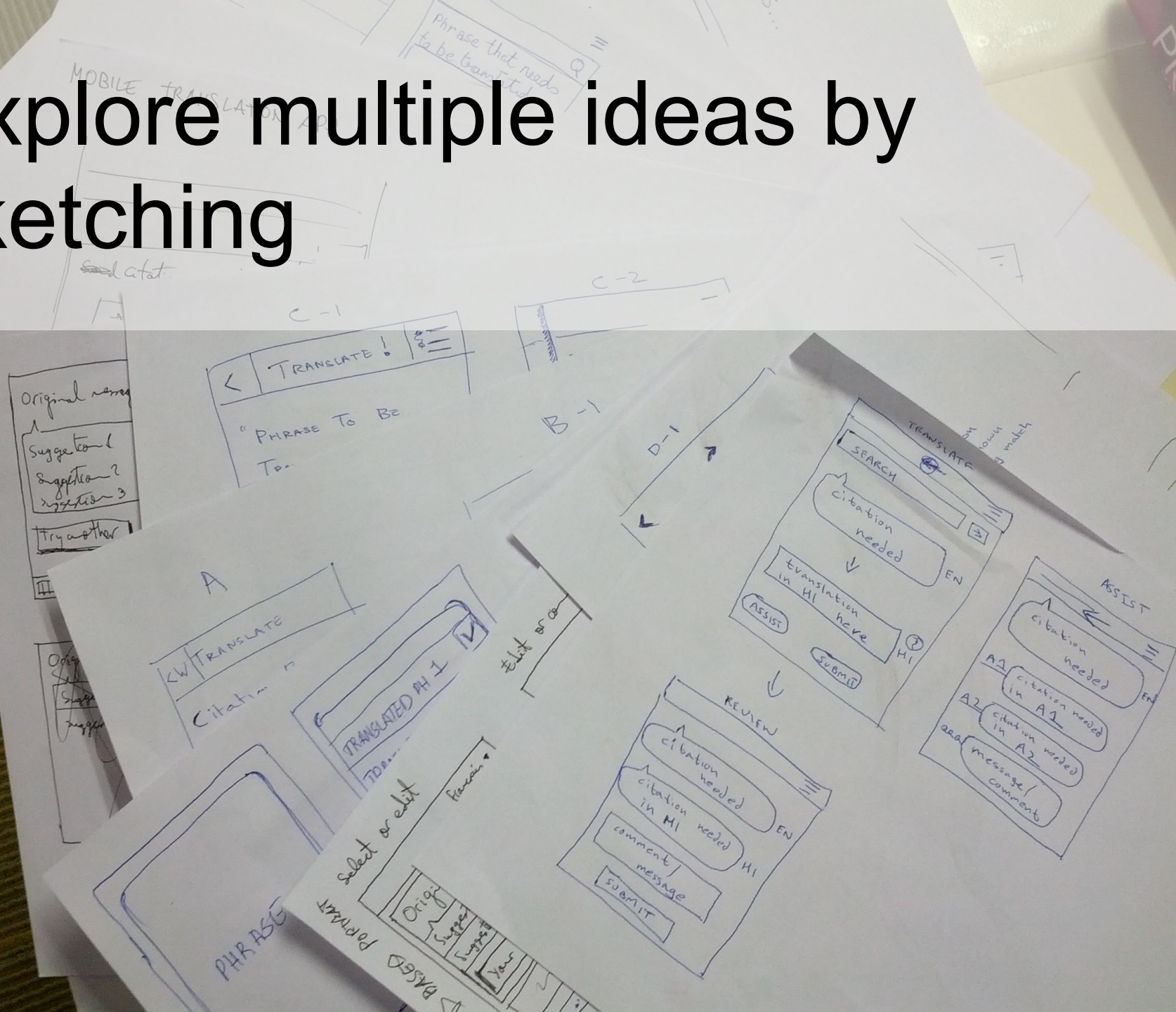
i18n guidelines

Prototype

Test with users



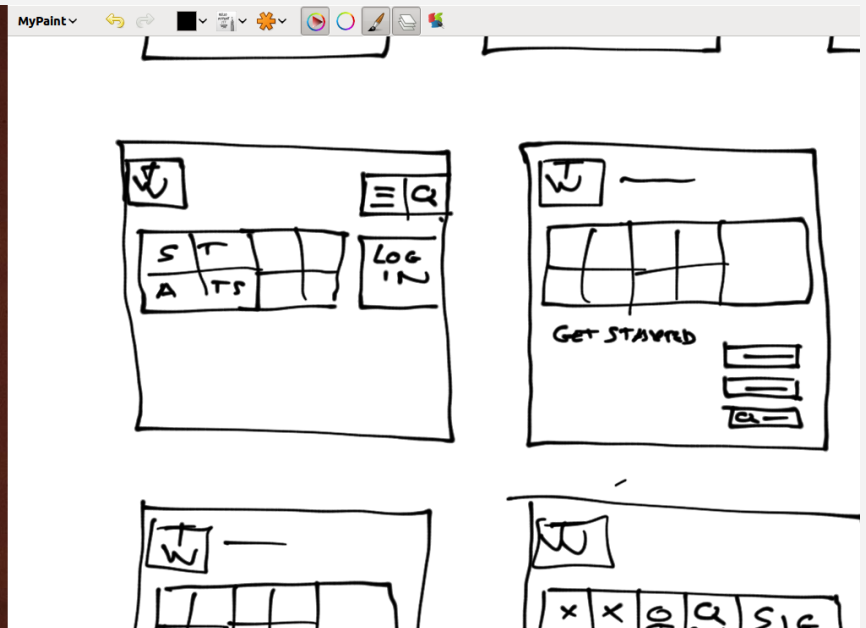
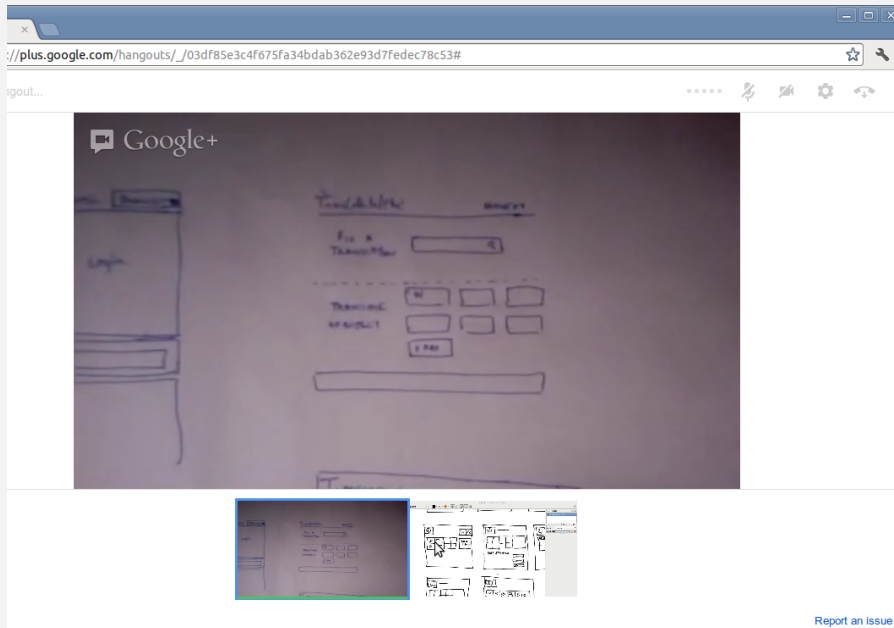
# Explore multiple ideas by sketching





# Iterate fast: 6-8 sketches in 5-10 minutes

Worldwide real-time sketching example:



Analog sketching

Dharamshala, India

1,457 m (4,780 ft) over sea level

Digital sketching

Valencia, Spain

15 m (49 ft) over sea level

# 5 steps

Personas & scenarios

Explore solutions

i18n guidelines

Prototype

Test with users

# Consider i18n issues early in the designs

"Differences in language can introduce substantial layout and information architecture variability."

- Luke Wroblewski

<http://www.lukew.com/ff/entry.asp?152>

# Consider i18n issues soon in the designs

Don't rely on specific paragraph metrics: Line-height, font weight, word length and font availability vary for different language/scripts.

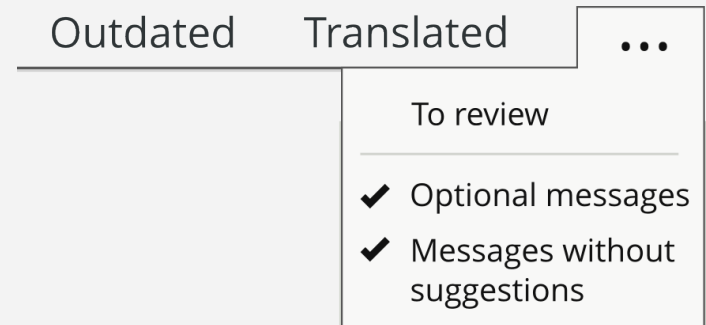
The screenshot shows a localization tool interface with a list of strings. At the top, there are two horizontal bars indicating column widths: a 9-column bar and a 3-column bar. Below these, there is a navigation bar with tabs: "All" (selected), "Untranslated", "Hardest", "Outdated", "Translated", and "...". To the right of the tabs is a search icon and a "Filter list" input field. The list contains three items:

- "Empty string" with a blue "/ Edit" link on the right.
- "Contains blacklisted character \$1" with a blue "/ Edit" link on the right.
- "The name \"\$1\" is too similar to :" with a blue "/ Edit" link on the right.

Column width indicators are shown below the list items: "9 cols" is centered under the first two items, "2 cols" is centered under the third item, and "1 col" is centered under the third item's edit link.

# Consider i18n issues soon in the designs

Think how an UI will flex when localized in terms of length and directionality.



**Wikimedia Highlights,  
June 2012**

**Second Visual Editor  
prototype launched**

**חדשות ויקימדיה, יוני  
2012**

**האב־טיפוס השני של העורך החזותי  
החזותי יצא לדרך**





# 5 steps

Personas & scenarios

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Test with users

# Choose the right fidelity to simulate the experience

Project [MediaWiki](#) › [Extensions](#) › [Anti Spoof](#) Language [हिन्दी](#) ▾

Untranslated [All messages](#) More ▾ Show:  Optional messages  Messages without suggestions

Empty string खाली स्ट्रिंग  Translated [/ Edit](#)

**MediaWiki:Antispoof-blacklisted/hi**

Contains blacklisted character \$1

काली सूची में डाल वर्ण हो\$1

[Save translation](#) [Skip to next](#)  Requires revision

Press "CTRL+S" to save or "CTRL+D" to go to next message.

Reason for failed account creation. Parameters:

- **\$1** — bad character designator (built with either [antispoof-bad-char](#) ("[<antispoof-bad-char>](#)") or [antispoof-bad-char-non-printable...](#) [Show more](#)

[/ Edit description](#)

**Suggestions**

<a href="#">काली सूची में डाल वर्ण हो\$1</a> <small>Used in translation</small>	70% match <small>used 4 times</small>
<a href="#">इसमें ब्लैकलिस्टेड कैरेक्टर हैं</a> <small>Use in translation</small>	from Microsoft

**Need more help?** [Ask for more information](#)

Translation lacking for [Italiano](#)

The name "\$1" is too similar to {PLURAL:\$2|the existing account|the following \$2 accounts}: [/ Edit](#)

Does not contain any letters इसमें कोईभी अक्षर नहीं हैं

""Your user account has not yet been migrated to the unified login system of ...

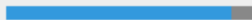
Please choose another name. कृपया कोई अन्य नाम चुनिये ।

Linked image prototype for translating UI messages (8 languages)

# Choose the right fidelity to simulate the experience

< Back to message list    Original    **Compare**    Translated    ::    ✓ Proofread    മലയാളം ▾    ✕

<h2>Wikimedia Highlights, August 2012</h2>	<h2>വികിമീഡിയ പ്രധാന വാർത്തകൾ, 2012 ഓഗസ്റ്റ്</h2>
<h3>Language support tools released in "Project Milkshake"</h3>	<p>ഭാഷാസഹായി ഉപകരണം "മിൽഷേക് സംരംഭത്തിൽ" പുറത്തിറക്കി</p> <p><b>Update translation</b>    Cancel</p>
<p>The Internationalisation/Localisation (i18n/l10n) team reported progress on its Project Milkshake, an effort to release its existing internationalisation-related JavaScript components as standard jQuery libraries. They</p>	<p>അന്താരാഷ്ട്രീകരണ/പ്രാദേശീകരണ (i18n/l10n) സംഘം ഇപ്പോഴുള്ള അന്താരാഷ്ട്രീകരണത്തെ സംബന്ധിച്ച ജാവായെസ്ക്രിപ്റ്റ് ഘടകങ്ങൾ മിൽഷേക് സംരംഭത്തിൽ പുറത്തിറക്കാനുണ്ട്. അവർ</p>

91% translated    

HTML prototype for translating full-pages and proofreading (9 languages)

# Either low or hi-fidelity, target multiple languages

We used Evolus pencil to create clickable prototypes  
Images were generated from SVG templates:

**MediaWiki:Antispoof-noletters/{{lang-code}}** ✕

Does not contain any letters

This translation may be outdated · [Show diff](#)

`{{msg4-trans}}`

[Confirm translation](#) [Skip to next](#)  Requires revision

Press "CTRL+S" to save or "CTRL+D" to go to next message.

Reason for failed account creation.  
[/ Edit description](#)

**Suggestions**

<code>{{msg4-alt}}</code> <small>Use in translation</small>	80% match <small>used 4 times</small>
<code>{{msg4-alt2}}</code> <small>Use in translation</small>	from Microsoft

**In other languages**

[Assenza di lettere](#) Italiano

Need more help

msg4-trans=не содержит ни одной буквы

**MediaWiki:Antispoof-noletters/ru**

Does not contain any letters

This translation may be outdated · [Show diff](#)

не содержит ни одной буквы

[Confirm translation](#) [Skip to next](#)  Requires revision

Reason for failed account creation.  
[/ Edit description](#)

**Suggestions**

Не содержит к	<small>Use in translation</small>
Нет буквы	<small>Use in translation</small>

**In other languages**

[Assenza di lettere](#)

# Either low or hi-fidelity, target multiple languages

For HTML prototypes we used jquery.i18n

```
<div class="ten column">  
  <h2 class="content" data-i18n="original-page-title"></h2>  
</div>
```



# 5 steps

Personas & scenarios

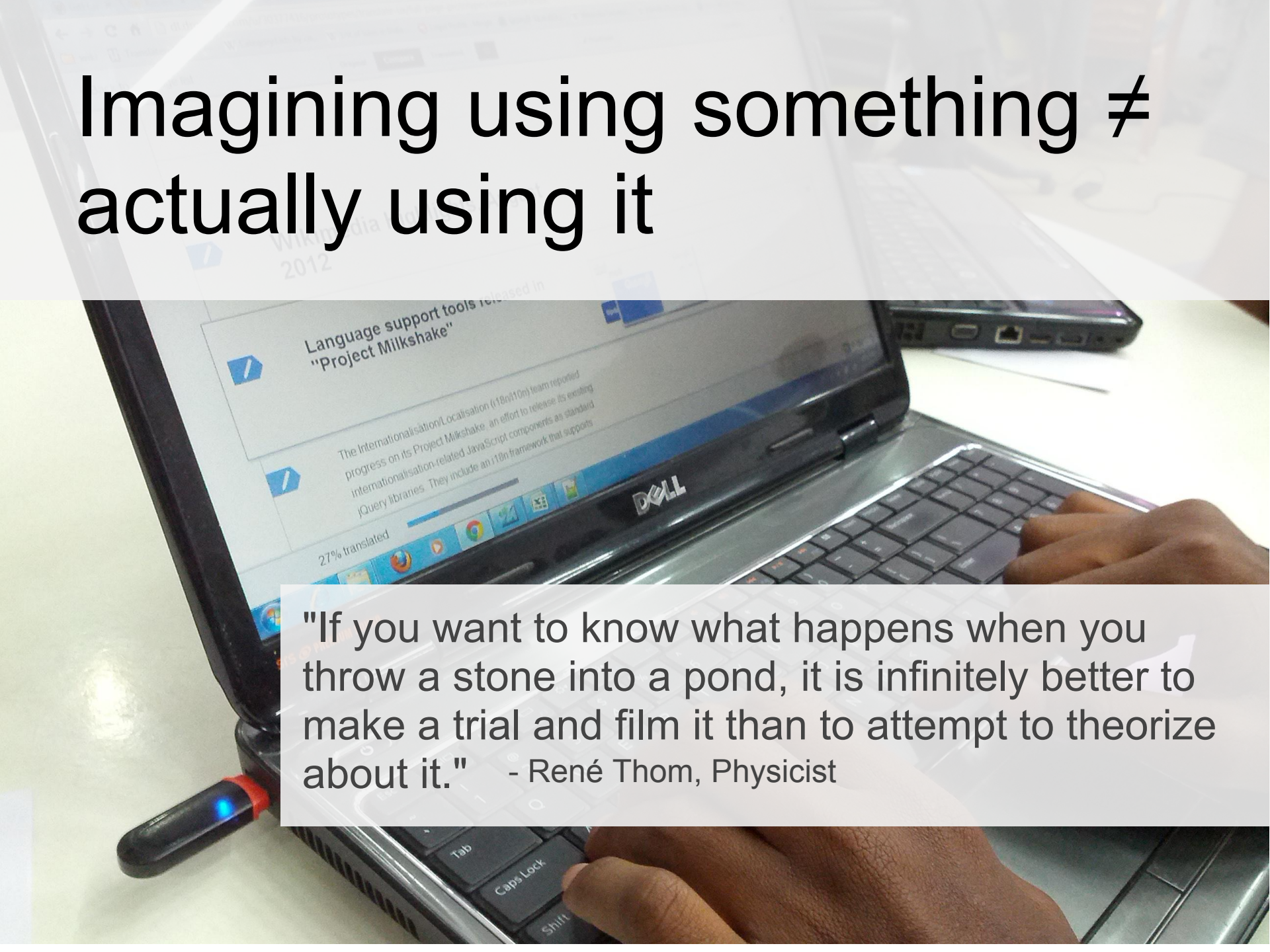
Explore solutions

i18n guidelines

Prototype

Test with users

# Imagining using something $\neq$ actually using it



"If you want to know what happens when you throw a stone into a pond, it is infinitely better to make a trial and film it than to attempt to theorize about it." - René Thom, Physicist

# Test globally

## 18 Users

3-5 tests per round

## 20 Languages

Chinese, French, Swahili, Kikuyu, Kalenjin, Macedonian, Russian, Serbo-Croatian, Japanese, Luxembourgish, Italian, Spanish, German, Tetum, Latin, Breton, Malayalam, Gujarati, Tamil, Hindi, Telugu, and English

## 10 Locations

Hong Kong, Kenya, France, New Zealand, Japan, Luxembourg, Italy, Germany, Russia, and India

To volunteer for participation, visit  
<http://goo.gl/E5dvO>

# Focus on the problems that happen in practice

Observing the different ways users tried to search for a language showed that making search flexible was worth it.

## Cross-language

Asia

日本語

## Typos allowed

Worldwide

English

## ISO codes

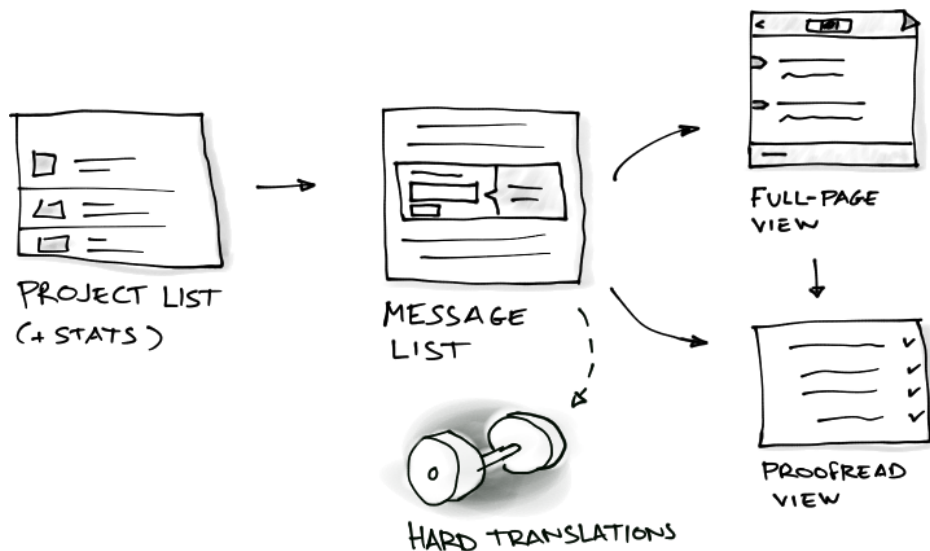
Worldwide

português

## Autocompletion

# Get new ideas

A hardest translation category was created after observing users skipping complex translations (making the "Require revision" option useless).





# Better understand users

Once the user has experienced the UI, the conversation becomes more in context.

# Just now is a good time to start testing

See the problems users have using the product makes sense at any stage of the development: from prototypes of future features to existing products

# Thanks!

## Prototypes

Translation workflow: <http://goo.gl/OzVQx>

Full-page HTML: <http://goo.gl/Li9oJ#side-hi>

## Specs

Translate UX: <http://goo.gl/yFxVJ>

Mobile translate: <http://goo.gl/DuXOu>

## Tools

Evolus pencil: <http://pencil.evolus.vn/>

MyPaint: <http://mypaint.intilinux.com/>