

# Babel 2012 on the Web

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W3C Workshop  
A Local Focus for the Multilingual Web



I. Where we come...

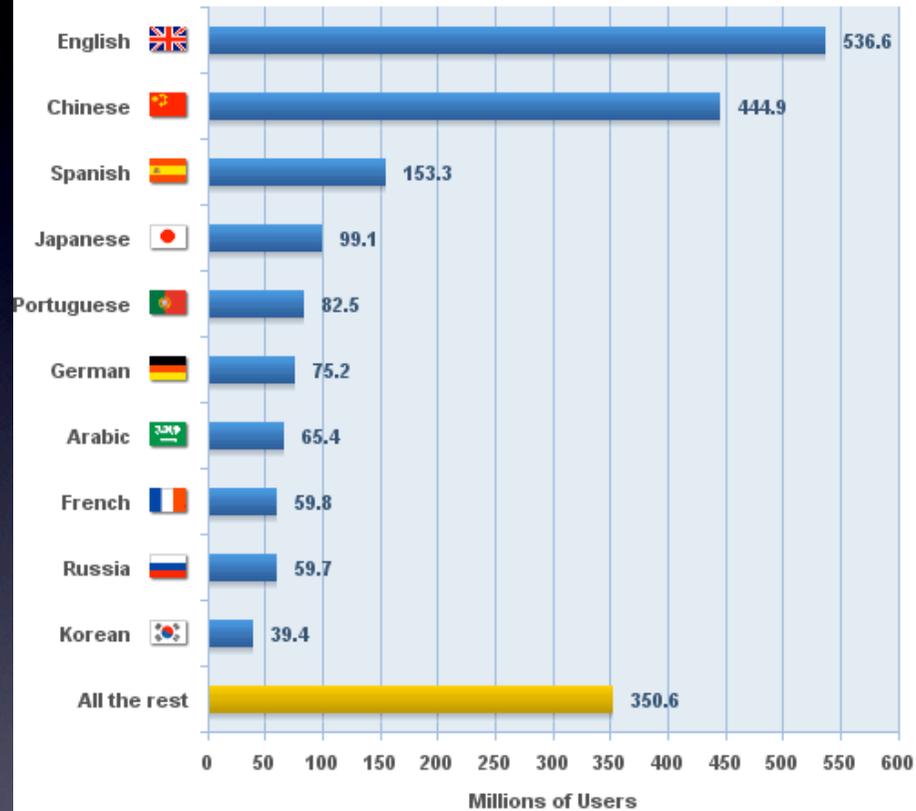
« Is it really important to support Boustrophedon or Mongolian in CSS? »

CSS Working Group, June 1998

« Since many countries use characters which are not a part of ASCII, the default character-set for modern browsers is ISO-8859-1 »

W3Schools, **now**...

## Top Ten Languages in the Internet 2010 - in millions of users



Source: Internet World Stats - [www.internetworldstats.com/stats7.htm](http://www.internetworldstats.com/stats7.htm)  
Estimated Internet users are 1,966,514,816 on June 30, 2010  
Copyright © 2000 - 2010, Miniwatts Marketing Group

US-ascii	UTF-8
uuencode	MIME
7bits	8bits
URLs	IRIs
-	Accept-Language
HTML+	HTML5
-	CSS 3
-	xml:lang

2. on the radar today...



# A reminder...

language

≠

script

≠

charset

# HTML 5: charset

- ...Authors are encouraged to use UTF-8. Conformance checkers may advise authors against using legacy encodings ...
- ...Authoring tools should default to using UTF-8 for newly-created documents ...

# HTML5: language

- still `lang` and `xml:lang...`
- the `lang` IDL reflects only `lang...`
- Authoring Tools rarely set the language or even offer UI for it

# HTML5: links

- hyperlinks in HTML are still mono-valued
- the `hreflang` attribute can target only one language

# HTML5: direction

- the `dir` attribute cannot reflect vertical directions (yet)
- elements with different inner and outer directions still a problem
- `:ltr` and `:rtl` pseudo-classes...
- `bdi` and `bdo` elements poorly implemented

```
<ul>
  <li>User <bdi>jcranmer</bdi>: 12 posts.
  <li>User <bdi>hober</bdi>: 5 posts.
  <li>User <bdi>إيان</bdi>: 3 posts.
</ul>
```

- User jcranmer: 12 posts.
- User hober: 5 posts.
- User 3 إيان: 3 posts.

# HTML5: forms

- bad localizations of dates and calendars
- date/time issues with time zones
- what's a name...

# JavaScript

- poor localizability...
- user interaction entirely based on UA's language and direction
- Node.js spreading !

# DOM: charset

- DOM uses UTF-16 strings...

# PHP

- PHP 5 said to have a lot of issues with UTF-8
- PHP 6 should fix that (hopefully...)
- Poor built-in localizability

# CSS3: Writing Modes

10月27日、マイクロソフトの定番ビジネススイート「マイクロソフト・オフィス」の最新版となる「オフィス2011 (Office for Mac 2011)」が、ついに発売されました。2009年8月、マイクロソフトは新しいMac版オフィスについてのロードマップを示しました。当時、2010年のホリデーシーズンに発売する予定であることや、新たに統合メールソフトの「アウトLOOK」を搭載することなどが発表されましたが、詳細はあまり明らかにされず、Macユーザは長い間その詳細の発表を心待ちにしていたわけです。

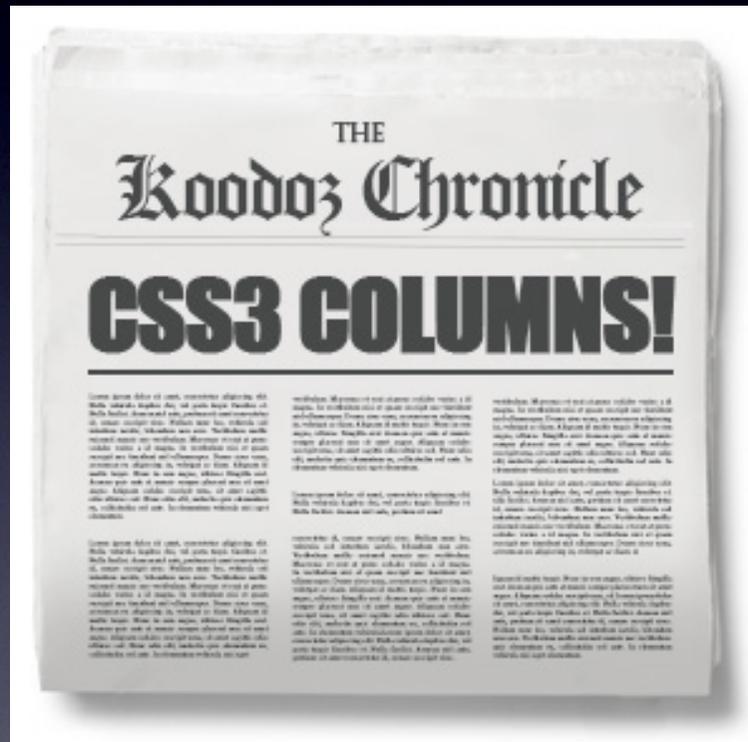


Figure 2. Mongolian-based writing mode

# CSS3: Text

- text transformations (issues in Greek)
- hyphenation
- emphasis marks (mostly for East Asian text)

# CSS3: Columns



# CSS3: Lists

- list-style-type property extended to dozens of values
- ability to define your own if missing

# CSS3: Box Model

- start/end instead of left/right
- margin-`{start|end}` not here yet

# CSS3: Fonts

- Language-specific display

Señora ▶ Señora

- Control of glyph substitute and positioning in East Asian text

麴町 ▶ 麴町

# CSS3: Ruby

とうきょう  
東京

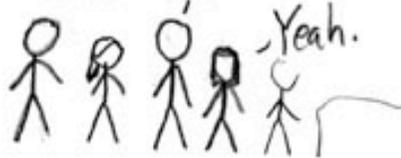
# EPUB3

- OpenType & WOFF
- CSS 2.1 + parts of CSS 3
  - hyphenation, emphasis, word breaking
  - Writing Modes
  - Multi-column Layout
  - Ruby

3. what we can expect...

This happened to my friend:

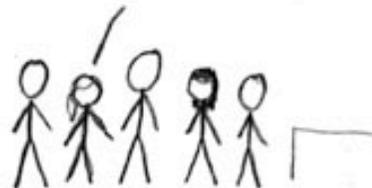
English should be the national language. These immigrants should have to learn English when they come here.



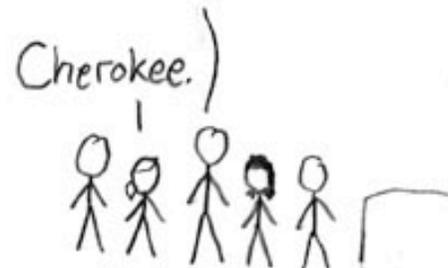
When you go to live somewhere, you learn the language they speak there.



Excuse me, but osio Sarah dawado.



What the hell was that?



- HTML5+CSS3 as the pivot format for new Wysiwyg editors with good i18n
- massive adoption of EPUB3 in Asia
- Boustrophedon ? :-)

Thank you

ありがとう

Bbl

merc

σας ευχαριστούμε

obrigado

gracias

grazie

danke

danke u

당신을 감사하십시오