HTML5 i18n:
A report from the front line

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W3C Internationalization Activity

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Outline

W3C Internationalization Activity
Bidirectional text
Ruby
Translate flag
About the Consortium

1994: World Wide Web Consortium created and still led by:
Sir Tim Berners-Lee, inventor of the WWW.

Mission:
Lead the technical evolution of the Web and ensure its interoperability.
Internationalization (i18n) Core Working Group

• Help W3C Working Groups understand issues and build in requirements relating to worldwide support for Web technologies

• Liaise with other standards organizations to develop support for the international Web (Unicode, IETF, etc)

• Help users of Web technology understand what's available to them and how to use it by developing best practices and other resources
MultilingualWeb-LT Working Group

- Define meta-data for web content (mainly HTML5) and "deep Web" content, for example a CMS or XML files from which HTML pages are generated, that facilitates its interaction with multilingual technologies and localization processes.

- Demonstrate interoperable implementations.
Internationalization Interest Group

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• public-i18n-its@w3.org
• public-iri@w3.org
Bidi
Embedded text
<p><bdi>Aroma</bdi> - 3 reviews</p>
<p><bdi>PURPLE PIZZA</bdi> - 5 reviews</p>

<p><span class="name" dir="auto">Aroma</span> - 3 reviews</p>
<p><span class="name" dir="auto">PURPLE PIZZA</span> - 5 reviews</p>
Ruby
Ruby
What is it?

につぽん でん き
日本電気
N E C
Requirements for Japanese Text Layout

W3C Working Group Note 4 June 2009

This version:  
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Please refer to the errata for this document.

A Japanese version of this document is also available. See also translations.

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Abstract

This document describes requirements for general Japanese layout realized with technologies like CSS, SVG and XSL-FO. The document is primarily based on a standard for Japanese layout, JIS X 4051, however, it also addresses areas which are not covered by JIS X 4051.
Ruby
HTML5 innovations

XHTML
<ruby>
<rb>日本</rb>
<rt>にっぽん</rt>
</ruby>

HTML5
<ruby>
日本
<rt>にっぽん</rt>
</ruby>

<ruby>
電
<rt>でん</rt>
</ruby>

<ruby>
気
<rt>き</rt>
</ruby>
Ruby base styling

Use case

<ruby>
B  <rt>a</rt>
B
<rt>a</rt>
</ruby>
Use case
Ruby base styling

<ruby>
<span><span><span>B</span><span>a</span></span></span><span>a</span></ruby>
Use case

Ruby base styling

- Use of span works.
- If used a lot, less obvious that this is better than rb.
- But allows styling within a base unit of multiple characters.
- Only works where span is present, so mass conversion for accessibility is not possible – but then neither does rb help if optional.

- Possible alternative, implicit rb element.
Use case
Fallback

今日は会議の初日です。

(き)の初日です。

今日は会議(かいぎ)
(き)の初日です。

<ruby>
B
<rp>(</rp>
<rt>a</rt>
<rp>)</rp>
</ruby>
Use case
Fallback

今日は会議の初日です。
会議（かいぎ）の初日です。
会議（かいぎ）の初日です。
Use case

Fallback

• Should we go to a column-based, rather than row-based approach? This would involve introducing rb.
• Is there some other way of producing a fallback?
• Can we reach a situation quickly where fallbacks are not needed?
Translate flag
Translate flag
Use cases

- some parts of texts should not be translated
- nowadays translation is usually automated thus there is a need for machine readable information about translatability

<p>Click the Resume button on the Status Display or the CONTINUE button on the printer panel.</p>

CONTINUE is a label on a hardware button and should not be translated as labels on hardware buttons are not going to be localized.
• translate="no" attribute can be added to any HTML element to indicate that content of element should not be translated

<p>Click the Resume button on the Status Display or the CONTINUE button on the printer panel.</p>

<p>Click the Resume button on the Status Display or the <span translate="no">CONTINUE</span> button on the printer panel.</p>
• translate attribute was recently added to HTML5 by effort started at the MLW Pisa workshop in 2011

• it is available in many other XML based formats thanks to ITS (Internationalization Tag Set)

• translate attribute can have **yes** and **no** values which can be overridden

• already supported by on-line translation services from Microsoft and Google

• already supported by content formats like DITA or DocBook
Getting involved…
The Web needs your help

dr(

this is your Web –
not the W3C's

the Web is about
people, not
technology

we need You to
make the Web
worldwide

get involved

Thank you
http://www.w3.org/International/