

# **W3C Mobile Web Initiative**

## **Opera workshop position**

**Barcelona**

**18-19.11.2004**

**Timo Bruns**

# Contents

- 1 Browsing we have today**
- 2 Evolution of the browsing technologies**
- 3 What is required**
- 4 From viewing to interacting**

# Different screen size, same capabilities

My Opera Community - Opera

File Edit View Navigation Bookmarks Mail Window Help

Mobical - Sync... Sent BBC NEWS | N... Unread Compose mess... Mail :: INBOX Yahoo! Mobile Opera Internet... 3GSM World C... My Opera Com... My Opera Com...

**Mobile** = **Desktop**

My Opera Com... - Opera

MY OPERA community

Home Customize

Forums Journals

Opera Fans Open Web

Developers News Portal

Not registered yet? [Sign up](#) for a My Opera account.

**Write a tutorial/article competition**

Submit tutorials, articles, faq's - share your knowledge with the community!

Users and Opera staff will get a chance to vote for the best entry in each category. Winners will get a cool Opera cap, plus have their website featured on My Opera.

See the [competition thread](#) on My Opera forums to learn more.

**Opera Graphics**

Download buttons and banners for your Web page or spice up your desktop with wallpapers.

[Banners & buttons](#) | [Wallpapers](#)

**Opera for your School**

Want your school to buy the Opera browser for you?

[Read more](#)

**Customize Opera**

Customize your Opera browser with skins, setups and language files.

[Opera skins](#) | [Setups](#) | [Language files](#)

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http://my.opera.com/community/

www.opera.com my.opera.com

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**Hotlist panels**

Keep on top of the latest news with the Opera newspanel.

[Hotlist panels](#)

**Customize Nokia 6600**

Customize your Nokia 6600 with a variety of themes.

**Journals**

Inspired by the popularity of blogs, you can now create

**Login**

E-mail address: Password:

[Lost password?](#) [Sign up](#)

**Question of the day**

**How many people have you convinced to use Opera?**

0 (18%)

1 (16%)

2-5 (39%)

6-9 (8%)

10+ (17%)

2921 persons have voted in this poll.

[Previous poll](#)

**Latest Opera versions**

Windows	Opera 7.23
Linux	Opera 7.23
FreeBSD	Opera 7.23
Solaris	Opera 7.23
P800/P900	Opera 6.20
NOKIA 3650/7650	Opera 6.10
Mac	Opera 6.03
QNX	Opera 6.0b
Psion	Opera 5.14

# Rendering technologies - Comparison

Desktop (764px)

The desktop version of the BBC News website is shown at 764px. It features a wide layout with a prominent red header containing the BBC News logo and navigation links. The main content area is divided into several columns. The primary headline is 'Blair 'unaware' of WMD threat', accompanied by a large image of a military vehicle. Below this, there are sections for 'OTHER TOP STORIES', 'ALSO IN THE NEWS', and 'WATCH/LISTEN VIDEO CHOICE'. The left sidebar contains a 'News Front Page' section with a world map and various regional links, as well as a 'Have Your Say' section. The bottom of the page includes a 'LANGUAGES' section and a 'WORLD SERVICE' section.

(320px)

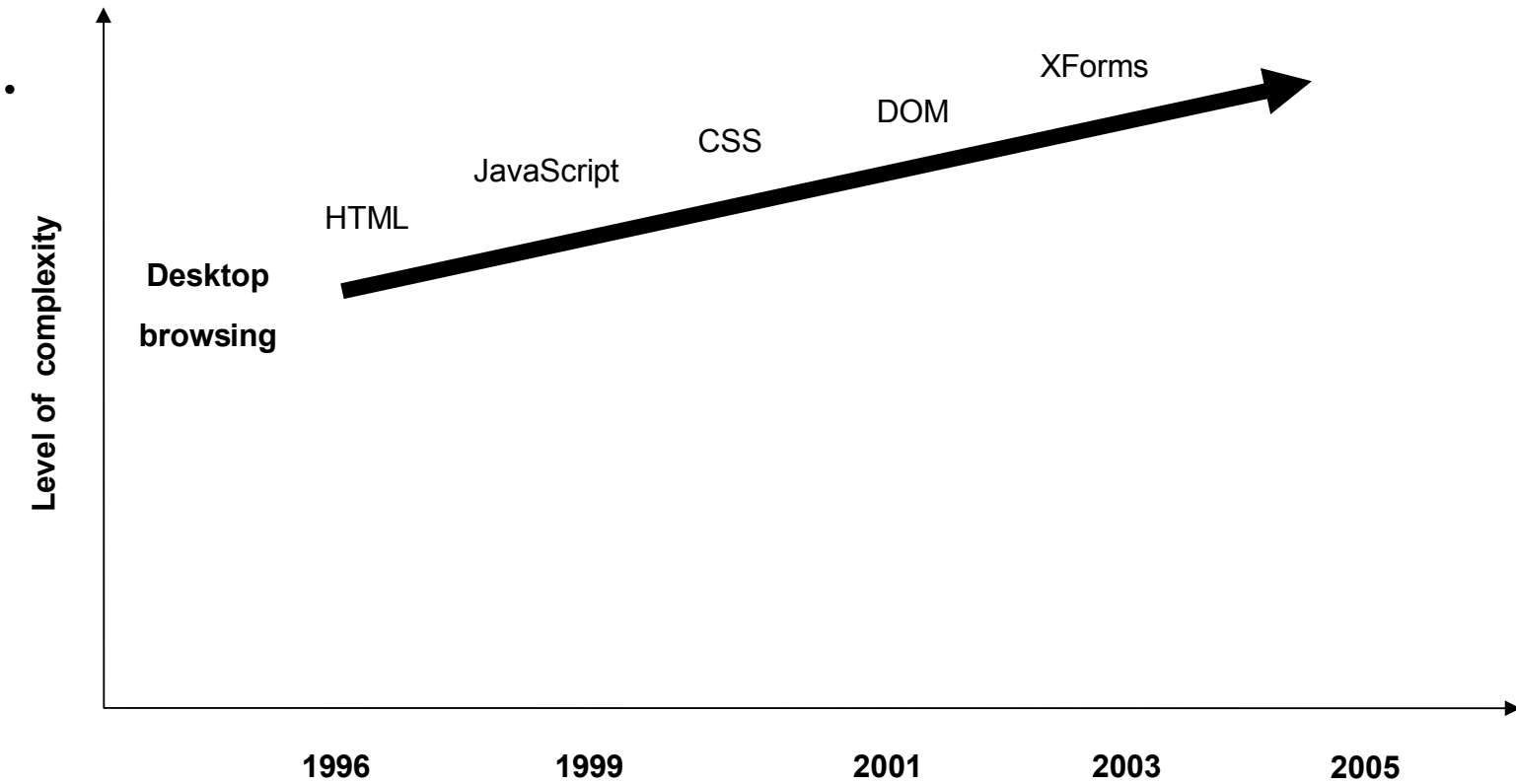
The BBC News website is shown at 320px. The layout is more compact than the desktop version, with the red header and navigation links still present. The main headline 'Blair 'unaware' of WMD threat' is visible, along with a smaller image of the military vehicle. The 'OTHER TOP STORIES' and 'ALSO IN THE NEWS' sections are also present, though the text is smaller. The left sidebar is narrower, and the 'Have Your Say' section is partially visible. The overall design is more focused on the main content.

(176px)

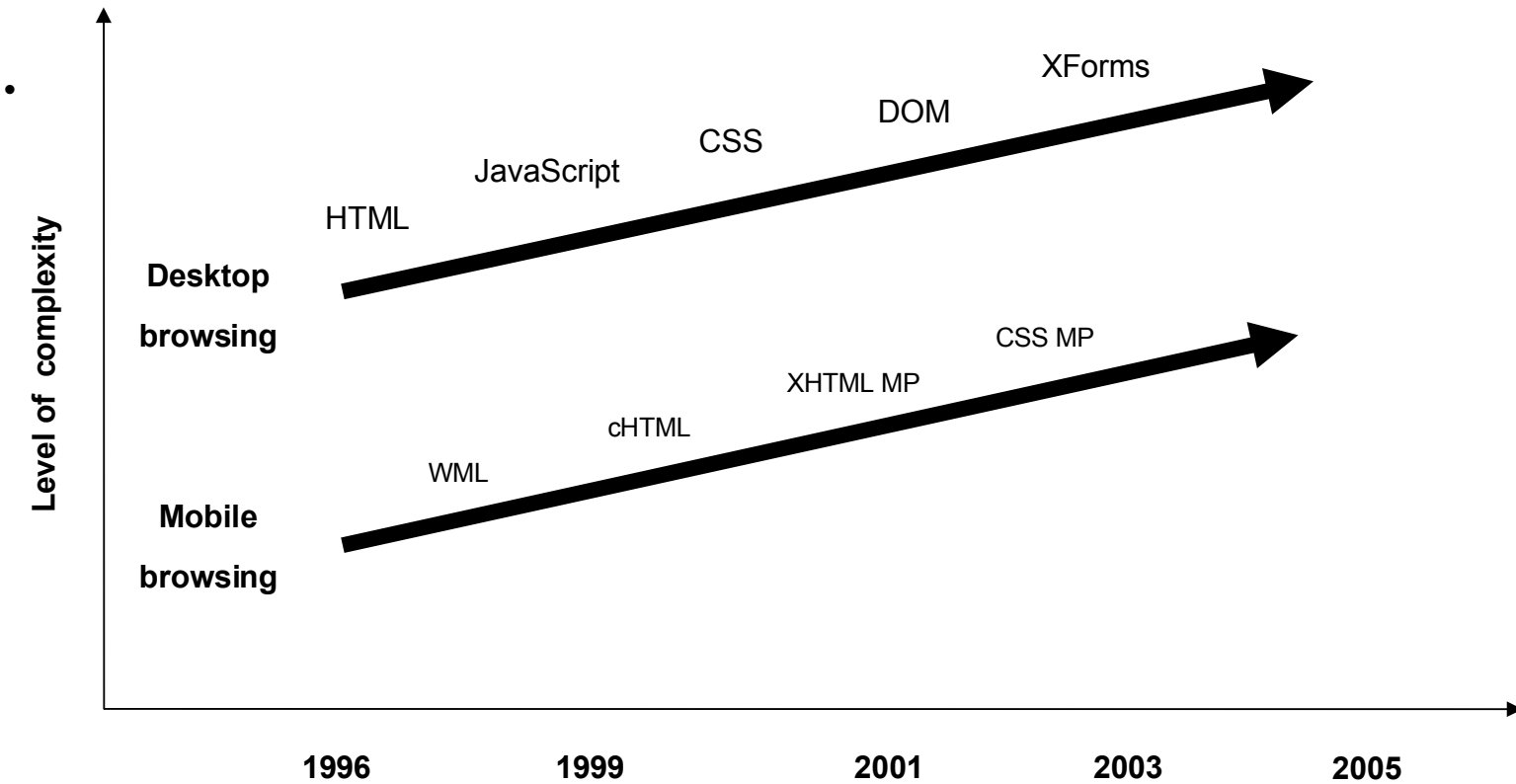
The BBC News website is shown at 176px. The layout is very compact, with the red header and navigation links being the most prominent feature. The main headline 'Blair 'unaware' of WMD threat' is visible, but the text is significantly smaller. The 'OTHER TOP STORIES' and 'ALSO IN THE NEWS' sections are also present, but the content is more condensed. The left sidebar is very narrow, and the 'Have Your Say' section is barely visible. The overall design is highly optimized for small screens, focusing on the most essential information.

# Evolution of the browser technologies

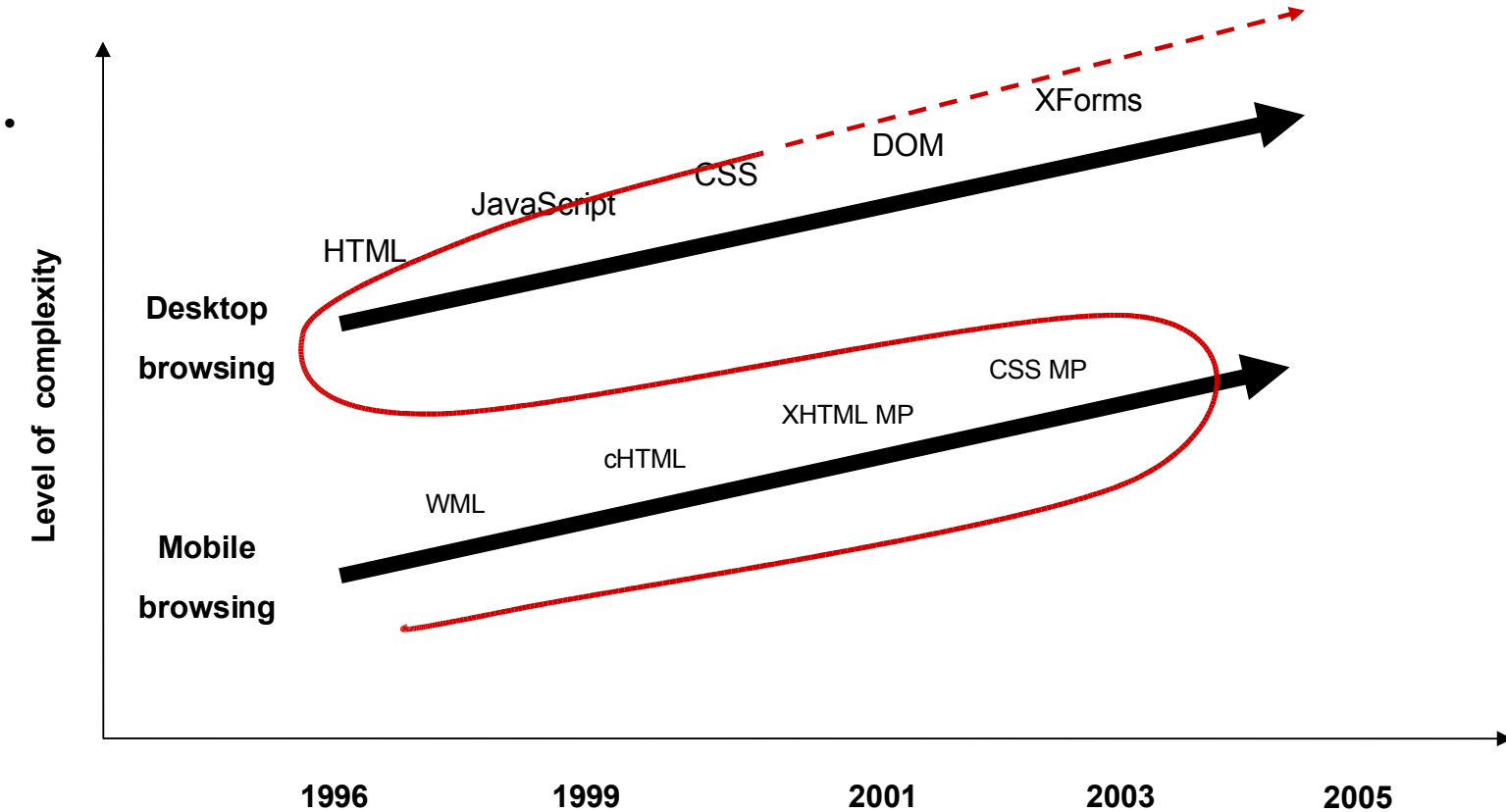
# Desktop browsers vs. mobile browsers



# Desktop browsers vs. mobile browsers

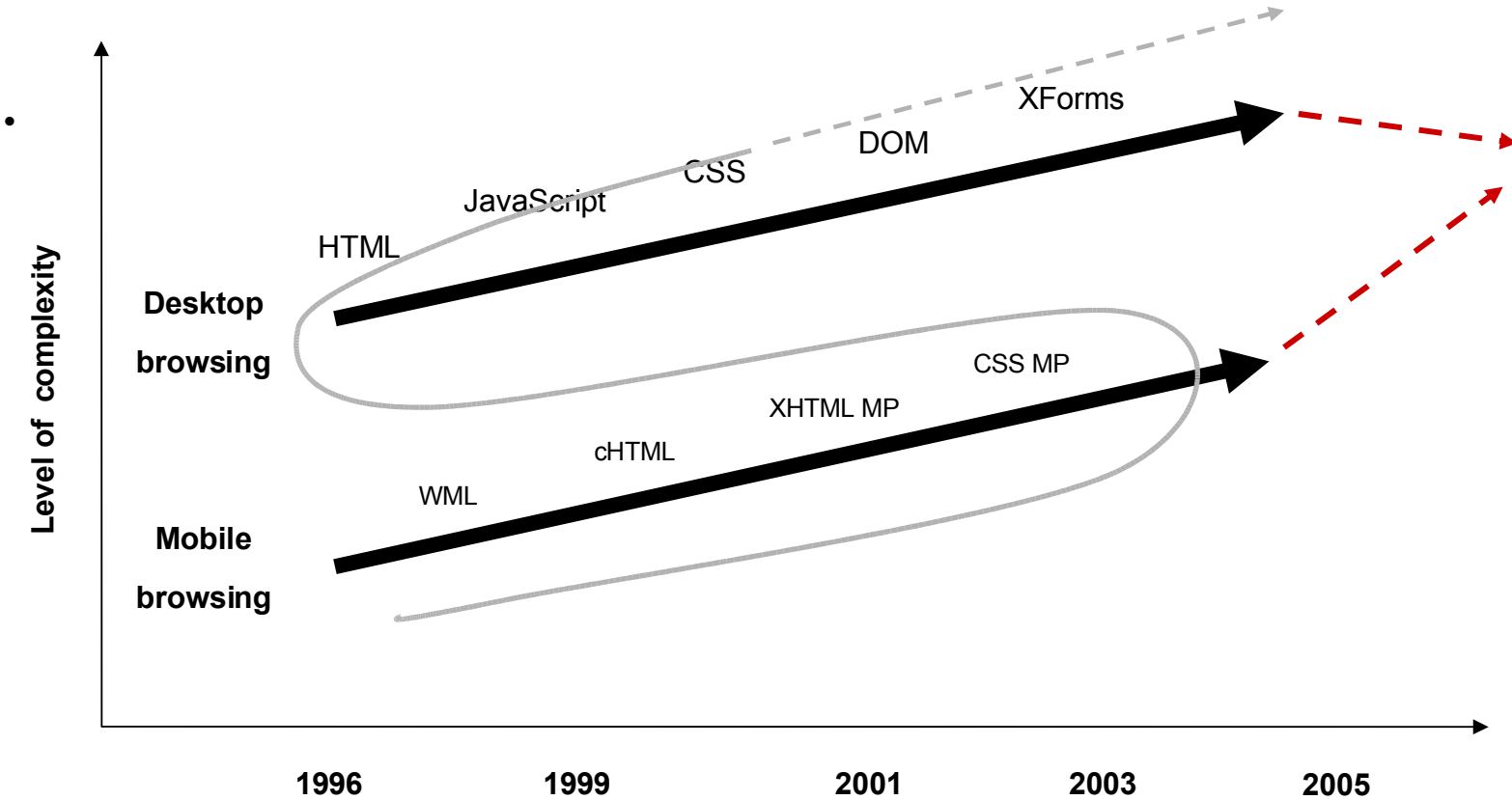


# Desktop browsers vs. mobile browsers





# Desktop browsers vs. mobile browsers



**What we need**

# What we need in browsing technologies

- **Universal access**
  - One content, many views
  - Form factors are diverging more, not less
  - Clean separation of content and styling
- **Interoperability**
  - Optimised for X not feasible
  - ALL devices, OSs, platforms
- **Modularity, not more profiles**
  - Common core and well specified extensions
  - Subsets are acceptable, supersets are not
- **Evolution, not revolution**
  - Not closed for construction
- **Users should not be exposed to authoring errors**
  - Show what can be shown
  - Validation is still required
- **Tools that make convergent content development easy**

# From viewing to interacting

# Mobile browsing technology use cases

	<b>Web Browsing</b>	<b>Online Services</b>	<b>Dynamic home Screens</b>	<b>Component in other apps</b>	
<b>Dynamic Scripting</b>	<ul style="list-style-type: none"> <li>• DOM 2</li> <li>• DOM 1</li> <li>• DHTML</li> </ul>	Interactive services such as gaming, chatting and shopping	Gaming, email, calendar etc.	Interaction with native environment for SMS, MMS etc.	Dynamic update of content
<b>Scripting languages</b>	<ul style="list-style-type: none"> <li>• JavaScript 1.5</li> <li>• ECMAScript 3rd</li> <li>• ECMAScript 2nd</li> </ul>	Make services such as web mail, banking etc.	Login routines, form inputs etc.	Standalone scripts such as Clock	Interactivity
<b>Layout languages</b>	<ul style="list-style-type: none"> <li>• CSS 2</li> <li>• CSS 1</li> </ul>	Full control of colors and layout	Extensible graphic over limited bandwidth	Themes, branding, etc.	Rich graphic
<b>Mark-up languages</b>	<ul style="list-style-type: none"> <li>• Street HTML</li> <li>• HTML 4.01</li> <li>• XHTML 1.0/1.1</li> </ul>	Complex non-standard web pages	Information services	Operator controlled framework	HTML in Mail
<b>WAP 2.0</b>	<ul style="list-style-type: none"> <li>• XHTML MP</li> <li>• CSS MP</li> <li>• WML</li> </ul>		WAP content		

# Mobile browsing technology use cases

## Dynamic Scripting

- DOM 2
- DOM 1
- DHTML

## Scripting languages

- JavaScript 1.5
- ECMAScript 3rd
- ECMAScript 2nd

## Layout languages

- CSS 2
- CSS 1

## Mark-up languages

- Street HTML
- HTML 4.01
- XHTML 1.0/1.1

## WAP 2.0

- XHTML MP
- CSS MP
- WML

## Web Browsing

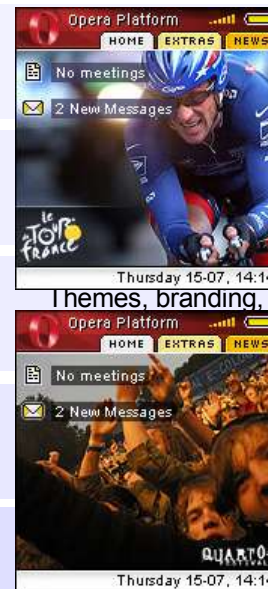
Interactive services such as gaming, chatting and shopping



## Online Services

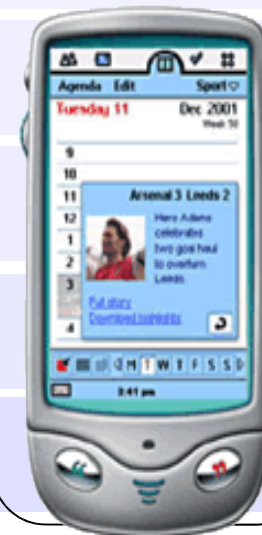


## Dynamic home Screens



## Component in other apps

Dynamic update of content



# Summary

- **Existing Web content will not be redone to cater mobile**
  - Evolutionary convergence of fixed and mobile domains
- **Divergence of form factors will increase**
  - Not fixed v. mobile but a range of different characteristics
- **Blaming the technologies is only a start**
  - Value proposition and the will to converge is required as well
- **Mobile Web is more than browsing**
  - True application environment
  - Pushed based services
  - Unique Mobile use cases and opportunities
- **Human behaviour patterns take a long time to change**
  - Not 'if you will build it they will come' but 'build market and be patient'