

XML languages

Philosophy
and Design

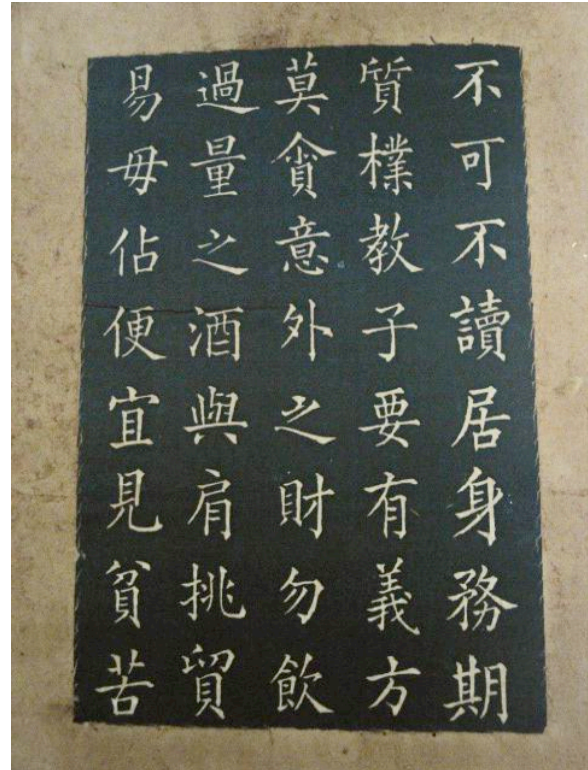
Punctuation

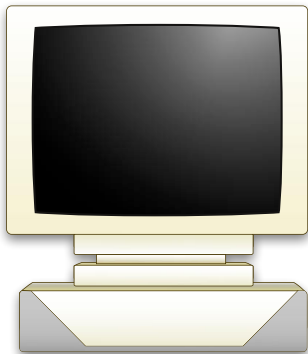
A £2.3 billion refit of defence mandarins' Whitehall headquarters includes three miles of demolished walls, 3,500 oak doors and a “terrazzo” marble floor

La télévision publique polonaise TVP avait annoncé en début de matinée que l'intronisation de l'archevêque, prévue à 11 heures, pourrait être annulée, et la cérémonie prévue transformée en une "messe de gratitude" pour le sacerdoce de Mgr Glemp, son prédécesseur tout juste retraité. "D'importants pourparlers entre les autorités polonaises et le Vatican ont eu lieu cette nuit", annonçait la chaîne.

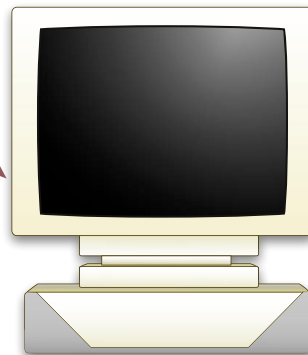
Scienziati Usa hanno isolato cellule capaci di differenziarsi. Una scoperta che apre grandi speranze, soprattutto nel settore del trapianto di organi. E che potrebbe far superare il dibattito etico intorno alla ricerca sugli embrioni

Сегодня Русская православная церковь и ряд других поместных церквей отмечают светлый праздник Рождества Христова, символизирующего приход Спасителя в наш мир. В этот день заканчивается 6-недельный Рождественский пост, и наступают святки – время широких празднований и обильного пиршества.

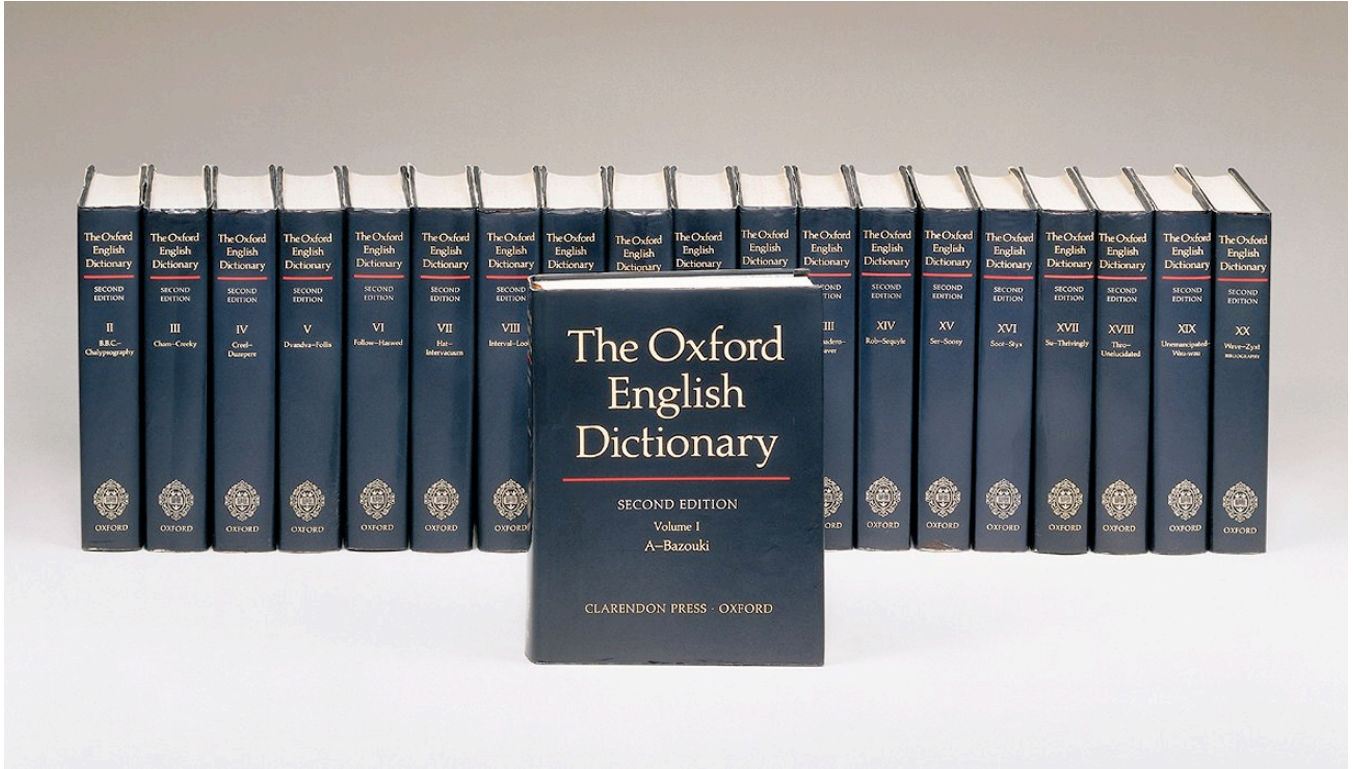




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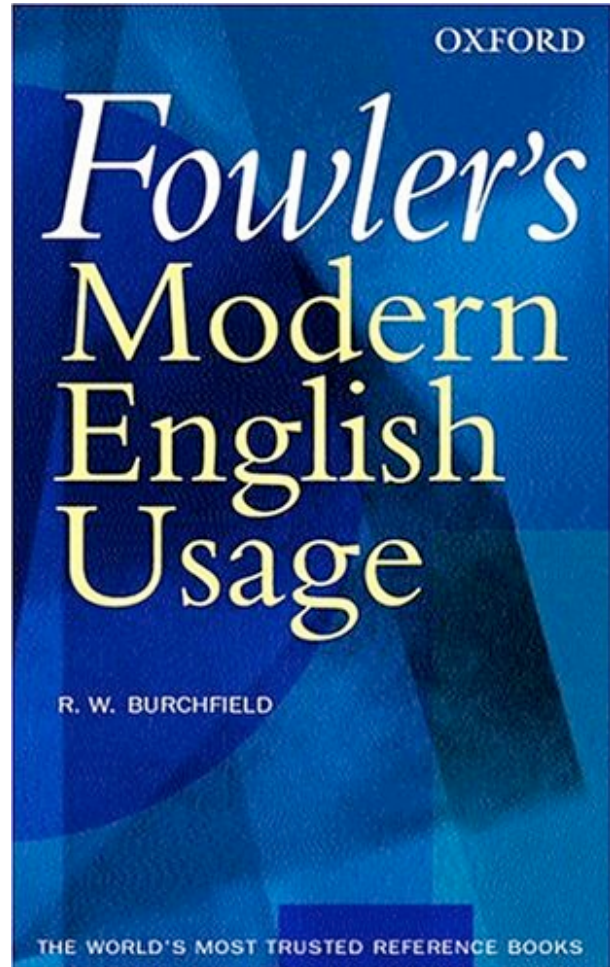
Vocabulary



```
<p>  
  words  
  <head>  
  more words  
    <table/>  
    <i/>  
  </child>  
  some more  
</parent>
```

Well-formed
nonsense

Grammar



"Pandra vynn'ta dh'y eva?"

"Pinta korev marpleg."

Shared meaning - semantics

Metadata

Dublin Core - generalized media metadata.

NERC Data Grid

- MOLES: Metadata Objects for Links in Environmental Science

UKOLN (UK Office for Library Networking, Bath University)

- JISC IEMSR: Metadata Schema Registration Project

GML - Geography Markup Language

Data

GML - Geography Markup Language

CSML: Climate Science Markup Language

XMML: eXploration and Mining Markup Language

QuakeML - Seismology Markup Language

XMML - eXploration and Mining Markup Language

HydroXC - Hydrology XML Consortium

...

Visualization

(X)HTML - Hypertext Markup Language

MathML - Mathematical Markup Language

SVG - Scalable Vector Graphics

Pelote - 2D Plot Markup Language

KML - Keyhole Markup Language (Google Maps/Earth)

XML Namespaces

XHTML <head> <body>

AnatomyML <head> <body>

XML Namespaces

XML language label:
namespace URI

```
xmlns="http://www.w3.org/1999/xhtml"
```

name="parent"

nsURI="http://FamilyML"

XML Namespaces

namespace prefixes

```
<html  
xmlns="http://www.w3.org/1999/xhtml">
```

```
<h:html  
xmlns:h="http://www.w3.org/1999/xhtml">
```

```
<xyz:html  
xmlns:xyz="http://www.w3.org/1999/xhtml">
```

```
Qname="html"  
localName="html"  
nsURI="http://..."
```

```
Qname="h:html"  
localName="html"  
nsURI="http://..."
```

```
Qname="xyz:html"  
localName="html"  
nsURI="http://..."
```

XML Namespaces

pick and mix

```
<html
xmlns="http://www.w3.org/1999/xhtml"
xmlns:s="http://www.w3.org/2000/svg"
xmlns:m="http://www.w3.org/1998/Math/MathML">
  ...
  <s:svg>
    ...
    </s:svg>
    <m:mathml>
      ...
      </m:mathml>
    ...
    <p></p>
</html>
>
```

Ancillary XML languages

Dublin Core

GML

SVG

HTML

...

Subsetting XML languages

(Microformats)

GML

HTML

CML

But what if I
get it wrong?

Explore!