

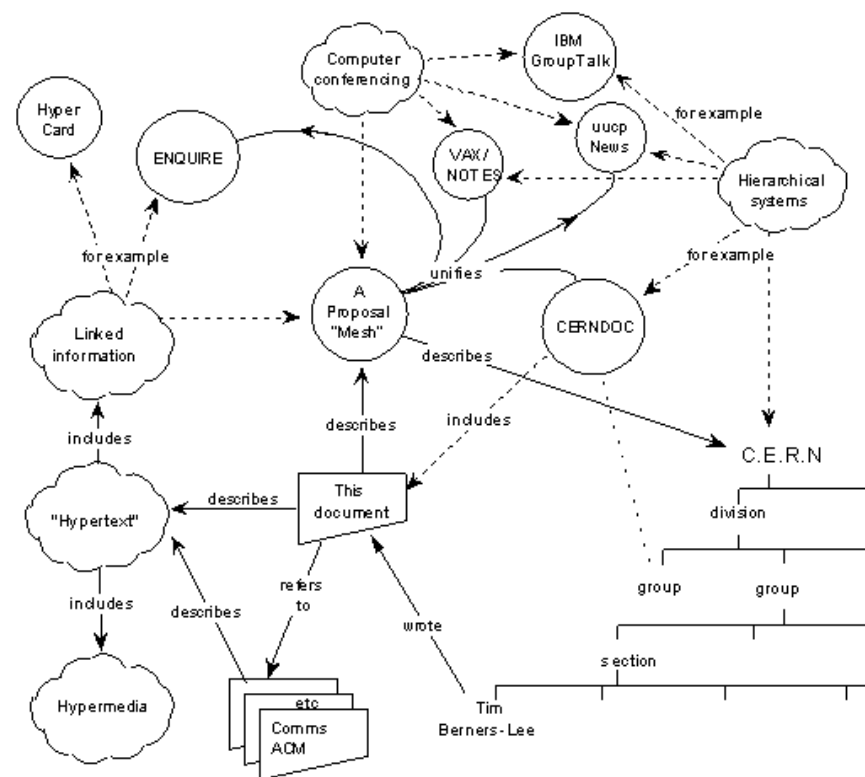
**W3C
HTML5
Web Semântica
Futuro da Web**

**Semana de Tecnologia
FATEC Carapicuíba
Outubro 2011**



Tim Berners-Lee criou / propôs

- a Web em 1989 (há 22 anos)
 - <http://www.w3.org/History/1989/proposal.html>
 - (URI + HTTP + HTML)



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 - (URI + HTTP + HTML)
- o W3C em 1994 (há 17 anos)
 - 01/10/1994 no MIT, Laboratório de Ciência da Computação
- Web Semântica
 - 1a. Conferência Internacional WWW – 25 a 27/05/1994
 - <http://www.w3.org/Talks/WWW94Tim/>

É um consórcio internacional

- organizações filiadas,
- uma equipe em tempo integral,
- participação do público

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para colaborativamente desenvolver padrões universais para a Web.

Conduzir a World Wide Web para que atinja todo seu potencial, desenvolvendo protocolos e diretrizes que garantam seu crescimento de longo prazo.

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Desde sua fundação, o W3C publicou mais de uma centena de padrões, denominados

Recomendações do W3C
Web Standards – Padrões Web

- Web para todos



- Web para todos

Tornar os benefícios da web (seu valor social: comunicação humana, comércio, compartilhar conhecimentos) disponíveis a todos, independente de

- Hardware
- Software
- Infraestrutura de rede
- Idioma
- Cultura
- Localização geográfica
- Habilidade física
- Habilidade mental

- Web para todos
- Web em qualquer dispositivo



- Web em qualquer dispositivo

Possibilitar que o acesso de qualquer tipo de dispositivo seja tão simples, fácil e conveniente quanto de um computador convencional

- Computadores
- Desktops
- Netbooks
- Telefones
- PDAs
- TV digital
- Sistemas de interação por voz
- Aparelhos domésticos
- ... web ubíqua

- Web para todos
- Web em qualquer dispositivo
- Web base de conhecimento



- Web base de conhecimento

Não apenas um grande livro hiperlinkado onde pessoas possam pesquisar, navegar, visualizar e **ler** informações

Possibilitar que computadores interpretem, estabeleçam inferências e relações na web

Interoperabilidade

– Web Semântica

- Web para todos
- Web em qualquer dispositivo
- Web base de conhecimento
- Web confiável e segura



- Web confiável e segura

Uma web em que as transações sociais e comunicações com terceiros sejam estabelecidas em relações de confiança, por pessoas, organizações ou serviços

- Ambiente mas colaborativo
- responsável
- seguro
- Confiança e Confidência

- Não apenas repositório de documentos com o propósito de exibição, mas de automação, integração e reuso em sistemas diferentes
- Não apenas apresentar dados, interpretá-los
- Compartilhar informações (interpretações) com organização em escala e completa integração de recursos

Web sintática

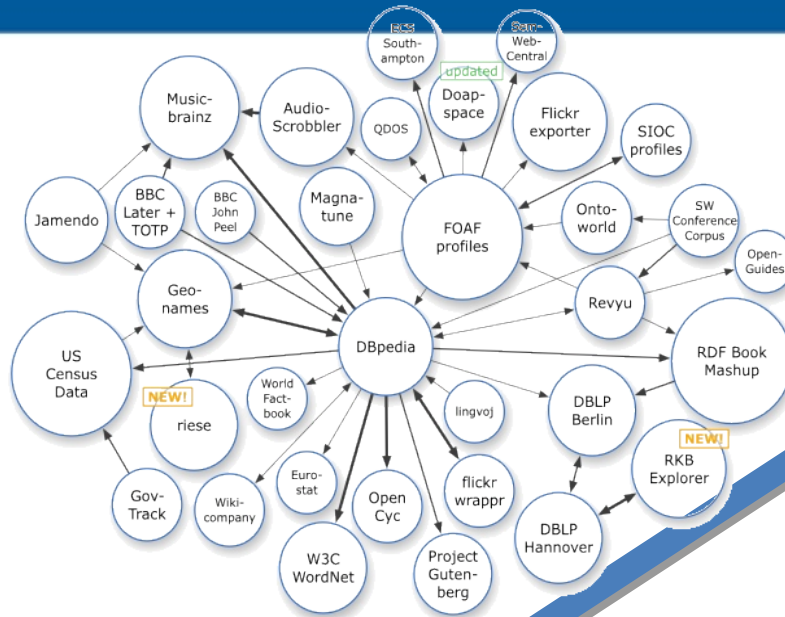


Web semântica

Regras e formalidades



Interpretações,
inferências e
relações

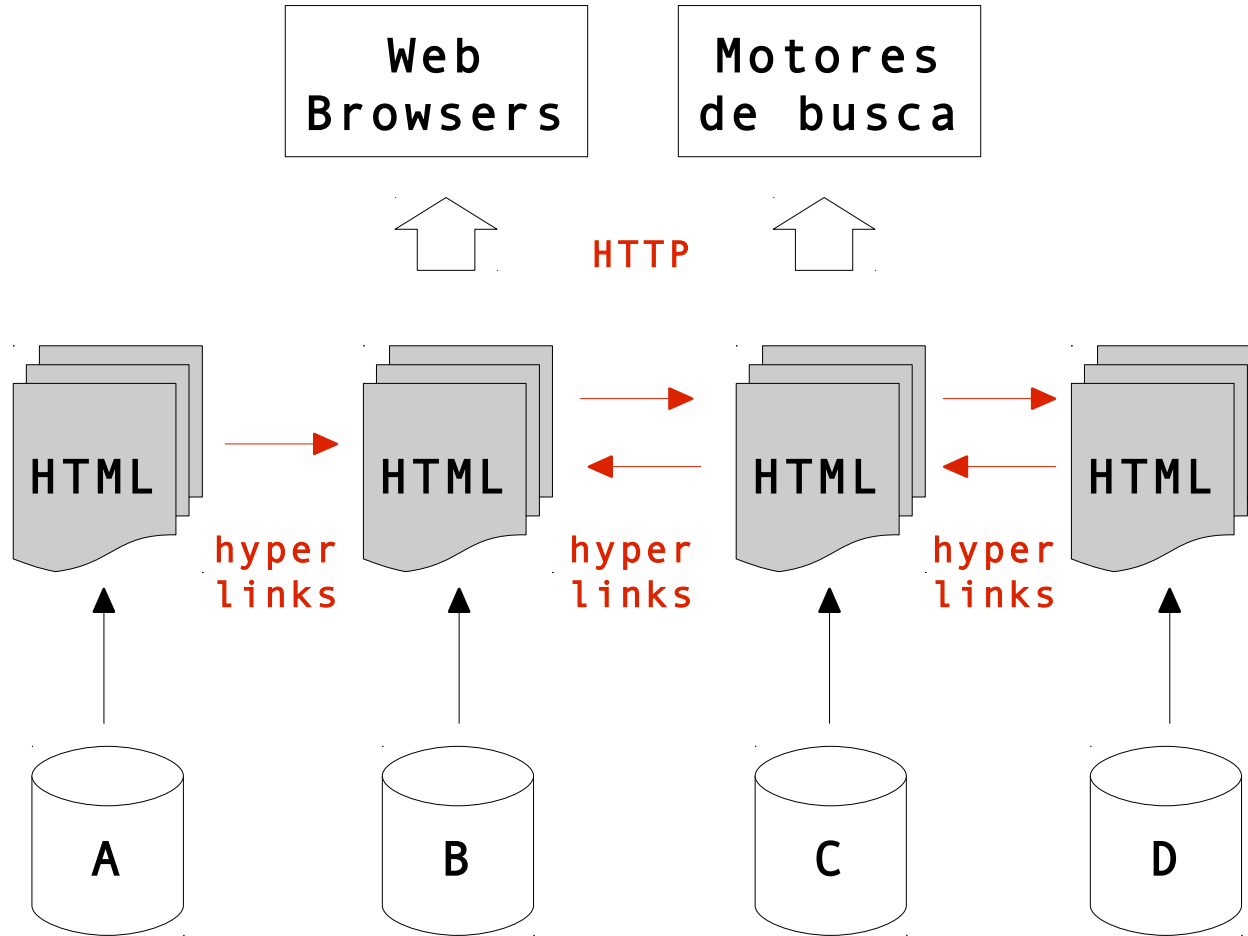


Web de dados (2006)
URI - RDF

Web Social (2003)



Web (1992)
HTTP - URI
HTML/CSS/JavaScript



HTML





HTML 5 [HyperText Markup Language]

- 1991 – html tag – Tim Berners Lee
- 1994 – HTML 2 - já incluía tag
- 1997 – HTML 3.2
- 1999 – HTML 4.01
- 2000 – XHTML 1.0
- 2001 – XHTML 1.1 – CSS
- 20... – Ian Hickson (Opera) propõe estender HTML:
Web Forms 2.0, Web Apps 1.0
- 2004 – Apple, Mozilla e Opera criam WHAT WG
(Web Hypertext Application Technology Working Group)
- 2007 – W3C retorna HTML Working Group
- 2009 – W3C descontinua XHTML
- 2010-2011 – Apple, Google, Microsoft, Mozilla e Opera implementam HTML5



proposed new tag: IMG

Marc Andreessen (marca@ncsa.uiuc.edu)

Thu, 25 Feb 93 21:09:02 -0800

- **Messages sorted by:** [\[date \]](#) [\[thread \]](#) [\[subject \]](#) [\[author \]](#)
- **Next message:** [Tony Johnson: "Re: proposed new tag: IMG"](#)
- **Previous message:** [Bill Janssen: "Re: xmosaic experience"](#)
- **Next in thread:** [Tony Johnson: "Re: proposed new tag: IMG"](#)

I'd like to propose a new, optional HTML tag:

IMG

Required argument is SRC="url".

This names a bitmap or pixmap file for the browser to attempt to pull over the network and interpret as an image, to be embedded in the text at the point of the tag's occurrence.

An example is:

```
<IMG SRC="file://foobar.com/foo/bar/blargh.xbm">
```

(There is no closing tag, this is just a standalone tag.)

This tag can be embedded in an anchor like anything else; when that happens, it becomes an icon that's sensitive to activation just like a regular text anchor.

HTML 5 [HyperText Markup Language]

Maio/2011 – Last Call



Processo W3C padronização :

- *Working Draft* (Rascunho de Trabalho)

Last Call

- *Candidate Recommendation* (Candidato a Recomendação):

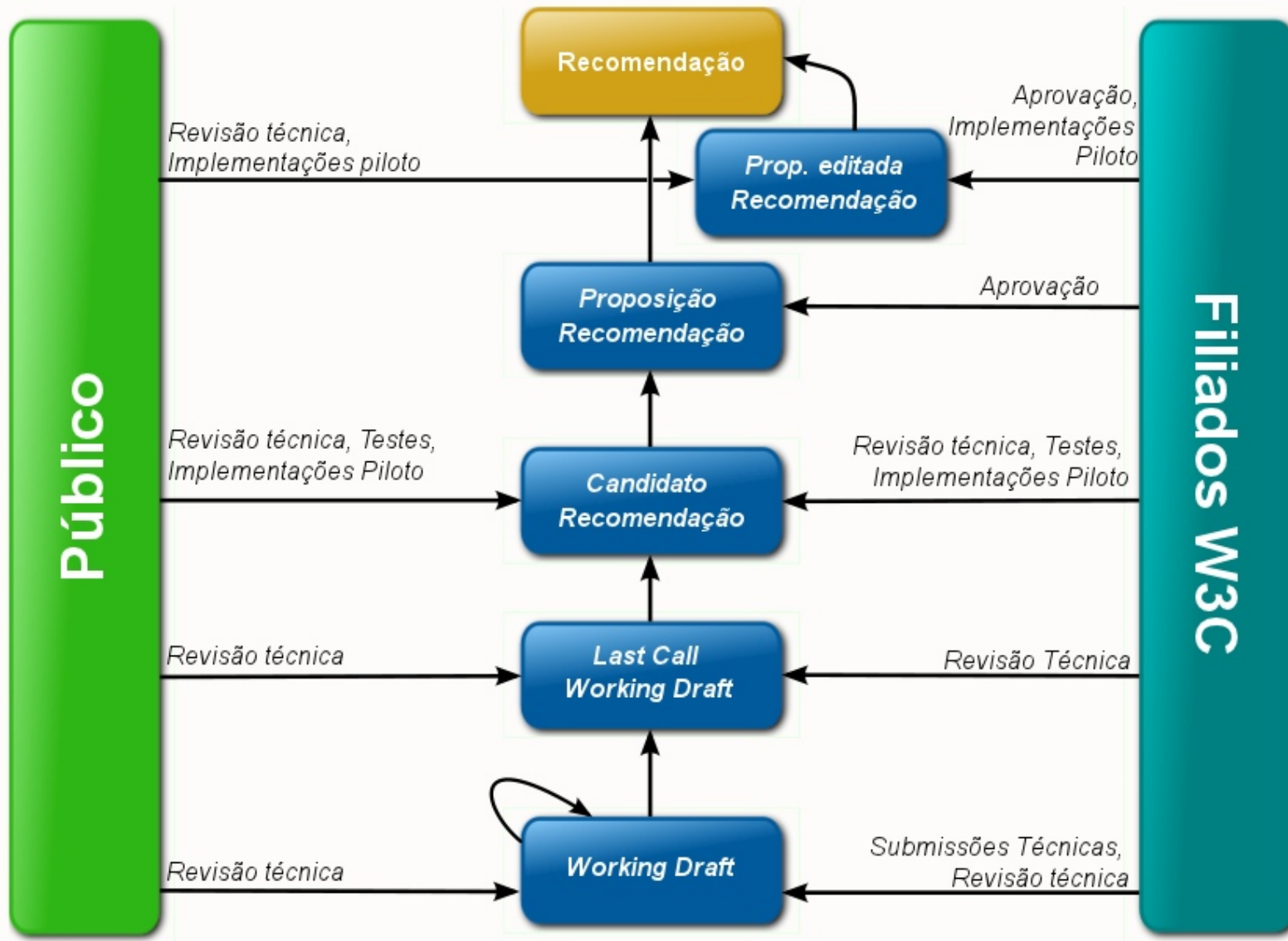
Chamada para implementação

- *Proposed Recommendation* (Proposta de Recomendação):

Chamada para revisão de proposta de recomendação

- *W3C Recommendation* (Recomendação W3C):

Publicação da recomendação





HTML 5 [HyperText Markup Language]

Formulários

<canvas>

<video>

<audio>

Elementos para melhor modelagem página

Geolocalização

HTML 5 [HyperText Markup Language]



DOCTYPE:

HTML4

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN"  
"http://www.w3.org/TR/html4/strict.dtd">
```

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01  
Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
```

XHTML

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0  
Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
transitional.dtd">
```



<!DOCTYPE html>



HTML 5 [HyperText Markup Language] Formulários

<http://diveintohtml5.info/examples/input-type-number-min-max-step.html>

<http://diveintohtml5.info/examples/input-type-date.html>

```
<form>  
  <label for="CEP">CEP: </label>  
  <input type="text" id="CEP" required pattern="\d{5}-?\d{3}" />  
  <input type="submit" value="Enviar" />  
</form>
```

HTML 5 [HyperText Markup Language]

VÍDEO



```
<video id='VideoResource' style='border: black 1px solid; margin-left: 4px; margin-top: 4px; margin-bottom: 0px;' poster='/2009/04/coffee.png'>
```

```
<source src="http://media.w3.org/2009/02/ThisisCo1961_tiny.mp4" type="video/mp4"/>
```

```
<source src="http://media.w3.org/2009/02/ThisisCo1961_tiny.ogv" type="video/ogg"/>
```

```
<text lang='en' type="application/ttaf+xml" src="/2009/02/ThisIsCoffee61_captions.xml">
</text>
```

```
<div style='width: 320px; height: 240px; color: white'><p>No Video Support.</p>
```

```
</div>
```

```
</video>
```

<http://www.w3.org/2011/Talks/0504-html5-plh/video-player.xhtml>

<http://www.w3c.br/Noticias/W3cBrasilPublicaPrimeiroVideoEmHtml5ETtml10>



HTML 5 [HyperText Markup Language] VÍDEO





HTML 5 [HyperText Markup Language]

Codecs/ container	IE	Firefox	Safari	Chrome	Opera	iPhone	Android
Theora+Vorbis+ Ogg	.	3.5+	.	5.0+	10.5+	.	.
H.264+AAC+ MP4	9.0+	.	3.0+	.	.	3.0+	2.0+
WebM	9.0+	4.0+	.	6.0+	10.6+	.	?

HTML 5 [HyperText Markup Language]

<http://szenesprachenwiki.de/words/canvas>



TREND
BÜRO <canvas>

Neue Wörter Wörterbuch **Konfetti** FAQ Registrierung oder Log-in

DUDEN

Neues Wörterbuch
der Szenesprachen

Games & Netwc

spoken

Musik von "The Spoken Project" Sc

» Buch bei Amazon kaufen



HTML 5 [HyperText Markup Language]

Novos elementos

<article>

<section>

<header> & <footer>

<hgroup> (agrupamento **<h1>** **<h2>** ...)

<aside>

<figure> e **<figcaption>**

Lista completa: <http://www.w3.org/TR/html-markup/>

HTML 5 [HyperText Markup Language]

div.container

div.header

div.nav

div.article

div.content

h1.title

div.links

div.sidebar

div.body

div.footer

HTML4 + CSS

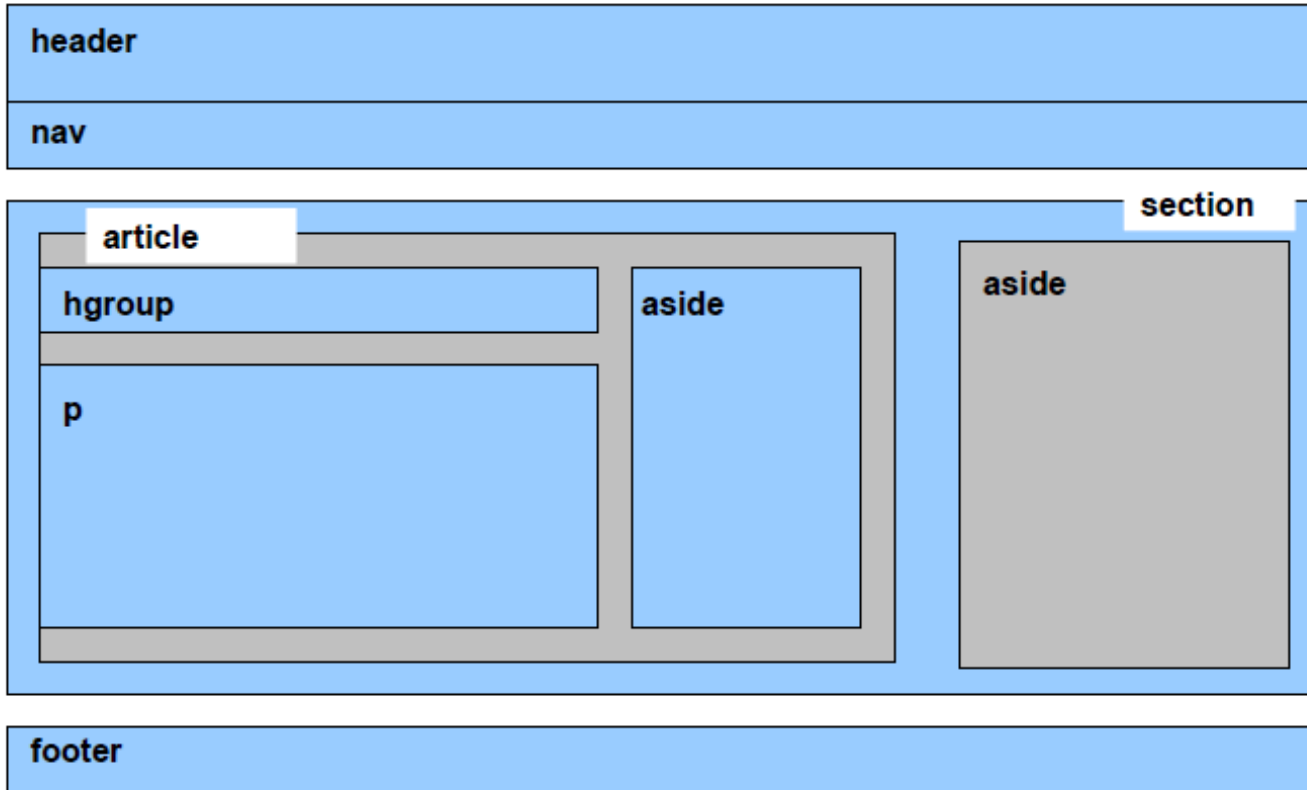
HTML 5 [HyperText Markup Language]



**Novos
elementos
(semânticos)**

HTML5 + CSS

section.container



HTML 5 [HyperText Markup Language]



- <http://www.whatwg.org/>
- <http://www.whatwg.org/demos/company-home/>
- <http://www.w3.org/2009/03/web-demo.xhtml>
- <http://www.w3.org/html/wiki/Demos>
- <http://www.w3.org/html/planet/>
- <http://www.w3.org/html/logo/>
- <http://www.w3.org/TR/ttaf1-dfxp/>
- <http://acessodigital.net/video-html5/video-acessibilidade-br.html>
- <http://www.w3c.br/Cursos/>
- <http://dev.w3.org/html5/markup/>

I've seen the
FUTURE
It's in my
BROWSER

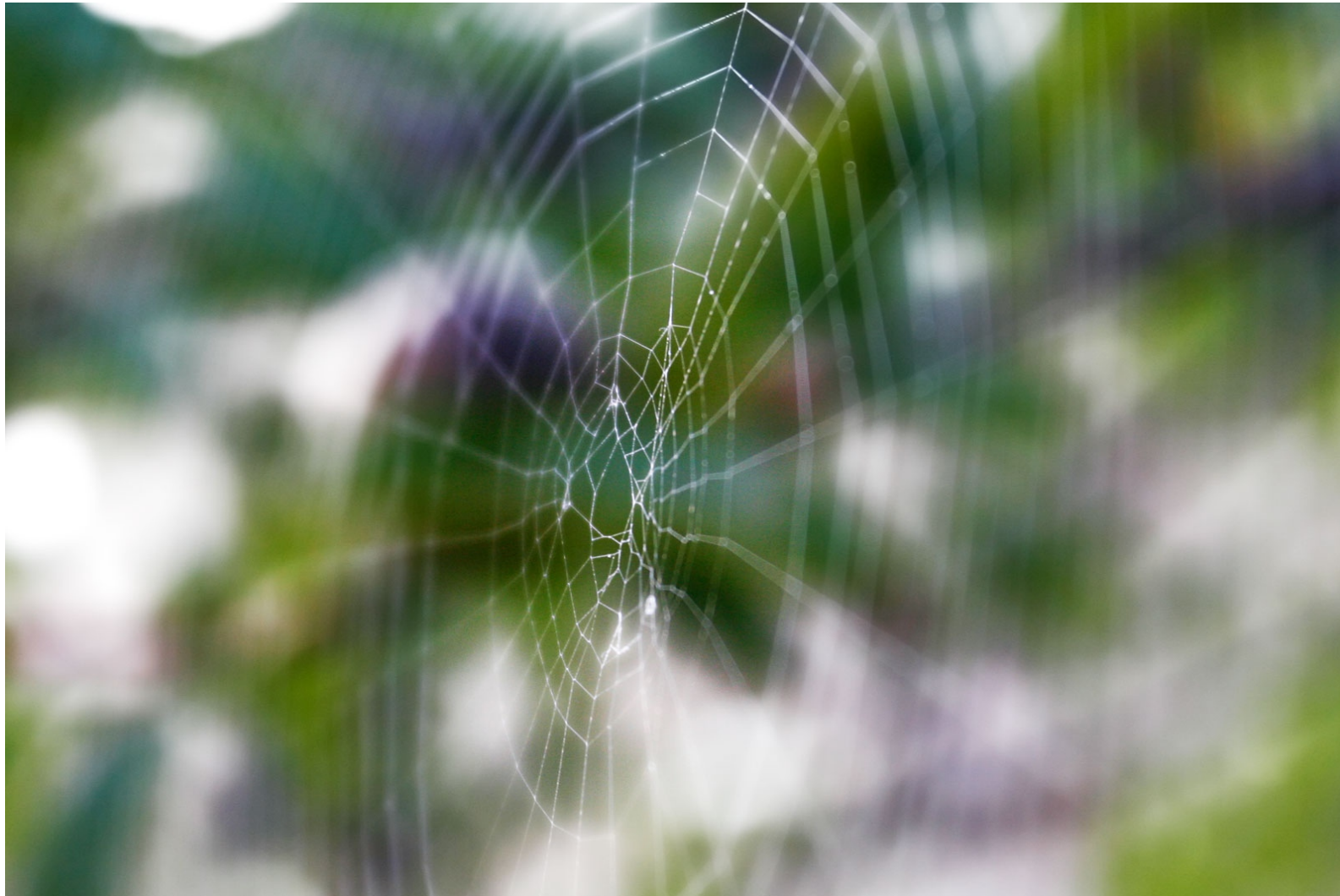


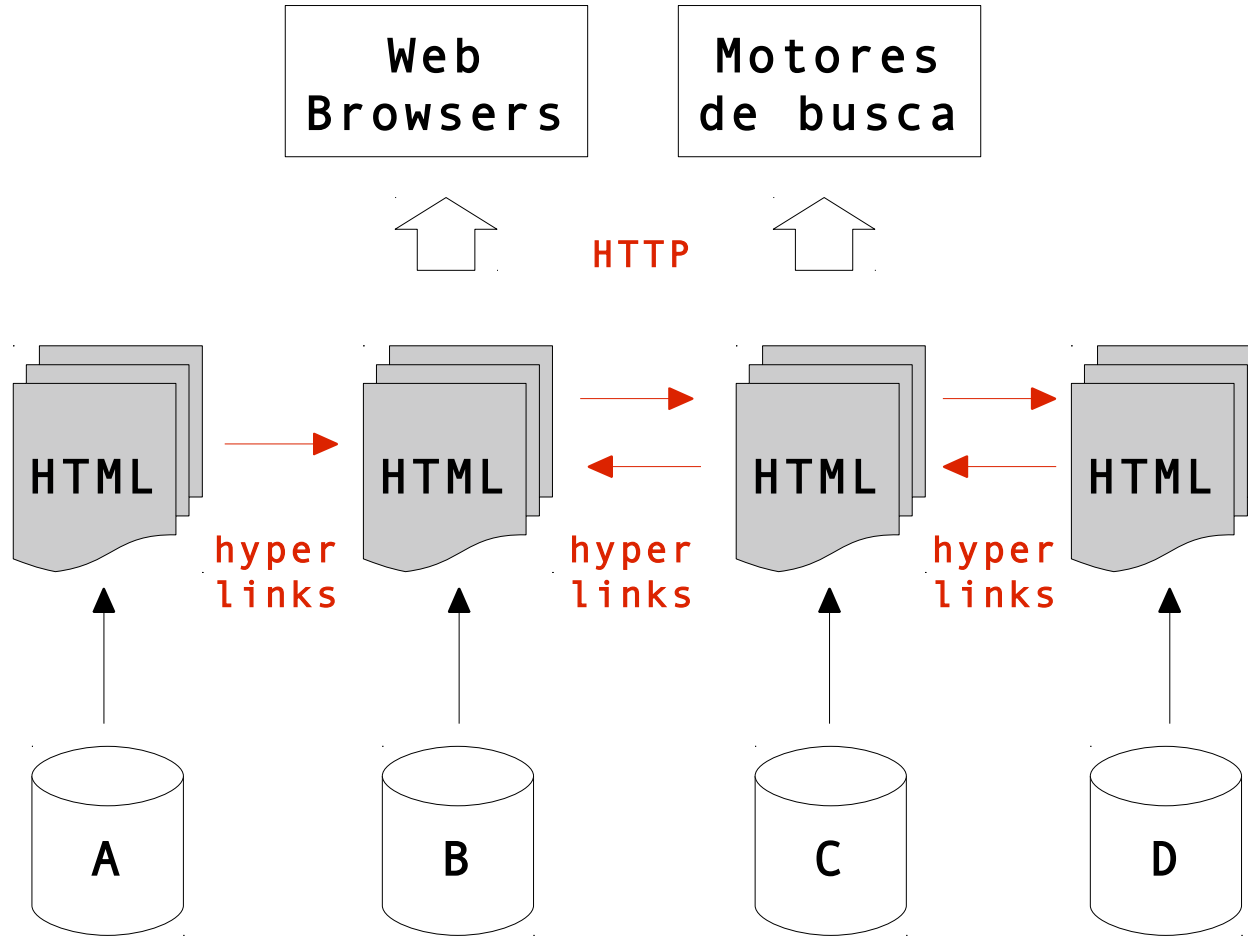


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FUTURE
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BROWSER

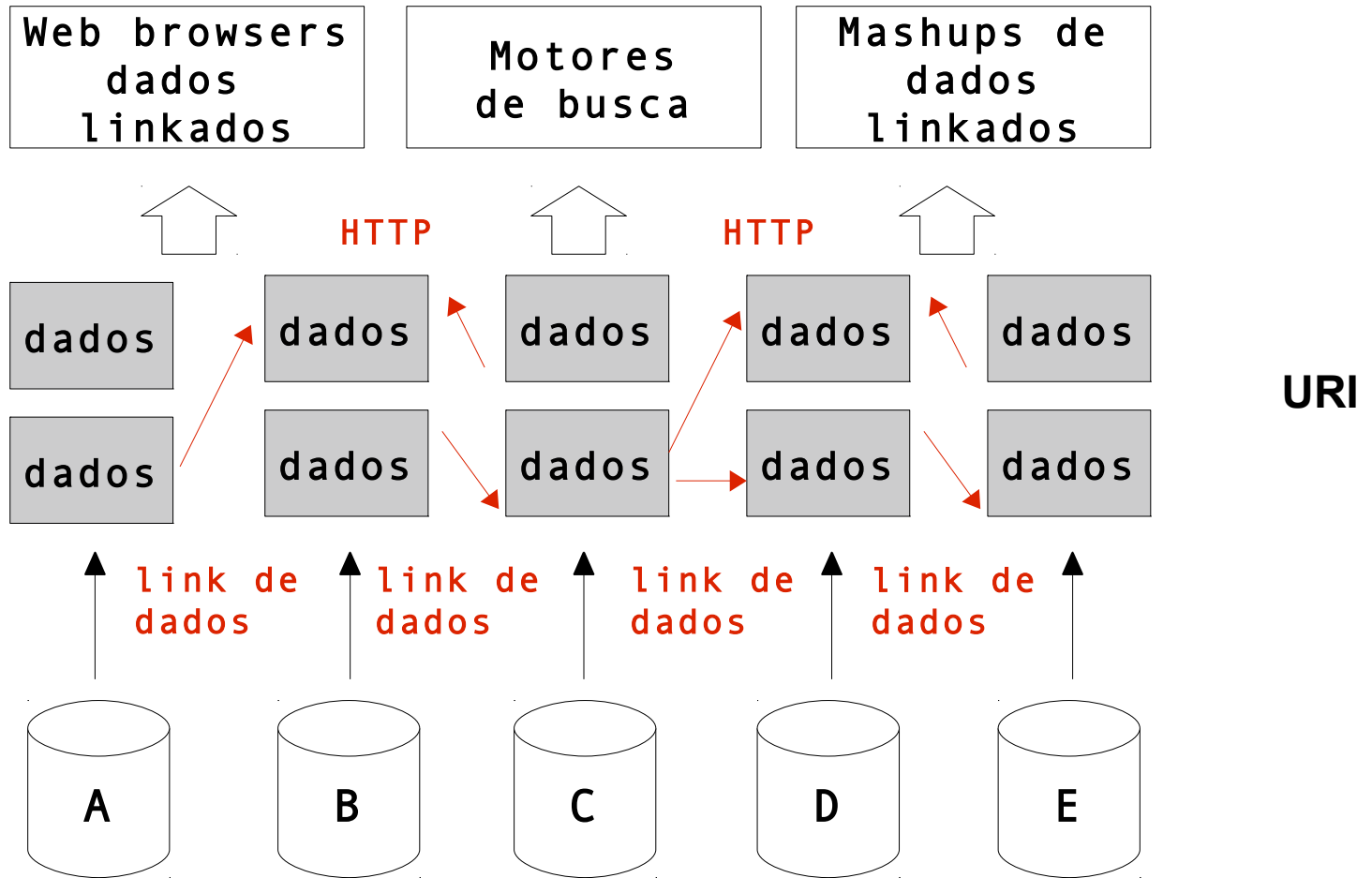


**Conectividade – CSS3 – Acesso de dispositivos –
Gráficos 3D e Efeitos – Multimídia – Performance e
Integração – Semântica – Offline e Armazenamento**

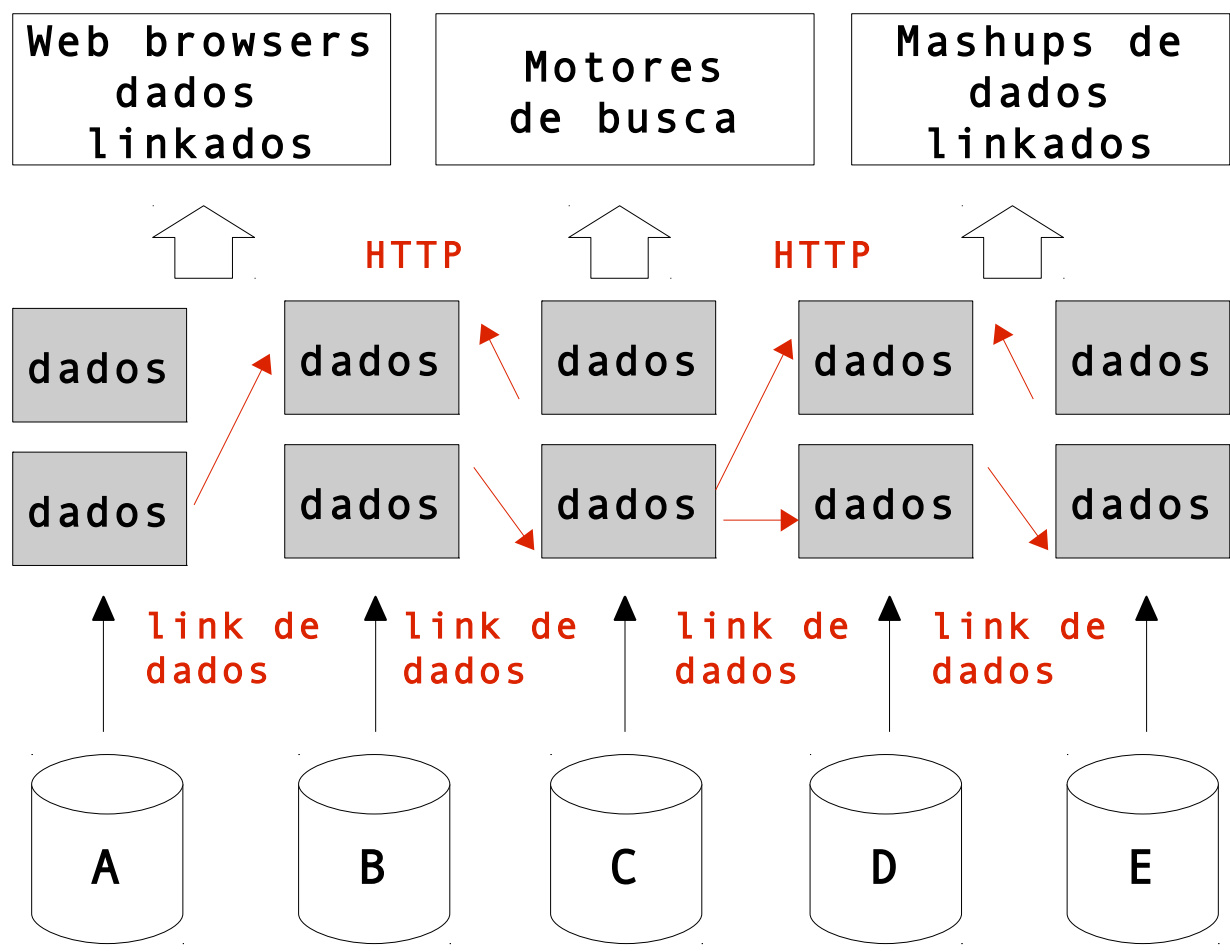




http://.../página

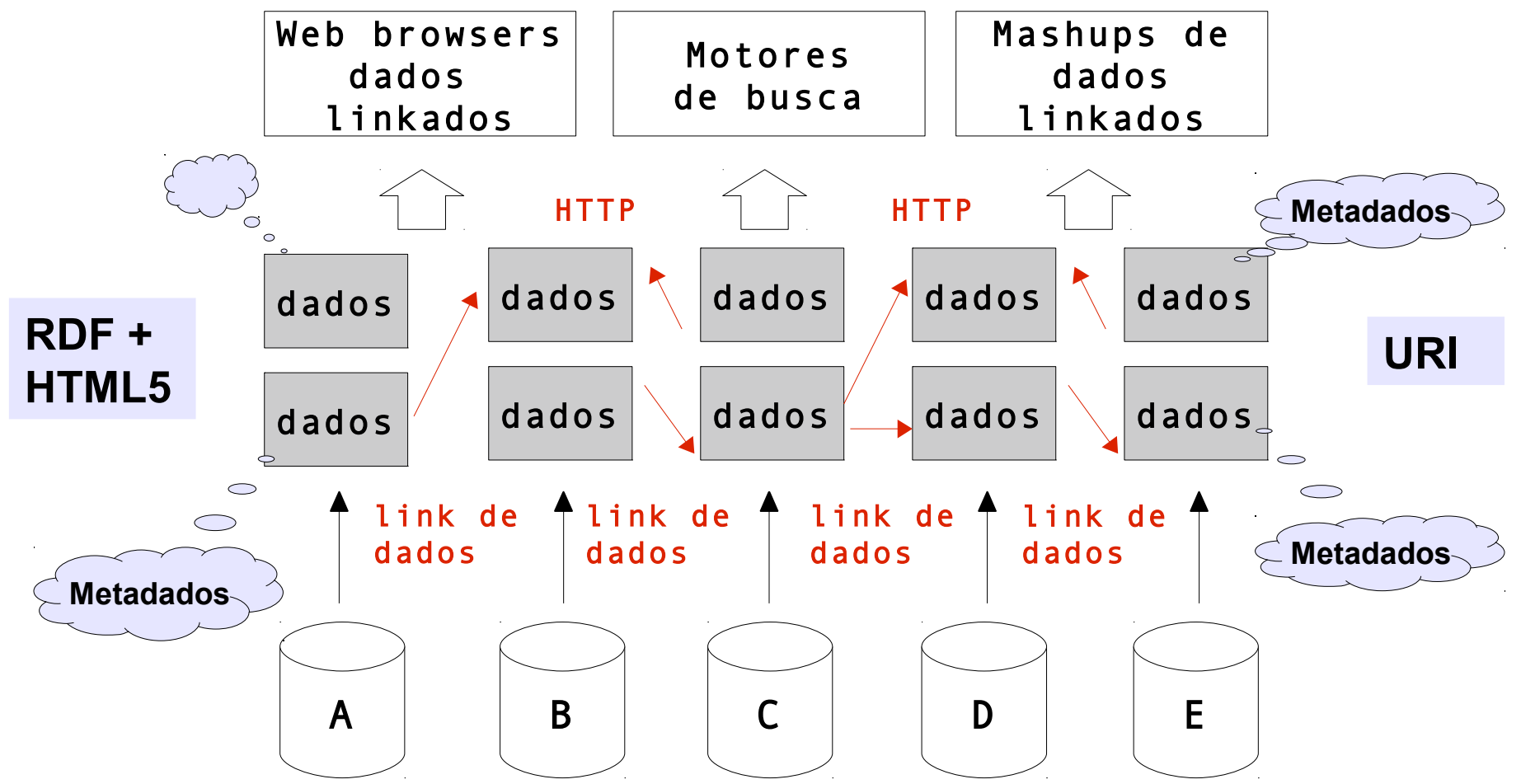


http://.../dados



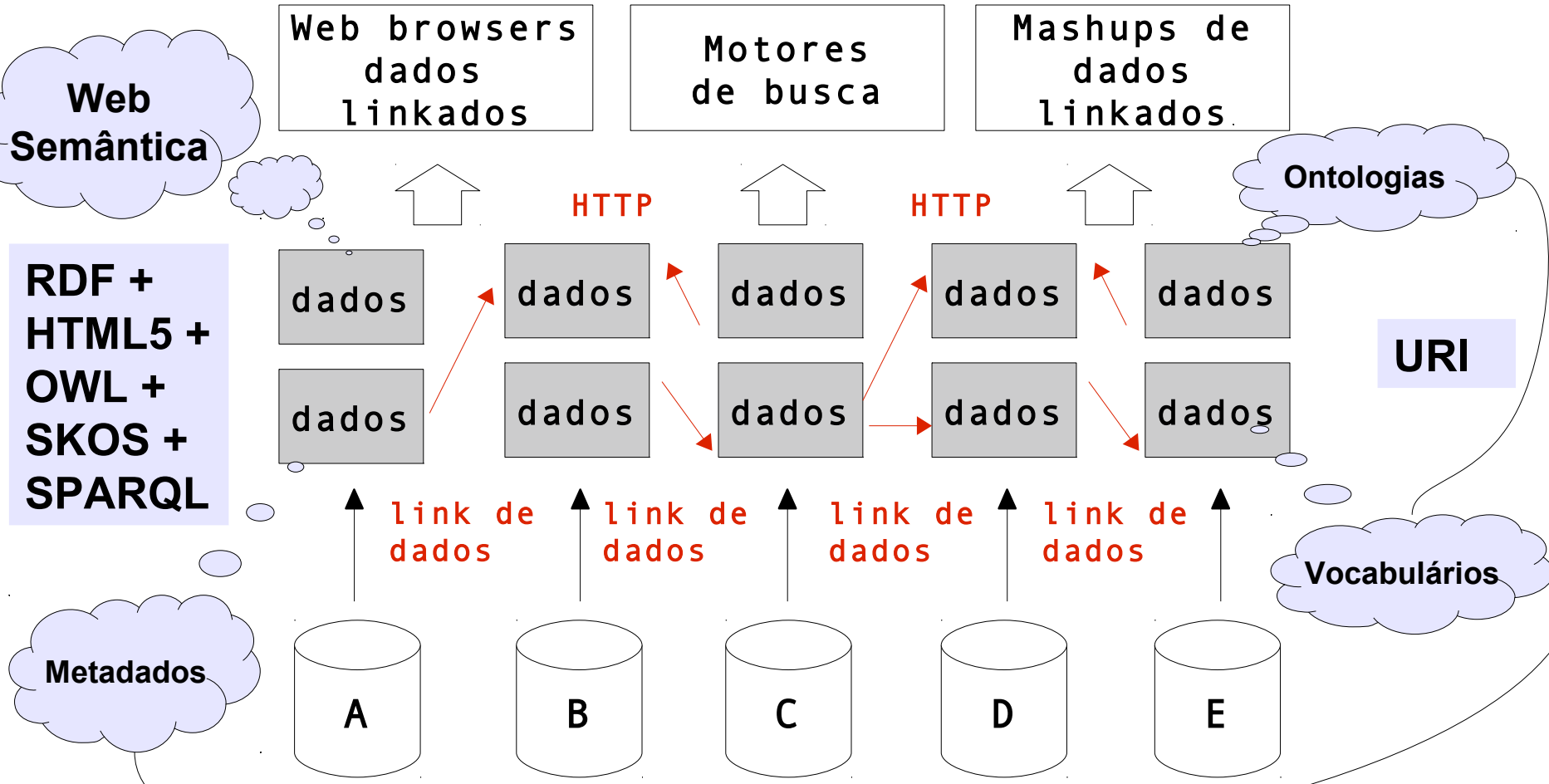
RDF + HTML5

URI



http://.../dado

http://.../metadado



http://.../dado

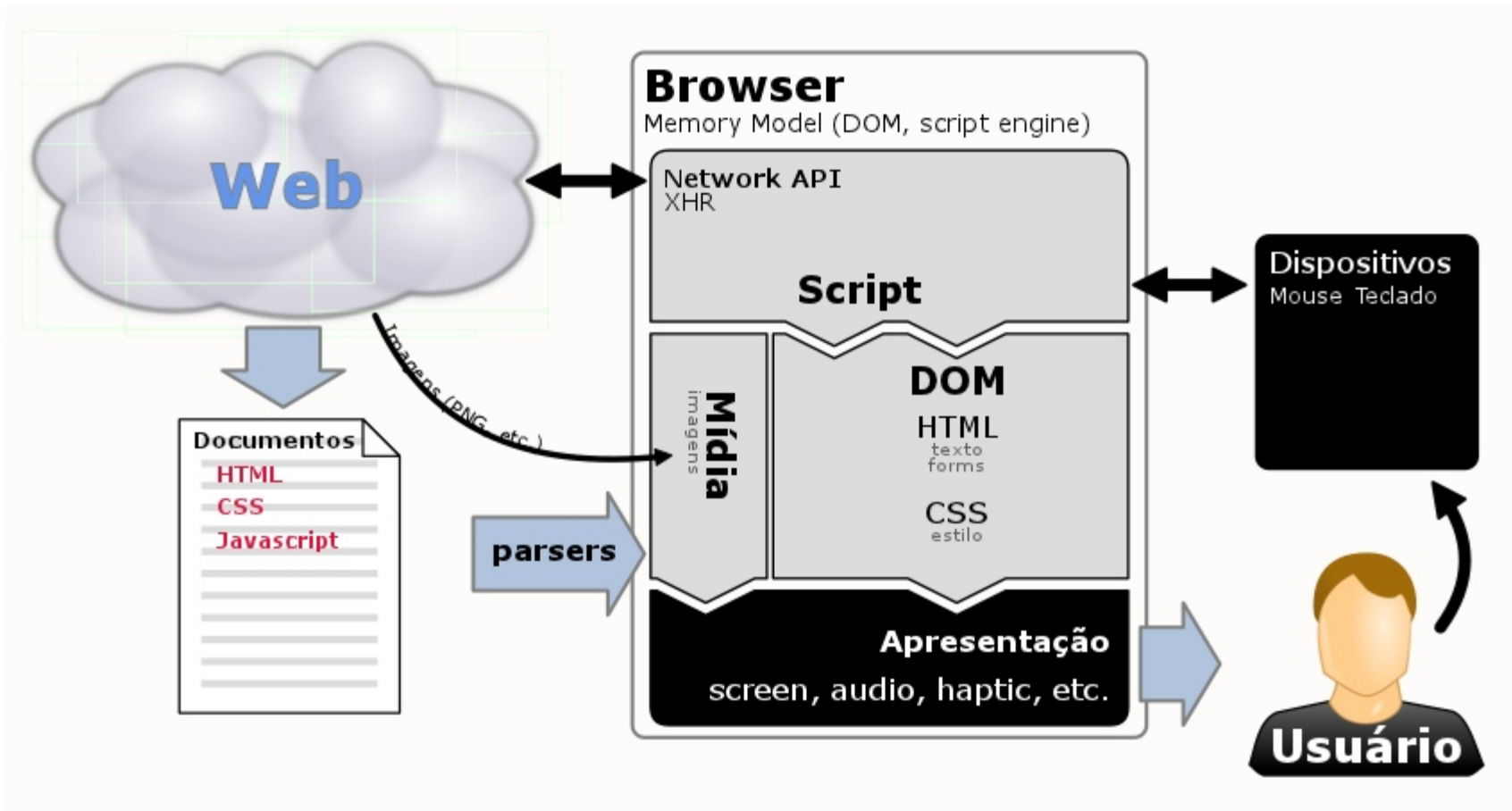
http://.../metadado

http://.../vocabulário

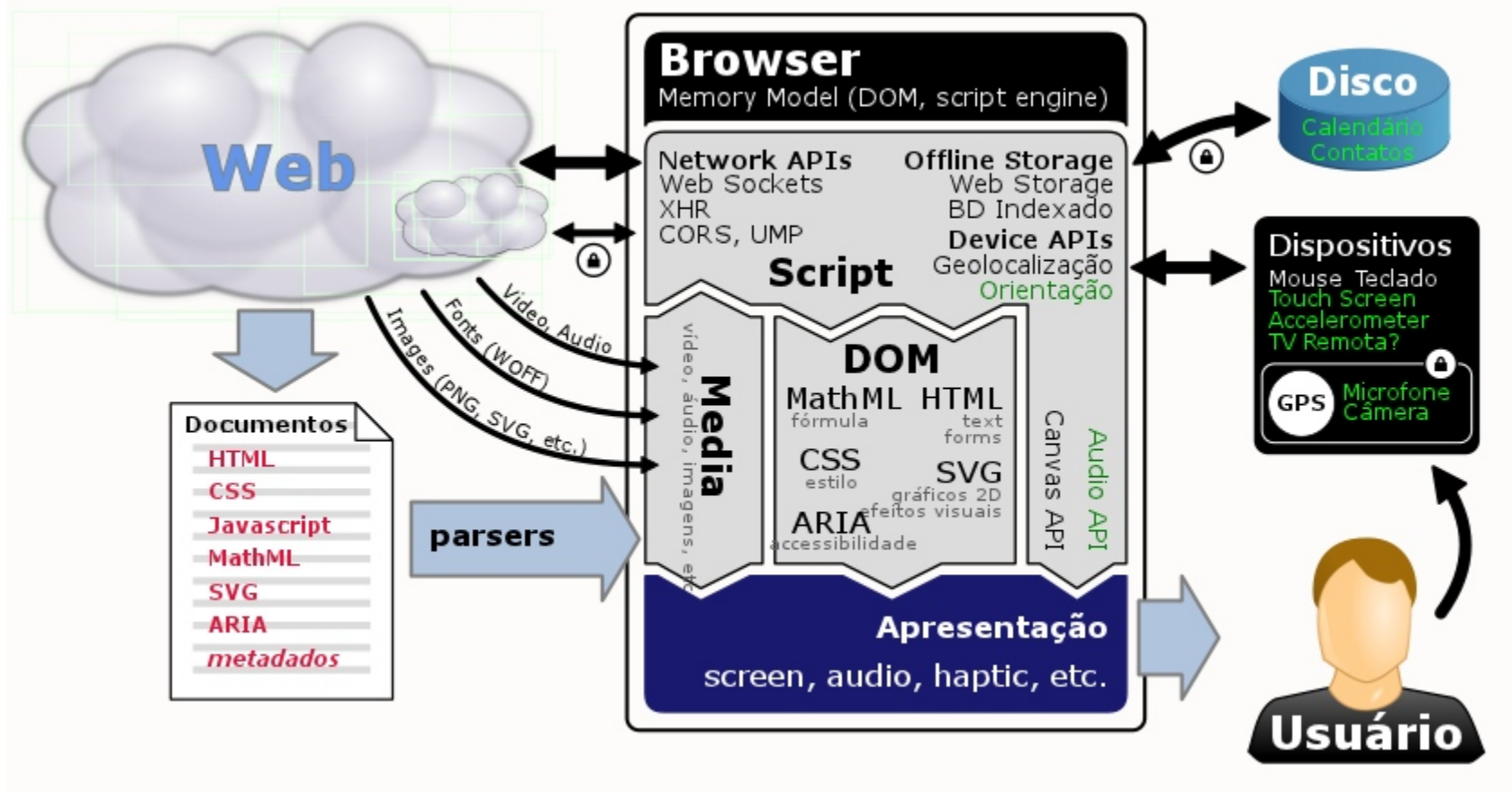
http://.../coisa

http://.../coisa

WEB 2001

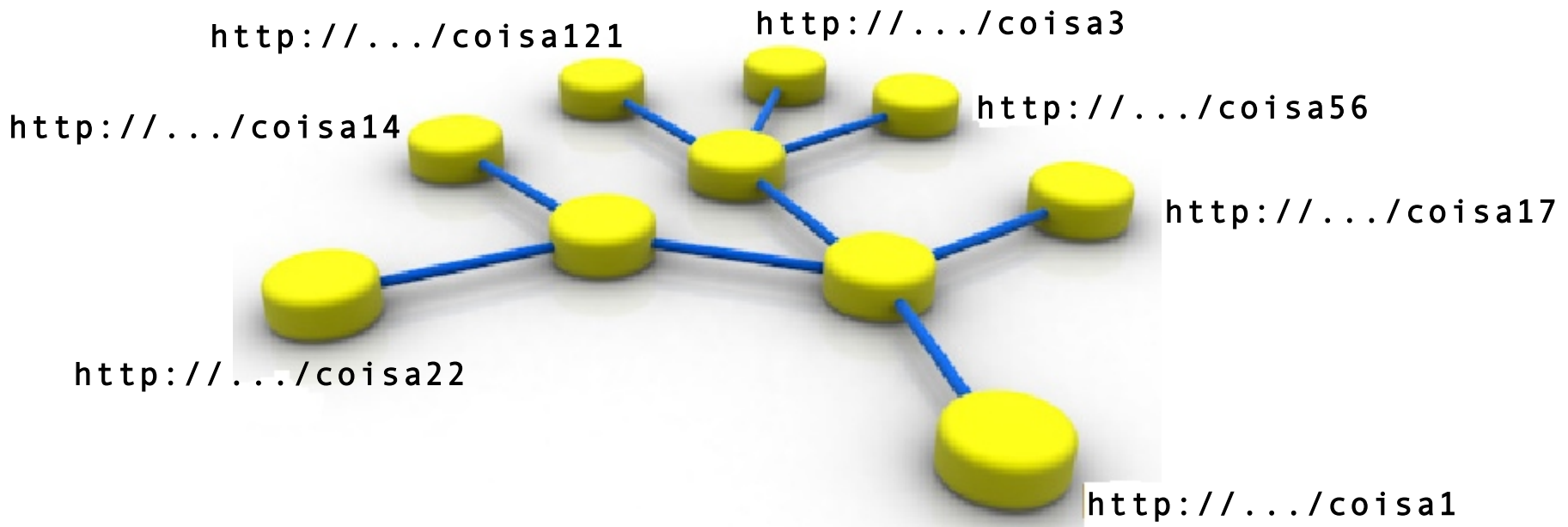


WEB 2011

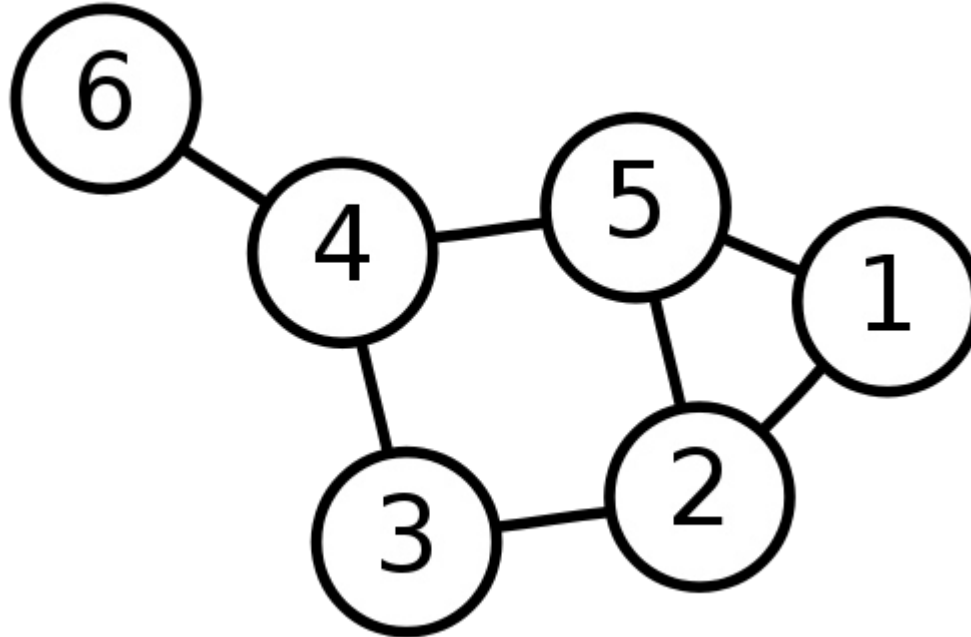


http:// ...

http://.../coisa

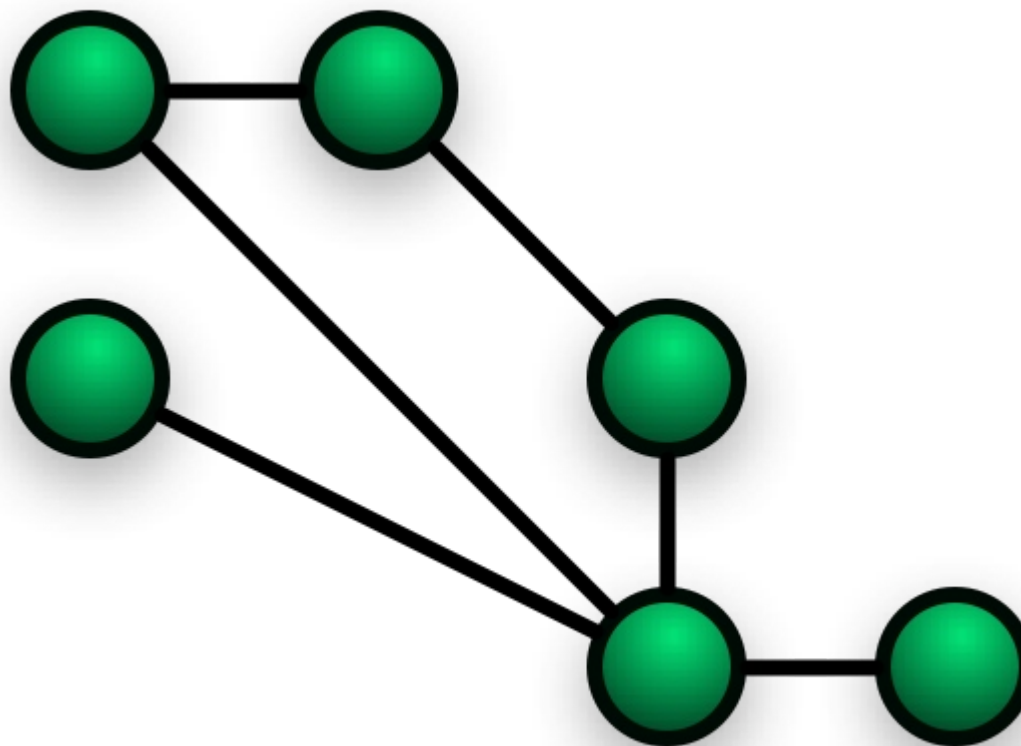


As coisas e suas relações



A <http://.../coisa6> é parte da <http://.../coisa4>

A <http://.../pessoa/CarlinhosCecconi>
http://.../vive_em <http://.../cidade/SaoPaulo>





O `http://.../futuro_da_web`

Usar os dados na web tal como já utilizamos os documentos

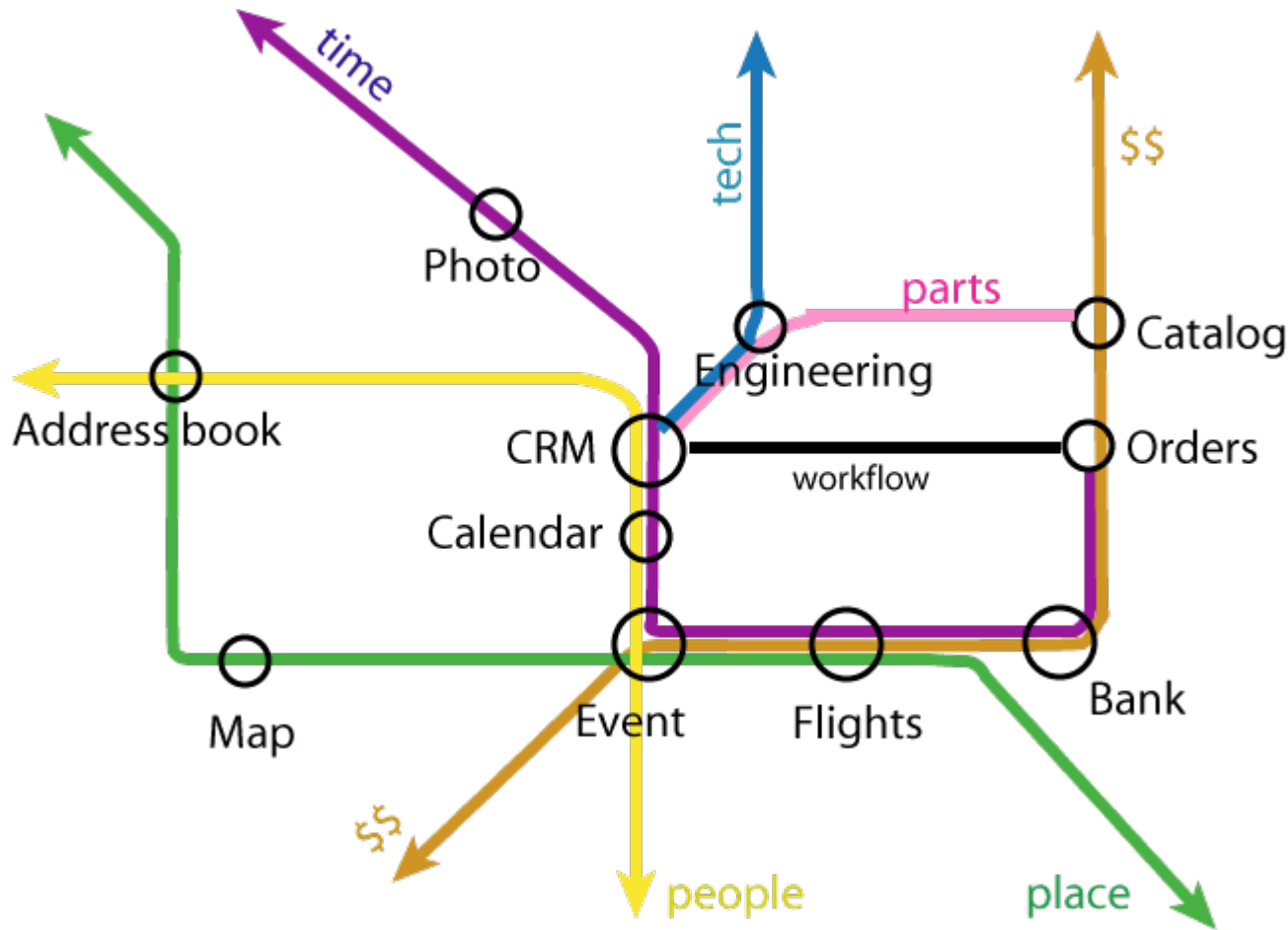
O `http://.../futuro_da_web`

Usar os dados na web tal como já utilizamos os documentos

hiperlinkando

e significando

Dados e metadados – dados e vocabulários



BBC Sign in News | Sport | Weather | iPlayer | TV | Radio | More ▾ Search the BBC

MUSIC Search By Artist...

HOME | SHOWCASE | REVIEWS | GENRES

Milton Nascimento

Born 26 outubro 1942.

PLAYED MOST ON **BBC RADIO 3**



David Redfern/Redferns

Share This Page

Share facebook twitter

BBC Music Showcase

BBC MUSIC SHOWCASE
Watch and listen to exclusive music clips

Latest Tracks Played On The BBC

Vera Cruz
BBC 6 MUSIC | GIDEON COE 06/04/2011

Played By

Biography

Milton Nascimento (born October 26, 1942, in Rio de Janeiro, Brazil) is a prominent Brazilian singer-songwriter and guitarist.

Milton Nascimento (born October 26, 1942, in Rio de Janeiro, Brazil) is a prominent Brazilian singer-songwriter and guitarist.

Read more at Wikipedia...

WIKIPEDIA This entry is from [Wikipedia](#), the user-contributed encyclopedia. It may not have been reviewed by professional editors and is licensed under the [GNU Free Documentation License](#). If you find the biography content factually incorrect, defamatory or highly offensive you can [edit this article at Wikipedia](#). Find out more about our use of this data.

Links & Information

LINKS

Official homepage at miltonnascimento.com.br

MySpace at myspace.com/miltonnascimento

Wikipedia article on [Milton Nascimento](#)

IMDb at imdb.com/name/nm0621643

Last.fm page on [Milton Nascimento](#)

Discogs at [discogs.com/artist/Milton Nascimento](http://discogs.com/artist/Milton+Nascimento)

MusicBrainz entry on [Milton Nascimento](#)

COLLABORATED ON [Milton Nascimento & Jobim Trio](#)

Links & information come from [MusicBrainz](#). You can add or edit information about [Milton Nascimento](#) at musicbrainz.org. Find out more about our use of this data. The BBC is not responsible for the content of external sites.

Played By

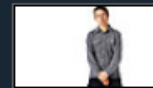
Since December 2008



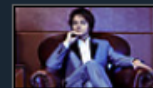
Late Junction
BBC Radio 3



Gideon Coe
BBC 6 Music



Gilles Peterson
BBC Radio 1



Jamie Cullum
BBC Radio 2



Stuart Maconie's Freakier Zone
BBC 6 Music

Information displayed about artists played on BBC programmes is incomplete at present. Find out more about this artist play count [information](#).

Similar Artists



Elis Regina



Gal Costa



Exemplo RDF

```
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/">

  <rdf:Description rdf:about="http://media.example.com/audio/guide.ra">

    <dc:creator>Rose Bush</dc:creator>
    <dc:title>A Guide to Growing Roses</dc:title>
    <dc:description>Describes process for planting and nurturing different
      kinds of rose bushes.</dc:description>
    <dc:date>2001-01-20</dc:date>

  </rdf:Description>
</rdf:RDF>
```

Exemplo RDF

```
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/">
  <rdf:Description rdf:about="http://media.example.com/audio/guide.ra">
    <dc:creator>Rose Bush</dc:creator>
    <dc:title>A Guide to Growing Roses</dc:title>
    <dc:description>Describes process for planting and nurturing different
      kinds of rose bushes.</dc:description>
    <dc:date>2001-01-20</dc:date>
  </rdf:Description>
</rdf:RDF>
```

Dublin Core Metadata Initiative

<http://dublincore.org/>

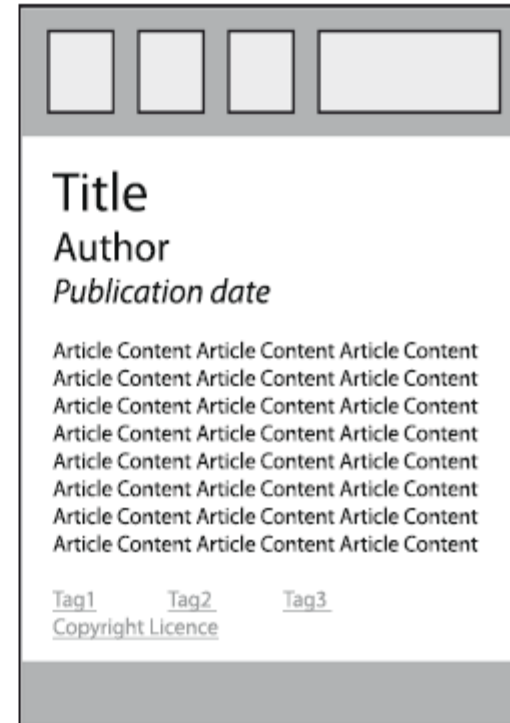
Index of Terms

Properties in the <i>/terms/</i> namespace	<u>abstract</u> , <u>accessRights</u> , <u>accrualMethod</u> , <u>accrualPeriodicity</u> , <u>accrualPolicy</u> , <u>alternative</u> , <u>audience</u> , <u>available</u> , <u>bibliographicCitation</u> , <u>conformsTo</u> , <u>contributor</u> , <u>coverage</u> , <u>created</u> , <u>creator</u> , <u>date</u> , <u>dateAccepted</u> , <u>dateCopyrighted</u> , <u>dateSubmitted</u> , <u>description</u> , <u>educationLevel</u> , <u>extent</u> , <u>format</u> , <u>hasFormat</u> , <u>hasPart</u> , <u>hasVersion</u> , <u>identifier</u> , <u>instructionalMethod</u> , <u>isFormatOf</u> , <u>isPartOf</u> , <u>isReferencedBy</u> , <u>isReplacedBy</u> , <u>isRequiredBy</u> , <u>issued</u> , <u>isVersionOf</u> , <u>language</u> , <u>license</u> , <u>mediator</u> , <u>medium</u> , <u>modified</u> , <u>provenance</u> , <u>publisher</u> , <u>references</u> , <u>relation</u> , <u>replaces</u> , <u>requires</u> , <u>rights</u> , <u>rightsHolder</u> , <u>source</u> , <u>spatial</u> , <u>subject</u> , <u>tableOfContents</u> , <u>temporal</u> , <u>title</u> , <u>type</u> , <u>valid</u>
Properties in the legacy <i>/elements/1.1/</i> namespace	<u>contributor</u> , <u>coverage</u> , <u>creator</u> , <u>date</u> , <u>description</u> , <u>format</u> , <u>identifier</u> , <u>language</u> , <u>publisher</u> , <u>relation</u> , <u>rights</u> , <u>source</u> , <u>subject</u> , <u>title</u> , <u>type</u>
Vocabulary Encoding Schemes	<u>DCMIType</u> , <u>DDC</u> , <u>IMT</u> , <u>LCC</u> , <u>LCSH</u> , <u>MESH</u> , <u>NLM</u> , <u>TGN</u> , <u>UDC</u>
Syntax Encoding Schemes	<u>Box</u> , <u>ISO3166</u> , <u>ISO639-2</u> , <u>ISO639-3</u> , <u>Period</u> , <u>Point</u> , <u>RFC1766</u> , <u>RFC3066</u> , <u>RFC4646</u> , <u>RFC5646</u> , <u>URI</u> , <u>W3CDTF</u>

<http://dublincore.org/documents/dcmi-terms/>

Dublin Core Metadata Initiative

<http://dublincore.org/>

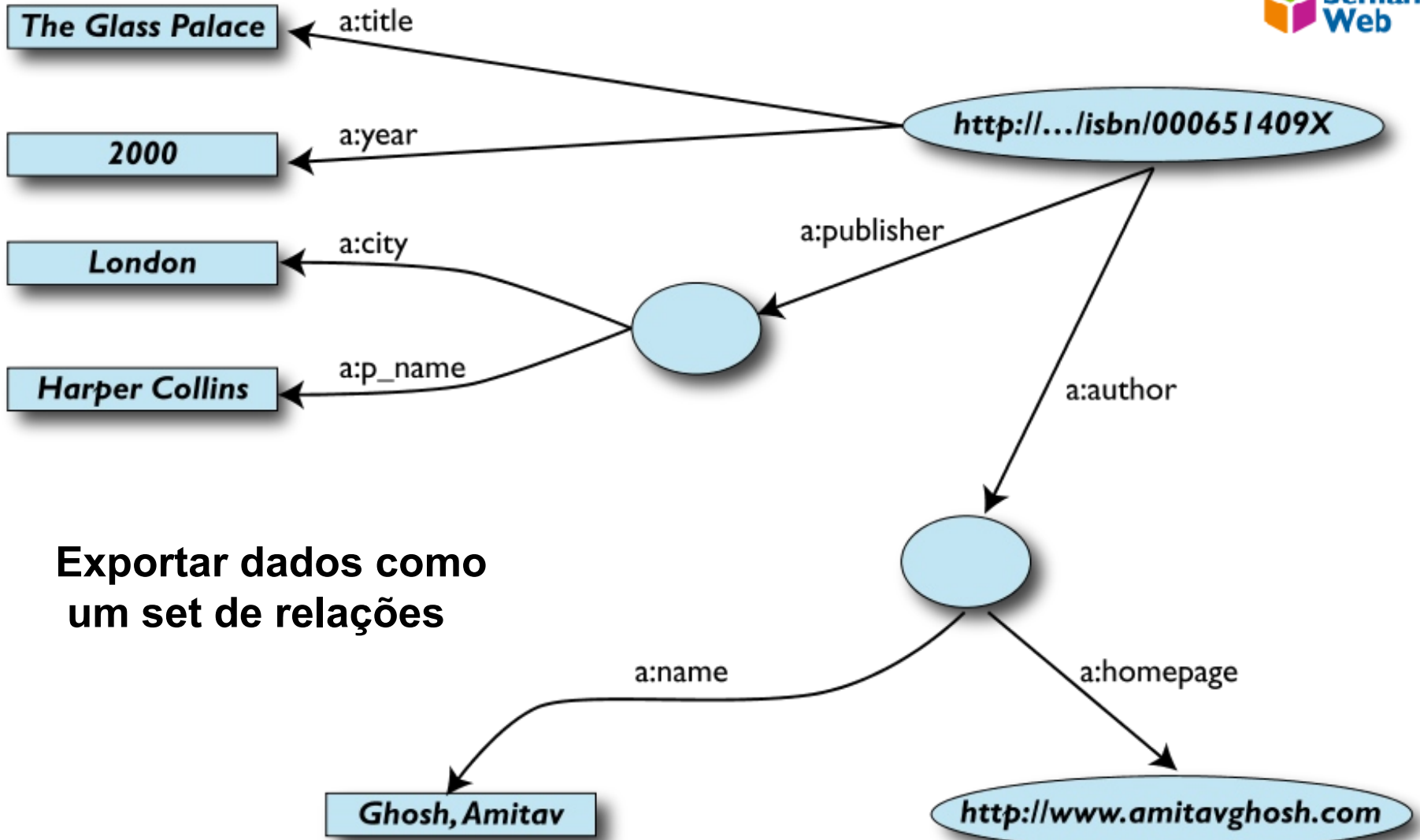


O que o computador vê —————> O que os humanos veem

ID	Author	Title	Publisher	Year
ISBN 0-00-6511409-X	id_xyz	The Glass Palace	id_qpr	2000

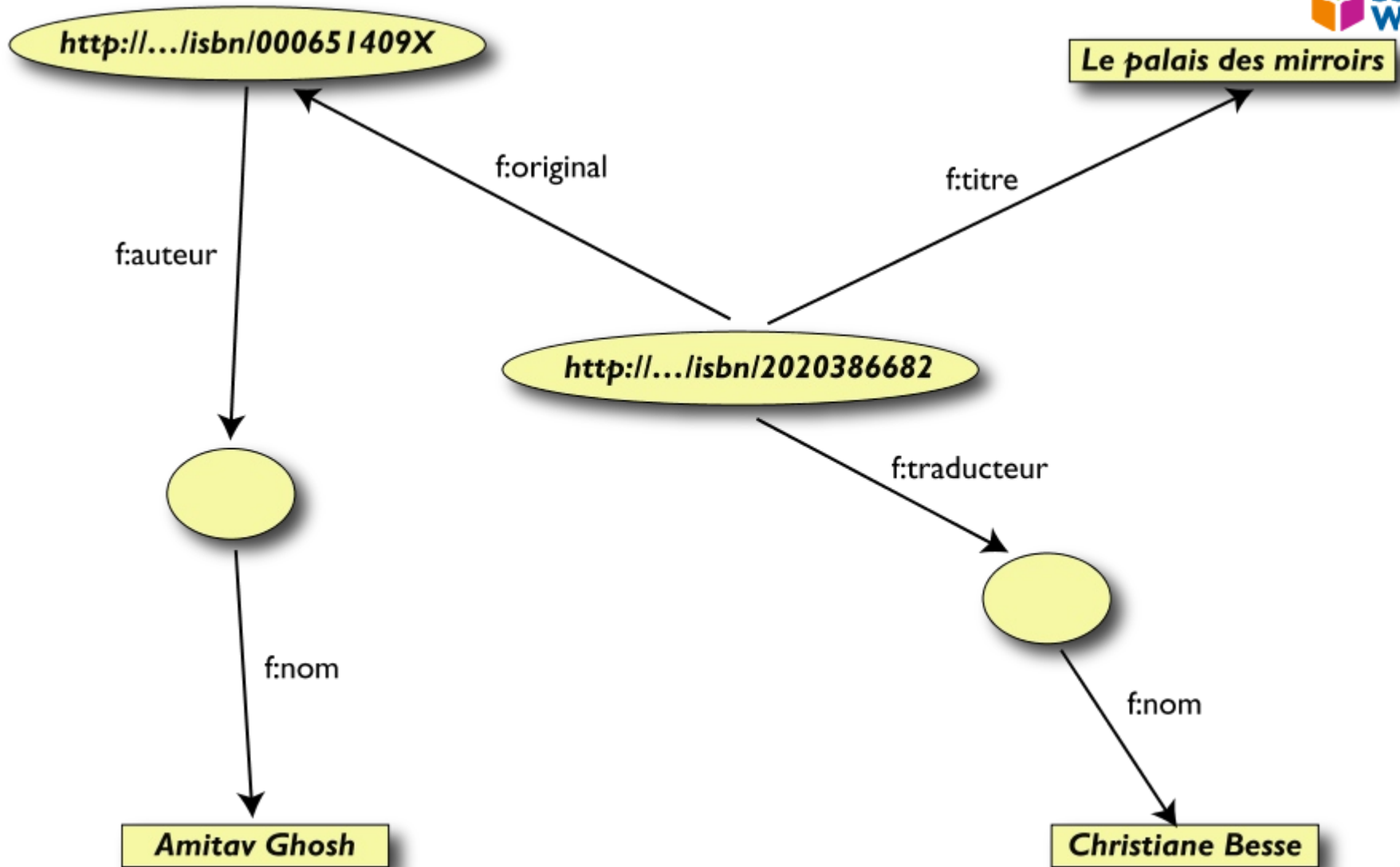
ID	Name	Homepage
id_xyz	Ghosh, Amitav	http://www.amitavghosh.com

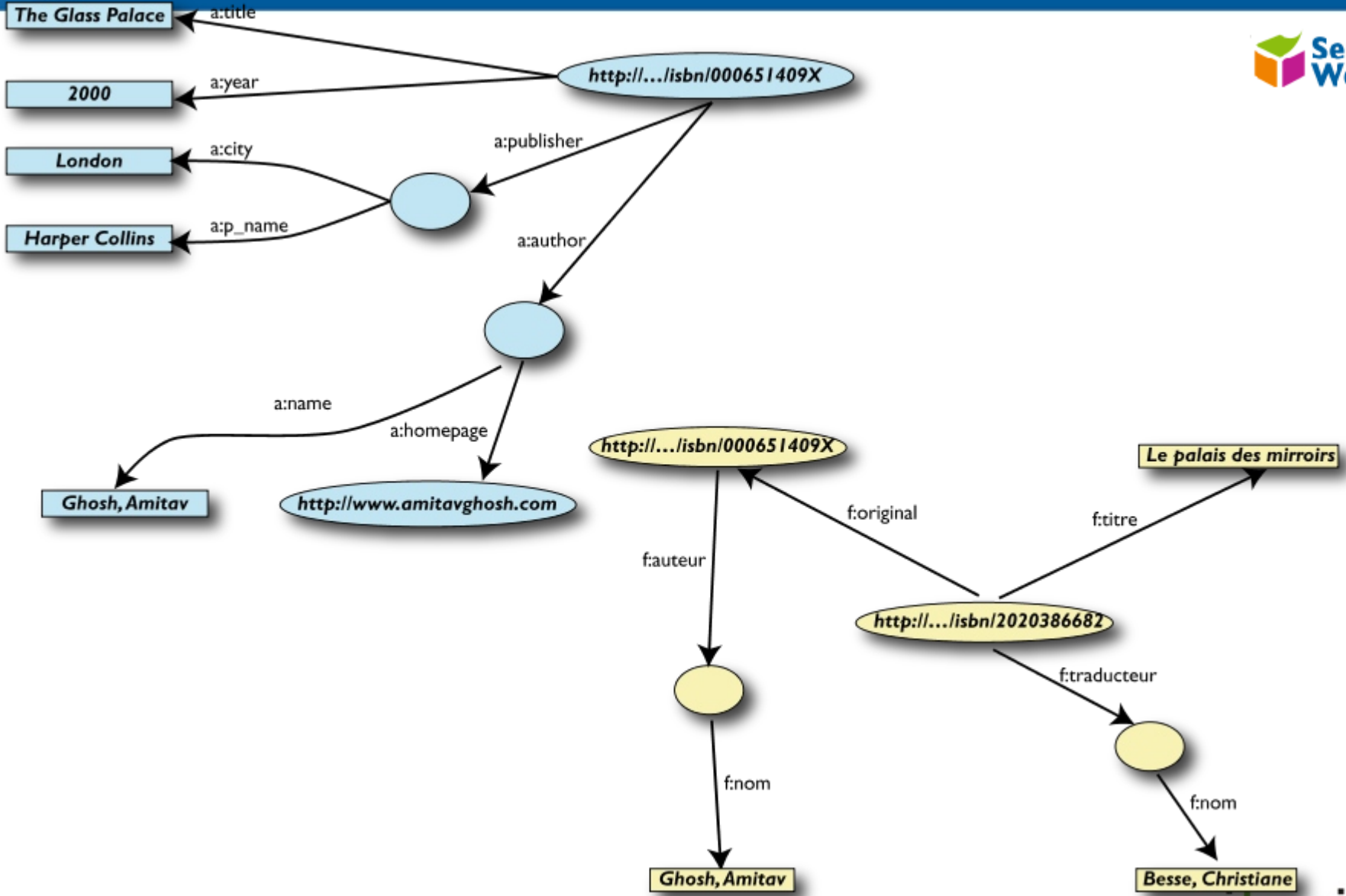
ID	Publisher's name	City
id_qpr	Harper Collins	London

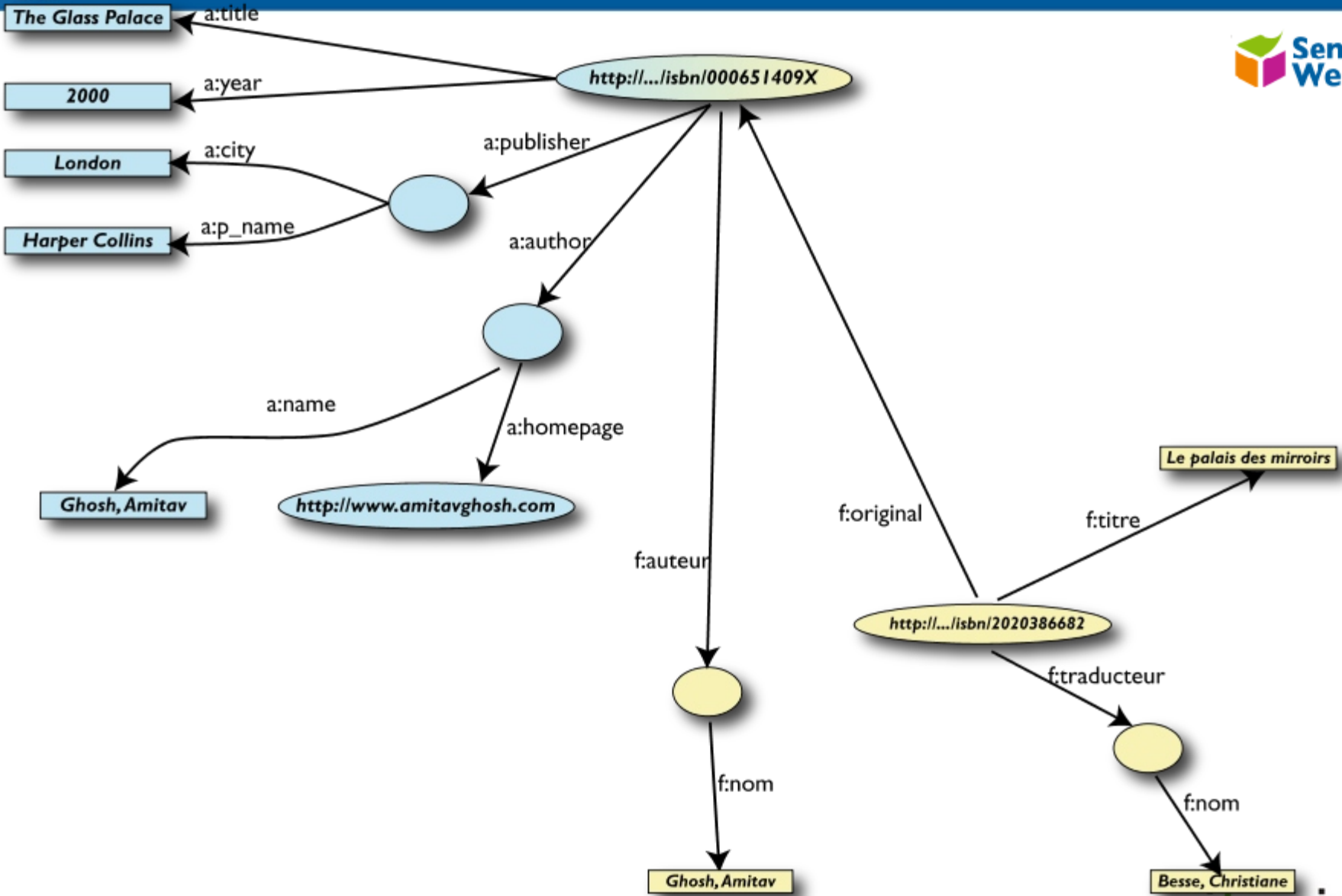


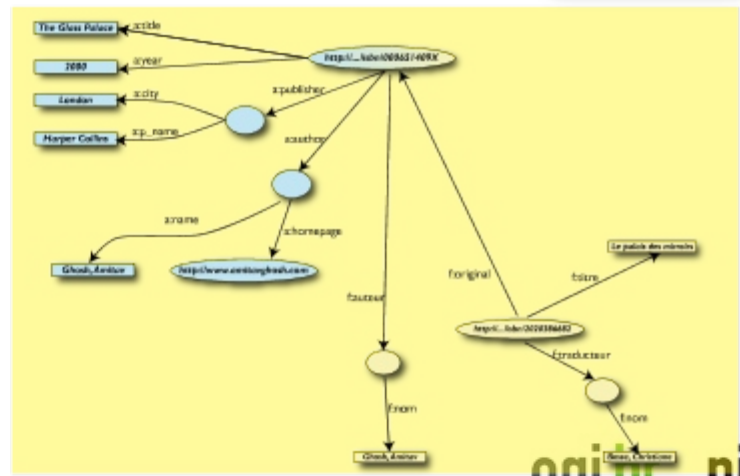
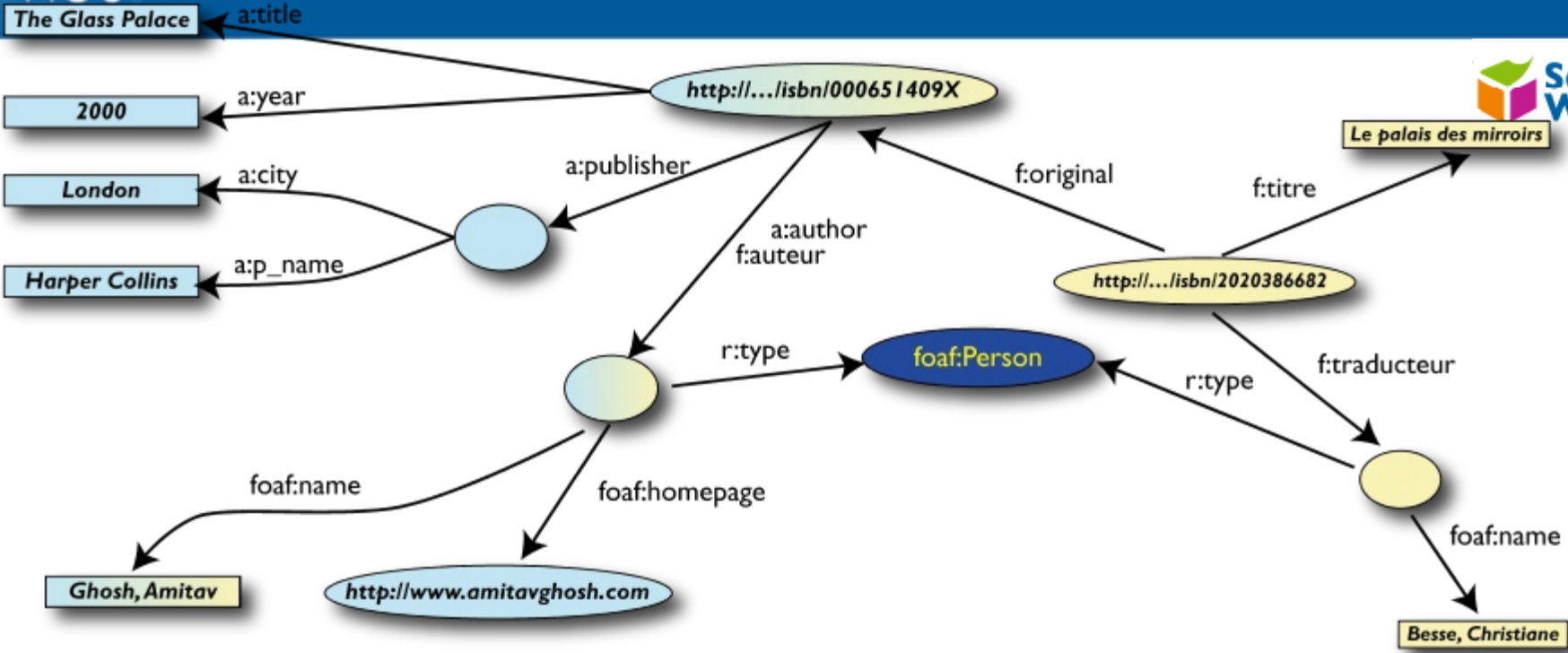
Exportar dados como um set de relações

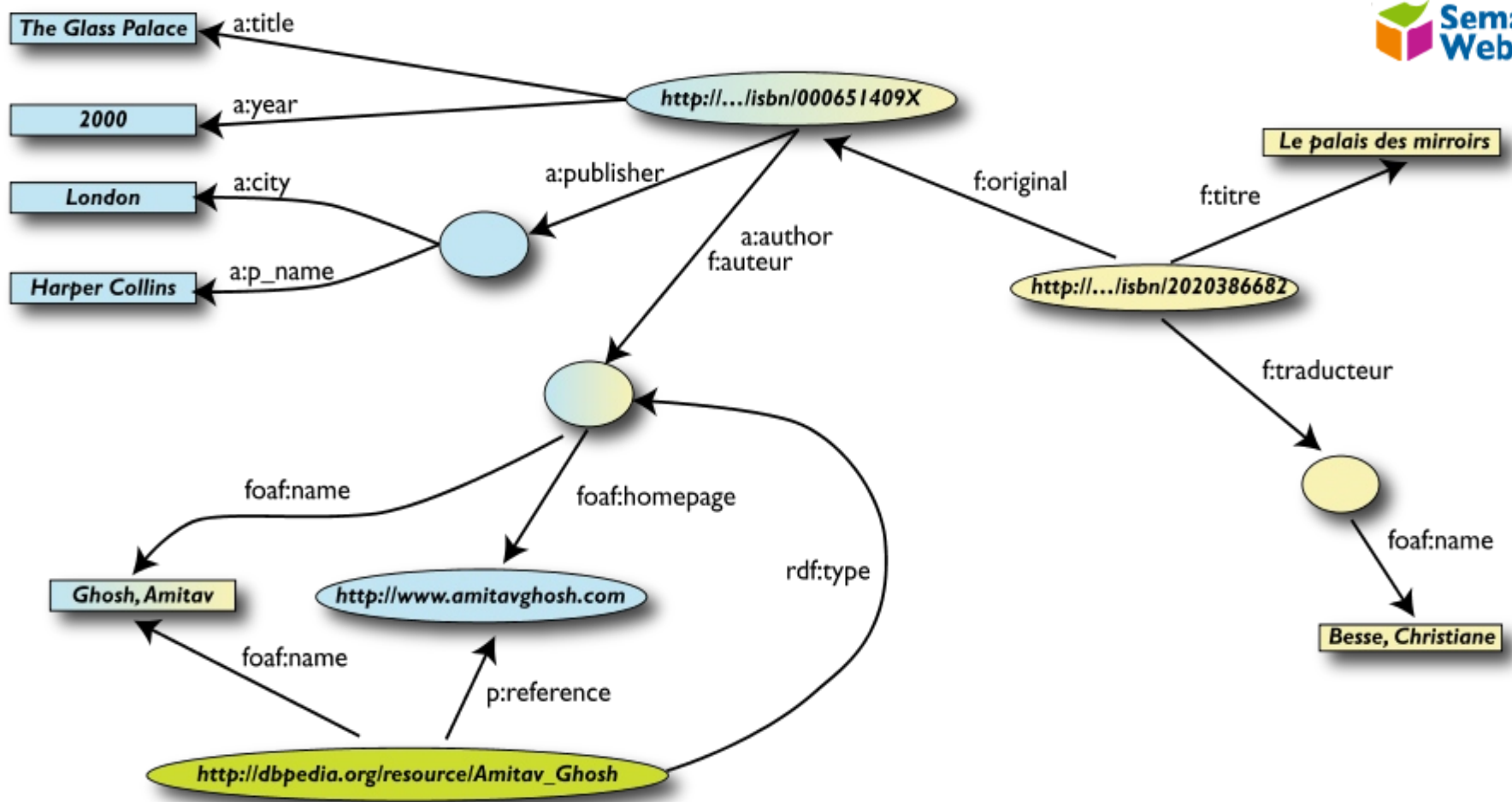


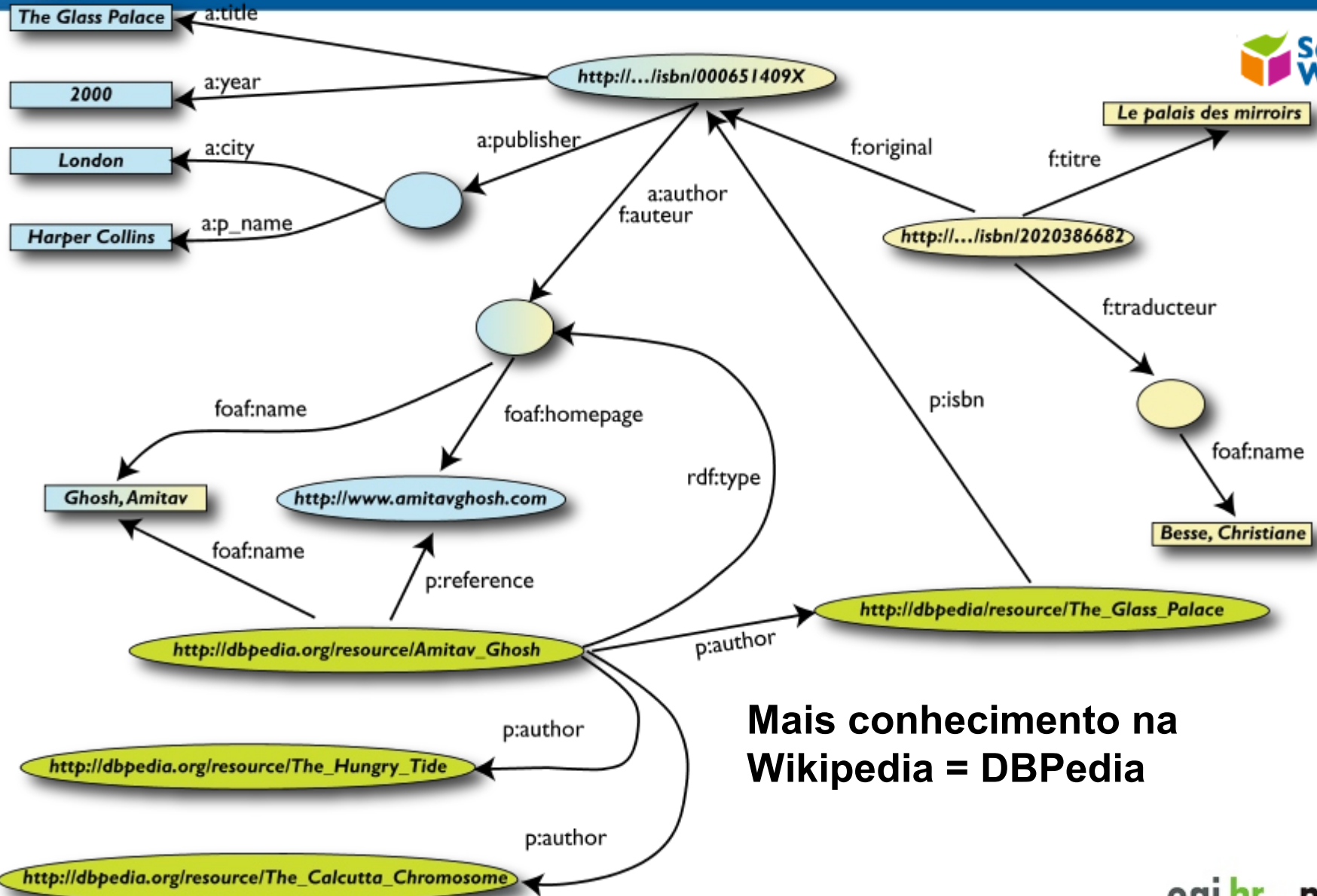




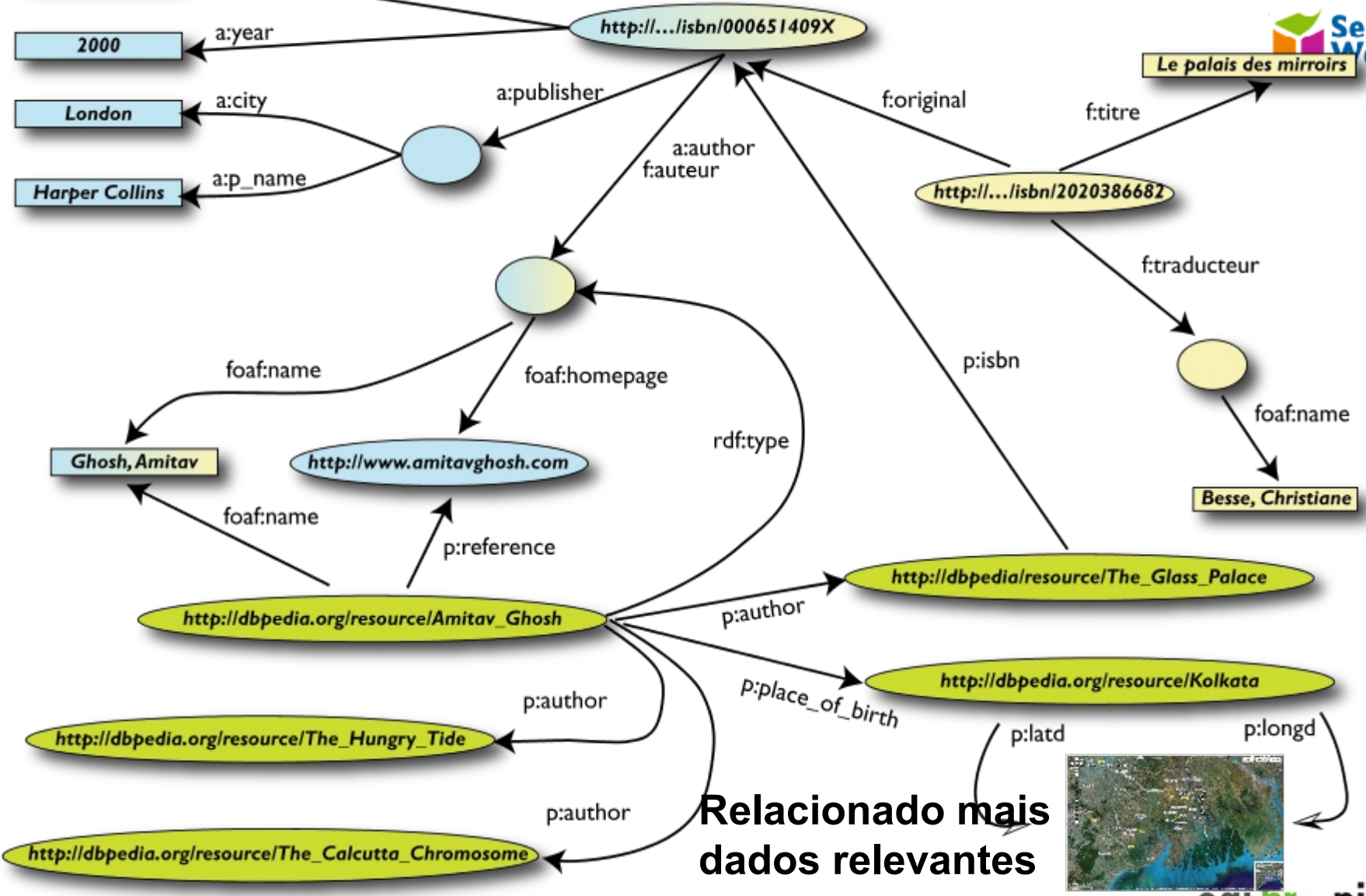








**Mais conhecimento na
Wikipedia = DBPedia**



Relacionado mais dados relevantes



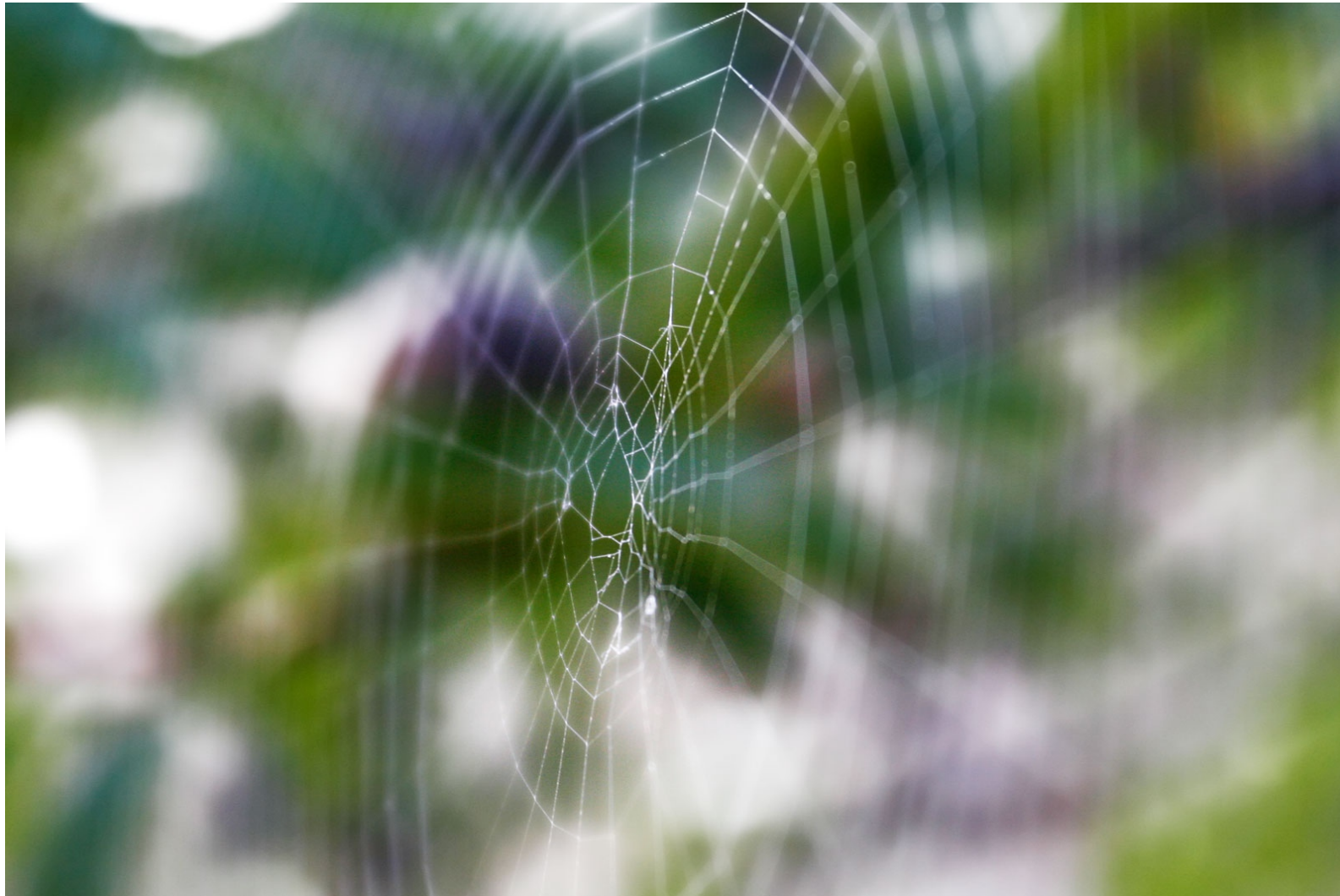
Web de dados
Web das coisas



Web Semântica



Integração
de dados na web



obrigado!

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