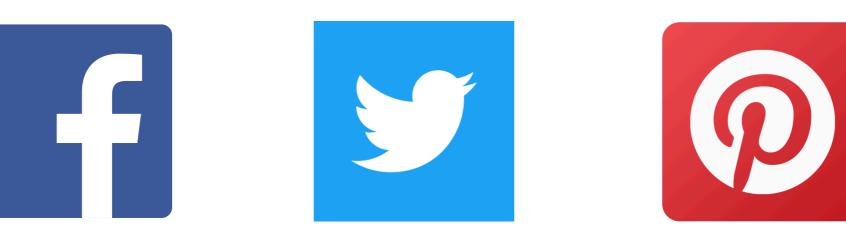
Social Networks and the Semantic Web







Frederik Gørvell de Lichtenberg

Facebook

Open Graph Protocol

Understand what kind of thing is being liked, and create a typed link back to the content page



Open Graph Protocol

- Simple and compact (small) schema one can use to markup a Web page
- RDFa as markup language
- Supported by IMDB, Microsoft, Rotten Tomatoes, Yelp among others
- In <meta> tags in <head> section



Object type specified in og:type

og:type takes string, available types represented by strings are those agreed upon by the community

```
<meta property="og:type" content="book"/>
```

Global types:

Article, Book, Business, Fitness, Game, Music, Place, Product, Profile, Restaurant and Video

Three additional properties required:

og:title, og:image and og:url



Creating Typed Links Using OGP

Web page has been marked up using OGP types and properties, a Facebook "Like" button on the page

Like pressed creates connection between visitor and Web page. Shows up in "Likes and Interests", and it will appear as a rich object in Facebook's social graph

```
<head>
<meta property="og:type" content="book" />
<meta property="og:title" content="A Developer's Guide to the Se-
mantic Web" />
<meta property="og:site name" content="Amazon.com" />
<meta property="og:description" content="this is a book about the</pre>
Semantic Web" />
<meta property="og:locale" content="en US" />
<meta property="og:url"</pre>
      content="http://liyangyu.com/book_test0.html" />
<meta property="og:image"</pre>
      content="http://www.liyangyu.com/image/devGuide.jpg" />
<meta property="book:author" content="http://liyangyu.com" />
<meta property="book:isbn" content="978-3642159695" />
<meta property="book:release date" content="2011-01-05" />
<meta property="book:tag" content="the Semantic Web" />
<meta property="book:tag" content="deveoper's guide" />
</head>
```



this is a test of OGP schema



A Developer's Guide to the Semantic Web liyangyu.com

Like · Comment · Share



this one does not have any OGP schema



Like · Comment · Share



GraphSearch

Facebook knows who likes what

Can search for:

"my friends who like books" or

"my friends who like books and also live in Atlanta"



Open Graph Issues

Does not fully agree with the W3C's RDFa guideline.

```
dc:title --> og:title
foaf:logo --> og:image
```

- No classes, og:type always has to use a text string —> no class hierarchy, no domain of property
- Only one object on each page
- Developer simplicity is key goal



Twitter

Twitter Cards

Tweet with link to marked Web page will automatically have a Twitter Card inside it



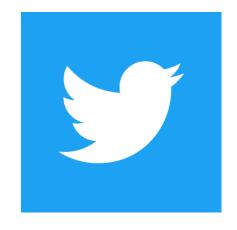
Twitter Cards

Four different types of cards: Summary Card, Summary Card with Large Image, App Card and Player Card

Twitter properties placed inside <head> section using <meta>

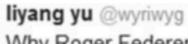
```
<meta name="twitter:card" content="summary" />
```

Fallback to Open Graph



```
<meta property="og:type" content="article" />
<meta property="og:url" con-</pre>
tent="http://6thfloor.blogs.nytimes.com/2013/09/10/why-roger-
federer-is-the-greatest-of-all-time/" />
<meta property="og:site name" content="The 6th Floor Blog" />
<meta property="og:description" content="Yes, he has a lousy rec-</pre>
ord against Nadal. But he& #8217; s displayed a consistency and
durability at a time when the competition is deeper than it has
ever been." />
<meta property="og:image"</pre>
con-
tent="http://graphics8.nytimes.com/images/2013/08/21/magazine/21-
federer-steinberger/21-federer-steinberger-superJumbo.jpg"/>
<meta name="twitter:card" value="summary">
<meta property="twitter:title"</pre>
      content="Why Roger Federer Is the Greatest of All Time " />
<meta property="twitter:url"</pre>
      content="http://6thfloor.blogs.nytimes.com/2013/09/10/why-
roger-federer-is-the-greatest-of-all-time/" />
<meta property="twitter:description" content="Yes, he has a lousy</pre>
record against Nadal. But he& #8217; s displayed a consistency
and durability at a time when the competition is deeper than it
has ever been." />
<meta name="twitter:image"</pre>
con-
tent="http://graphics8.nytimes.com/images/2013/08/21/magazine/21-
federer-steinberger/21-federer-steinberger-thumbLarge-v2.jpg"/>
<meta name="twitter:site" value="@nytmag"><meta name="PT" con-</pre>
```

tent="Blogs" />



7h

Why Roger Federer Is the Greatest of All Time nyti.ms/19F3Jq8

Hide summary



Why Roger Federer Is the Greatest of All Time

Yes, he has a lousy record against Nadal. But he's displayed a consistency and durability at a time wh en the competition is deeper than it has ever been.



View on web

9:34 AM - 10 Nov 13 - Details

Flag media

Reply to @wyriwyg



Twitter Card Issues

- Even further away from Semantic Web standards
- Markup format is a collection of name-value pairs, which best remotely resembles the minimal form of RDFa
- One card per content page
- No URI, no way to uniquely identify a resource in the real world

Pinterest

Rich Pins

Show metadata right on the Pin itself

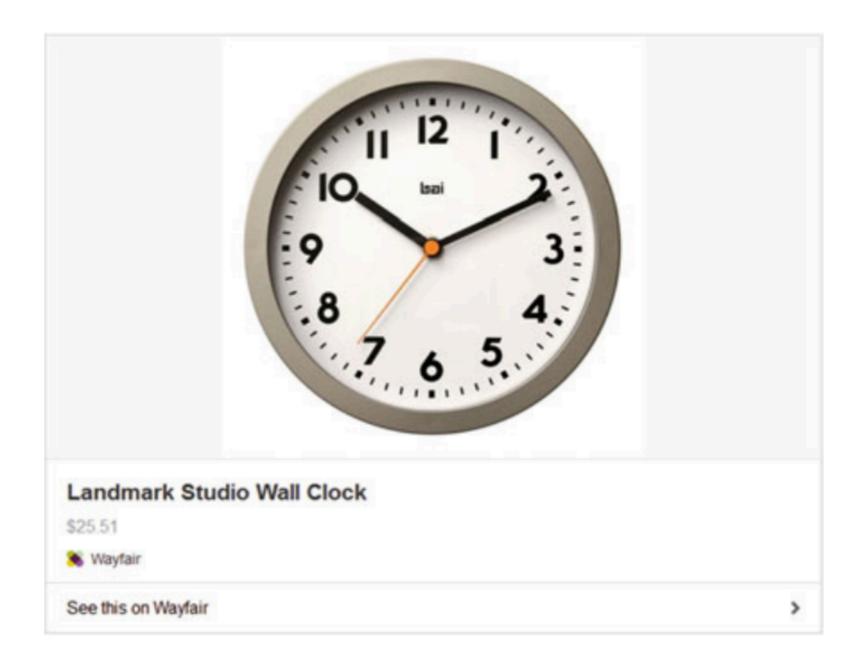


Rich Pins

- Six different types:
 App, Article, Movie, Place, Product and Recipe
- Both schema.org and Open Graph Protocol can be used



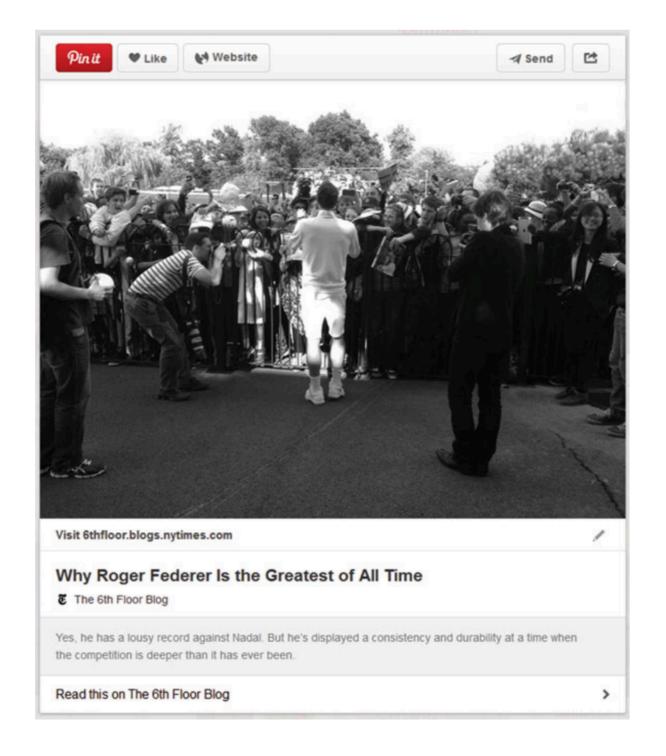
```
<div id="review totals" class="pdreview sidebar fl "</pre>
     itemscope=""
     itemtype="http://schema.org/Product">
   <meta itemprop="manufacturer" content="Bai Design"</pre>
         itemtype="http://schema.org/Organization">
   <meta itemprop="brand" content="Bai Design"</pre>
         itemtype="http://schema.org/Organization">
   <div itemscope=""
        itemtype="http://schema.org/PriceSpecification">
      <meta itemprop="price" content="25.51">
      <meta itemprop="priceCurrency" content="USD" >
   </div>
   <meta itemprop="name" content="Landmark Studio Wall Clock">
```





```
<meta property="og:type" content="article" />
<meta property="og:url"
content="http://6thfloor.blogs.nytimes.com/2013/09/10/why-roger-
federer-is-the-greatest-of-all-time/" />
<meta property="og:site_name" content="The 6th Floor Blog" />
<meta property="og:description" content="Yes, he has a lousy rec-
ord against Nadal. But he&#8217;s displayed a consistency and du-
rability at a time when the competition is deeper than it has ev-
er been." />
<meta property="og:image" con-
tent="http://graphics8.nytimes.com/images/2013/08/21/magazine/21-
federer-steinberger/21-federer-steinberger-superJumbo.jpg"/>
```







Rich Pins Issues

- Uses Open Graph Protocol
- Only supports microdata, not RDFa or RDFa Lite
- Cannot compare prices from different stores, does not uniquely identify URIs of products.



Social Networks and the Semantic Web





