One hands washes the other: round trip semantics with SMW and DBpedia Spotlight

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Semantic MediaWiki Conference September 22<sup>nd</sup>, 2011



### The 1min message

From Wikipage Links, Disambiguations, Redirects we built DBpedia Spotlight



# With DBpedia Spotlight, we can help users to create better Links, Disambiguations and Redirects

#### Web Based Systems Group

#### **Disambiguation Pages**





Collectively provide a list of ambiguous terms and meanings for each

#### But some extra stuff too:

languages Deutsch

#### Palm

From Wikipedia, the free encyclopedia

Palm or Palms may refer to:

- The central region of the front of the hand
- Various plants:
  - Arecaceae or palm tree, a family of flowering plants belonging to the monocot order Arecales
  - . Cycas revoluta, a cycad native to southern Japan, sometimes called "Sago palm"
  - Traveler's palm or Ravenala madagascariensis, a species of banana-like plant from Madagascar
  - The Palmetum, Malakpet, a garden specialized for Palm trees.
- Palm (PDA), the personal digital assistant
  - Palm OS, the operating system of such PDAs
  - Palm, Inc., a hardware manufacturer
- Palm (unit), unit of length
- The Palms, a hotel and casino in Las Vegas, Nevada
- The Palm (restaurant), a restaurant chain originating in New York City
- Palms, Los Angeles, California
- Palm branch (symbol)
- Palm Islands, three artificial islands off the coast of Dubai
- Palm Breweries, a Belgian company
- Palm Pictures, an arthouse film distribution company
- Palm Records, a Hawaiian company
- Palm village, a resort chain originating in Kolkata, India
- PhotoActivated Localization Microscopy or PALM

#### See also

- Palming, a sleight-of-hand technique
- Palmer
- Palm reading

## Redirects



#### Apple\_Inc

| AAPL                        | Apple Inc          | Apple pc            |
|-----------------------------|--------------------|---------------------|
| Apple (Company)             | Apple Incorporate  | Apple's             |
| Apple (Computers)           | Apple Incorporated | Apple, Inc          |
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| Apple Computer Inc.         | Apple computers    | Cripple Inc.        |
| Apple Computer Incorporated | Apple inc          | Inc. Apple Computer |
| Apple Computer, Inc         | Apple inc.         | Jobs and Wozniak    |
| Apple Computer, Inc.        | Apple incoporated  | Option-Shift-K      |
| Apple Computers             | Apple incorporated | ? Inc.              |

Collectively provide a list of name variations

< but some extra stuff too



### Paragraphs with Wikilinks

(...) Upon their return, <u>Lennon</u> and <u>McCartney</u> went to <u>New York</u> to announce the formation of <u>Apple Corps</u>.

http://dbpedia.org/resource/New\_York\_City

http://dbpedia.org/resource/Apple\_Corps

# We built: DBpedia Spotlight

#### http://spotlight.dbpedia.org/dev/demo



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|  | <u>Lothar (storm)</u> (0.0407)<br>Gaza flotilla raid (0.0299)  | BACK TO TEXT  |
|  | Ash Wednesday Storm of 1962 (0.0219)<br>Xynthia (storm) (0.0205)<br>Storm window (0.0184)                              |   |



### Round trip

What can we do with DBpedia Spotlight in Semantic Media Wiki?



#### The "Suggest" Button User decides to add a link

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| <ul> <li>Toolbox</li> <li>What links here</li> <li>Related changes</li> <li>Upload file</li> <li>Special pages</li> </ul>   | Today's torpedoes can be divided into lightweight and heavyweight classes; and into straight-running, autonomous homers, and wire-guided.<br>They can be launched from a variety of platforms.<br>==Etymology==<br>The word ''torpedo'' comes from a genus of [[electric ray]]s in the order ''[[Torpediniformes]]'', which in turn comes from the [[Latin]]<br>"torpere" (to be stiff or numb). In naval usage, the American [[Robert Fulton]] introduced the name to refer to a towed [[gunpowder]]<br>charge used by his French [[submarine]] [[Nautilus (1800 submarine)]''Nautilus'']] to demonstrate that it could sink [[warship]]s.<br>==History==<br>The concept of a torpedo existed many centuries before it was developed as a working device. The earliest description is found in the<br>works of [[Surial]n [[Inventions in the Muslim world]engineer]] Hassan al-Bammah in 1275. He described various kinds of incendiary arrows  |



## The "Suggest" Button

#### System suggest targets, user chooses

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# The "Suggestion"

#### System returns "see also" link

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| <ul> <li>Interaction<br/>Help<br/>About Wikipedia<br/>Community portal<br/>Recent changes<br/>Contact Wikipedia</li> </ul> | The term torpedo was originally employed for a variety of devices, most of which would today be called [[naval mine mines]]. From about<br>1900, "torpedo" has been used strictly to designate an underwater self-propelled missile.<br>While the [[battleship]] had evolved primarily around engagements between armoured ships with [[Naval artillery  <u>large-caliber</u> guns]], the<br>torpedo allowed [[torpedo boat]]s and other lighter surface ships, [[submarine submersible]]s, and later, aircraft to destroy large<br>armoured ships without the use of large guns, though sometimes at the risk of being hit by longer-range shellfire  |  |  |  |  |  |
| <ul> <li>Toolbox</li> <li>What links here</li> <li>Related changes</li> <li>Upload file</li> <li>Special pages</li> </ul>  | Today's torpedoes can be divided into lightweight and heavyweight classes; and into straight-running, autonomous homers, and wire-guided.<br>They can be launched from a variety of platforms.<br>==Etymology==<br>The word ''torpedo'' comes from a genus of [[electric ray]]s in the order ''[[Torpediniformes]]'', which in turn comes from the [[Latin]]<br>"torpere" (to be stiff or numb). In naval usage, the American [[Robert Fulton]] introduced the name to refer to a towed [[gunpowder]]<br>charge used by his French [[submarine]] [[Nautilus (1800 submarine)]''Nautilus'']] to demonstrate that it could sink [[warship]]s.<br>==History==<br>The concept of a torpedo existed many centuries before it was developed as a working device. The earliest description is found in the<br>works of [[Svrialln [[Inventions in the Muslim world engineer]] Hassan al-Bammah in 1275. He described various kinds of incendiary arrows |  |  |  |  |  |



#### Or... no button, autosuggest! As user types (also for properties)

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| Help<br>About Wikipedia<br>Community portal<br>Recent changes<br>Contact Wikipedia  | While the [[battleship]] had<br>torpedo allowed [[torpedo bo<br>armoured ships without the u  | Torpedo<br>Torpedo | <u>isolates</u><br>is an alias for | at the risk | .ne submersib<br>Jf being hit |   |                |                  |         |
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# Many link types (aka properties)

• Alternative spelling

"Thorpedo" ([[sometimes spelled::Torpedo]]) is a nickname for Ian Thorpe

• Formerly known as

"Torpedo" was originally employed for [[formerly known as::naval mine]]

- First name, Last name
- Type, Subclass

# Disambiguations and redirects can come automatically as SMW queries!



### Thanks!

One hand washes the other, and they both make a better Web.

On Twitter: @pablomendes E-mail: pablo.mendes@fu-berlin.de Web: http://pablomendes.com http://slideshare.net/pablomendes

#### http://spotlight.dbpedia.org

Semantic MediaWiki Conference, September 2011