TONY PERKINS
"We know from the social science that children do best with a mom and a dad."
— PunditFact

DUNCAN HUNTER
"At least 10 ISIS fighters have been caught coming across the Mexican border in Texas" and there are "dozens more that did not get caught by the Border Patrol."
— PolitiFact Texas

MICHICHEL OBAMA
"The unemployment rate for young people is down from a 10.6 percent high in 2009 to 2.6 percent today."
— PolitiFact Wisconsin

JEANNE SHAHEEN
Says Scott Brown co-sponsored legislation to let employers deny women coverage for mammograms.
— PolitiFact New Hampshire

source: http://www.politifact.com/
## Sharp Decline in Percentage Saying Obama is a Christian

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Christian</td>
<td>47</td>
<td>51</td>
<td>48</td>
<td>34</td>
<td>-14</td>
</tr>
<tr>
<td>Muslim</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>18</td>
<td>+7</td>
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<tr>
<td>Other</td>
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<td>1</td>
<td>2</td>
<td>+1</td>
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<tr>
<td>Don’t know</td>
<td>36</td>
<td>32</td>
<td>34</td>
<td>43</td>
<td>+9</td>
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<tr>
<td>Refused</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td></td>
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<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</tr>
</tbody>
</table>

Source: [http://www.pewforum.org/2010/08/18/growing-number-of-americans-say-obama-is-a-muslim/](http://www.pewforum.org/2010/08/18/growing-number-of-americans-say-obama-is-a-muslim/)
"Now son, do you know what you did wrong?"

"Yes sir, I shared something on Facebook without checking facts & encouraged bullshit to propagate, leading to the dumbing-down of humanity."
Fact-checking

- Manual activity
- Only large organizations can afford dedicated depts
  - New Yorker, Der Spiegel, etc
- **Question:** is it possible to make it automatic?

source: vanityfair.com
News

*Nature* 438, 900-901 (15 December 2005) | doi:10.1038/438900a; Published online 14 December 2005

Special Report
Internet encyclopaedias go head to head

Jim Giles

Jimmy Wales' Wikipedia comes close to Britannica in terms of the accuracy of its science entries, a *Nature* investigation finds.

**UPDATE:** see details of how the data were collected for this article in the [supplementary information](#).

**UPDATE 2 (28 March 2006).** The results reported in this news story and their interpretation have been disputed by Encyclopaedia Britannica. *Nature* responded to these [objections](#).

One of the extraordinary stories of the Internet age is that of Wikipedia, a free online encyclopaedia that anyone can edit. This radical and rapidly growing publication, which includes close to 6 million articles...
Knowledge bases

- Reliable enough
  - Vandalism repaired in a matter of minutes [Priedhorky 2007]
- Large-scale systems
- Knowledge networks
Barack Obama

Barack Hussein Obama II (listen /bəˈrɑːk hooˈseɪn oʊˈbeɪmaʊ/; born August 4, 1961) is the 44th and current President of the United States, and the first African American to hold the office. Born in Honolulu, Hawaii, Obama is a graduate of Columbia University and Harvard Law School, where he served as president of the Harvard Law Review. He was a community organizer in Chicago before earning his law degree. He worked as a civil rights attorney and taught constitutional law at the University of Chicago Law School from 1992 to 2004. He served three terms representing the 13th District in the Illinois Senate from 1997 to 2004, running unsuccessfully for the United States House of Representatives in 2000.

In 2004, Obama received national attention during his campaign to represent Illinois in the United States Senate with his victory in the March Democratic Party primary, his keynote address at the Democratic National Convention in July, and his election to the Senate in November. He began his presidential campaign in 2007 and, after a close primary campaign against Hillary Rodham Clinton in 2008, he won sufficient delegates in the Democratic Party primaries to receive the presidential nomination. He then defeated Republican nominee John McCain in the general election, and was inaugurated as president on January 20, 2009. Nine months after his election, Obama was named the 2009 Nobel Peace Prize laureate.

During his first two years in office, Obama signed into law economic stimulus legislation in response to the Great

Novel statement inference

- Amount of “work” needed to resolve a **novel** statement
- On a network: how hard it is to find a path between two nodes
- Graph closure
Distance function

\[
\mathcal{W}_u(P_{s,o}) = \mathcal{W}_u(v_1 \ldots v_n) = \begin{cases} 
\phi \left( \min_{i=2}^{n-1} \left\{ \frac{1}{\log(k(v_i))} \right\} \right) & \text{if } n > 2 \\
1 & \text{if } n = 2 
\end{cases}
\]
Validation
Validation / 1

❖ Sanity check:
➢ Is Paris the capital of France?
❖ Datasets:
➢ Oscars Best directors vs movies
➢ US States vs capitals
➢ World countries vs capitals
➢ US presidents vs spouses (20th c. onwards)
❖ Direct edges removed!

Validation / 2

Source: http://googleresearch.blogspot.com/2013/04/50000-lessons-on-how-to-read-relation.html
Institution

Degree

![Graph showing ROC curves for Institution and Degree with AUC values of 0.55 and 0.65 respectively.](image)
Barack Obama is a socialist!!1!1!
Thanks!

Filippo Menczer
Alessandro Flammini
Prashant Shiralkar
Johan Bollen
Luis Rocha

gciampag@indiana.edu