Political Polarization on Twitter

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Information & Democracy

DELIBERATIVE DEMOCRACY

PUBLIC FORUM DOCTRINE & GENERAL INTEREST INTERMEDIARIES

MYOPIA & THE NETWORKED PUBLIC SPHERE

NETWORKS OF POLITICAL DISCOURSE
ATOMIC STRUCTURE

Thursday, April 28, 2011
NETWORKS OF POLITICAL DISCOURSE
MULTI-MODE COMMUNICATION

Thursday, April 28, 2011
### Qualitative Content Analysis

#### Left Undecidable Right

**1,000 Random Users**

**2 Authors, 1 Non-Author Judge**

<table>
<thead>
<tr>
<th></th>
<th>Cluster</th>
<th>Left</th>
<th>Right</th>
<th>Und.</th>
<th>Nodes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retweet</strong></td>
<td>A</td>
<td>1.1</td>
<td><strong>93.4</strong></td>
<td>5.3</td>
<td>7,115</td>
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<tr>
<td></td>
<td>B</td>
<td><strong>80.1</strong></td>
<td>8.7</td>
<td>11.1</td>
<td>11,355</td>
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<tr>
<td><strong>Mention</strong></td>
<td>A</td>
<td><strong>39.5</strong></td>
<td>52.2</td>
<td>8.1</td>
<td>7,021</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>9.5</td>
<td>85.7</td>
<td>4.7</td>
<td>154</td>
</tr>
</tbody>
</table>

### Political Identity

**Partisan Divide**

Thursday, April 28, 2011
Please follow @username for an outstanding progressive voice! #p2 #dems #prog #democrats #tcot

Couple Aborts Twin Boys For Being Wrong Gender .. http://bit.ly/xyz #tcot #hhrs #christian #tlot #teaparty #sgp #p2 #prolife
Content Injection

**IMPORTANCE OF A CONTENT STREAM**

\[
I(t, A) = \frac{N(t, A)}{\sum_t N(t, A)}
\]
<table>
<thead>
<tr>
<th>Far Left</th>
<th>Moderate Left</th>
<th>Centrist</th>
<th>Moderate Right</th>
<th>Far Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>#healthcare</td>
<td>#aarp</td>
<td>#democrats</td>
<td>#rangel</td>
<td>#912project</td>
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<td>#citizensunited</td>
<td>#social</td>
<td>#waste</td>
<td>#twisters</td>
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<td>#saveamerica</td>
<td>#gop2112</td>
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<td>#american</td>
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<td>#energy</td>
<td>#political</td>
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<td>#sarahpalin</td>
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<td>#stopbeck</td>
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<td>#palin12</td>
<td>#rednov</td>
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<td>#topprogs</td>
<td>#women</td>
<td></td>
<td></td>
<td>#abortion</td>
</tr>
</tbody>
</table>

\[ V(t) = 2 \frac{I(t, R)}{I(t, R) + I(t, L)} - 1 \]

**PARTISAN LANGUAGE**

**MEASURE** | **VALENCE** | **TABLE** | **POLITICAL HASHTAGS**
Cross-Ideological Interaction

![Graph showing percentage of mentions vs mean user valence with a table listing hashtag rankings, mentions, and valence scores.]
Related Work

- Predicting the Political Alignment of Twitter Users (KDD 2011)
- Partisan Engagement and Social Media (Social Networks, 2012)
- Political Communication Dataset

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