CTRnet: A Crisis, Tragedy, & Recovery Network (www.ctrnet.net)

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Crisis, Tragedy, and Recovery

- Human tragedies that result from man-made and natural events affect communities significantly.

- During and after a tragic event, there are a series of needs that have to be addressed.
  - Usually centered around communication and a confusing plethora of data and information.
## Limited Data & Information on CTR

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>IA Collection #</th>
<th>Wikipedia suffix, other URLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Asian Tsunami</td>
<td>2004</td>
<td>Indian_Ocean_earthquake, tsunami.archive.org</td>
</tr>
<tr>
<td>2007</td>
<td>Burmese Uprising</td>
<td>937</td>
<td>2007_Burmese_anti-government_protests</td>
</tr>
<tr>
<td>2008</td>
<td>Georgia and Russia Conflict</td>
<td>1120</td>
<td>2008_Georgia–Russia_crisis</td>
</tr>
<tr>
<td>2008</td>
<td>Iowa Flood</td>
<td>1092</td>
<td>Iowa_flood_of_2008</td>
</tr>
<tr>
<td>1998</td>
<td>Matthew Shepard murder</td>
<td>1075</td>
<td>Matthew_Shepard</td>
</tr>
<tr>
<td>2008</td>
<td>N. Illinois U. Shooting</td>
<td>970</td>
<td>Northern_Illinois_University_shooting</td>
</tr>
<tr>
<td>2008</td>
<td>Tibet protests</td>
<td>1044</td>
<td>Tibet_protests</td>
</tr>
</tbody>
</table>

*Staging: school shootings, school events, then to full set of natural / man-made*
Data Collection

- Expand coverage at Internet Archive
  - Can crawl about 17 million URLs a year
  - Can get data back from them twice yearly
  - Now crawling re Typhoons in Asia–Pacific (e.g., Ketsana)

- Archive-It tool (http://archive-it.org)
  - Can select seeds (starting URLs)
  - Various parameters to adjust coverage

- Seek volunteers to spot events, give seeds
• Build a networked digital library relating to CTR

• Integrate community, content, and services relating to CTR, making it accessible, and preserving it for long-term reuse

• Support information exploration

• Aided by an ontology
An ontology for CTR

CTR Ontology
- Individual
- Organizational
- Community
- Political
- …

sources

Browsing

Searches
- Query expansion

Tagging

Recommending

Summarizing

Visualizing

CTR literature

Focus groups

Websites, Internet Archive

Social network applications

Multicultural/linguistic input

uses
Categories from focus group study

Results from focus group interviews following the April 16, 2007 tragedy at Virginia Tech
CTR stakeholders
# Services

<table>
<thead>
<tr>
<th>Infrastructure Services</th>
<th>Add Value</th>
<th>Information Satisfaction Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repository-Building</td>
<td>Acquiring Classifying</td>
<td>Browsing</td>
</tr>
<tr>
<td>Cataloging and Annotating</td>
<td>Cataloging Clustering</td>
<td>Collaborating</td>
</tr>
<tr>
<td>Crawling</td>
<td>Crawling Entity Extraction, and Integration through URM</td>
<td>Customizing</td>
</tr>
<tr>
<td>Digitizing</td>
<td>Digitizing Evaluating</td>
<td>Filtering</td>
</tr>
<tr>
<td>Federating</td>
<td>Federating Auto Tagging</td>
<td>Providing access</td>
</tr>
<tr>
<td>Harvesting</td>
<td>Harvesting Publicizing</td>
<td>Recommending</td>
</tr>
<tr>
<td>Submitting</td>
<td>Submitting Rating</td>
<td>Searching</td>
</tr>
<tr>
<td>Indexing</td>
<td>Indexing Ontology building</td>
<td>Visualizing</td>
</tr>
</tbody>
</table>
SSP and Storytelling

- New Queries
- SSP/PR
- Queue

- Users
- Stories
- Storytelling Process

- List
- Summary
- Visualization of Chain
- Entries in Chain
Potential impact

• Help affected communities to recover more quickly and effectively
  – Global network
  – Easy accessibility
  – Relevant information and resources
  – INCLUDING FROM VCOM (e.g., aid worker diaries)

• Support classes of stakeholders in reacting to and recovering from crises
  – Researchers
  – Scholars
  – Emergency personnel
  – Decision makers
  – Public
Priorities

1. Find more partners (including internationally – Finland, Mexico, Russia, …)
2. Text mining & stories re: VT, NIU
   – Supporting sociology research
3. Collect key information especially related to school shootings worldwide
4. Plan CTR computer: key tools & content
5. Initial release – of interest to general public
Please login, guide, & help us!

Thank you!

http://www.ctrnet.net

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