Mapping the web
e-Diasporas Atlas

Mathieu Jacomy - FMSH TIC-Migrations, Sciences Po | Médialab
The web is not Internet

...it is not the digital technologies using discrete (discontinuous) data

...telecommunications
networks of terminals connecting users

...Internet
the network of computers using the IP standard

The web is what you see in your browser
1. The web as a source
Using a search engine

«Bisphenol»
http://en.wikipedia.org/wiki/Bisphenol_A

«Bisphenol heart diseases controversy»
http://www.foxnews.com/health/2012/03/07/bpa-chemical-may-be-tied-to-heart-disease/

«Bisphenol Melzer controversy»
http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60496-6/fulltext
Using a search engine

«Bisphenol»
http://en.wikipedia.org/wiki/Bisphenol_A
BPA, Polycarbonate, endocrine disruptor, heart disease...

«Bisphenol heart diseases controversy»
http://www.foxnews.com/health/2012/03/07/bpa-chemical-may-be-tied-to-heart-disease/
David Melzer, Food and Drug Administration, coronary artery disease...

«Bisphenol Melzer controversy»
http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60496-6/fulltext
Monica Lind, Jeremy Pearson, Steven Hentges, Polycarbonate Global Soup...
2. The web as a space
Open question

How do you picture the web?
The shape of the web

The bow tie model, IBM’s Almaden Research, 2000
The shape of the web

Three spheres of the blogosphere:

- Individuality & home
- Leisure
- Society
The shape of the web

http://internet-map.net
3. The web as a network: Computing
Networks as graphs

Euler, Solutio problematis ad geometriam situs pertinentis, 1736
More precisely, the rank of a page A is defined according to the present invention as

\[
r(A) = \frac{\alpha}{N} + (1 - \alpha)\left( \frac{r(B_1)}{|B_1|} + \cdots + \frac{r(B_n)}{|B_n|} \right),
\]
4. The web as a network: Mapping
EMOTIONS MAPPED BY NEW GEOGRAPHY

Charts Seek to Portray the Psychological Currents of Human Relationships.
Networks as maps

US political blogs
Linkfluence
2007
Networks as maps

London Underground 1920 Map
Networks as maps

London Underground 1933 Map
(Harry Beck)
5. The e-Diasporas Atlas
http://e-diasporas.fr
The e-Diasporas Atlas project

TIC-Migrations program (ICT and migrations)
Fondation Maison des Sciences de l’Homme
Télécom ParisTech

Coordinated by Dana Diminescu

Funded by the ANR (Agence Nationale de la Recherche)

With the participation of Migrinter, Exalead, INA
The e-Diasporas Atlas project

2003: Dana Diminescu founds TIC-Migrations « The connected Migrant »

2005: Special issue of Migrance « Les documents numériques: Méthodologie d’archivage et perspectives de recherche sur les migrations »
The e-Diasporas Atlas project

Creating a digital memory of migrants

First map:
The «sans papiers» of the Pajol street
The e-Diasporas Atlas project

The need for our own tools

2008: The e-Diasporas Atlas is funded for 3 years by the Agence Nationale de la Recherche (CONTINT)
The e-Diasporas Atlas project

2012: the project is achieved
5 tools dedicated to digital methods in humanities
30 case studies
80+ researchers, exceptional international participation
Augmented publication
International conference in may 2012
Methodology

- Exploration
- Circonscription du corpus
- Validation

ARCHIVE

- Navigateur Internet
- Outils d'aide à la navigation
- Crawler
- Outils spécifiques
- Accès dédié

Plateforme collaborative en ligne
Methodology

The Navicrawler
### Methodology

Classification of the Hmong's corpus

<table>
<thead>
<tr>
<th>Website/Domain</th>
<th>Frequency</th>
<th>Language</th>
<th>Country</th>
<th>Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.hmongtoday.com">www.hmongtoday.com</a></td>
<td>monthly</td>
<td>English</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmongstudies.org">www.hmongstudies.org</a></td>
<td>monthly</td>
<td>Culture</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmongradio.tv">www.hmongradio.tv</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.uhasie.org">www.uhasie.org</a></td>
<td>monthly</td>
<td>Urgence, Humanitarian</td>
<td>France</td>
<td>Clichy la Garennes</td>
</tr>
<tr>
<td><a href="http://www.hmongacademy.org">www.hmongacademy.org</a></td>
<td>monthly</td>
<td>Education</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmongarchives.org">www.hmongarchives.org</a></td>
<td>monthly</td>
<td>Culture</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmongdictionary.com">www.hmongdictionary.com</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Wisconsin, Sheboygy</td>
</tr>
<tr>
<td><a href="http://lennon.csfresno.edu">http://lennon.csfresno.edu</a></td>
<td>monthly</td>
<td>Social, Education</td>
<td>USA</td>
<td>California, Arlington</td>
</tr>
<tr>
<td><a href="http://csuc.wisc.edu/cmct">http://csuc.wisc.edu/cmct</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Wisconsin, Madison</td>
</tr>
<tr>
<td><a href="http://www.h">www.h</a> mongminnesotaradio</td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmongamer.org">www.hmongamer.org</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Wisconsin, Milwaukee</td>
</tr>
<tr>
<td><a href="http://www.csp.edu/hmongcenter">www.csp.edu/hmongcenter</a></td>
<td>monthly</td>
<td>Center for Hmong Studies</td>
<td>USA</td>
<td>Minnesota, Minneapolis</td>
</tr>
<tr>
<td><a href="http://www.aboutchat.org">www.aboutchat.org</a></td>
<td>monthly</td>
<td>Culture</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmongwisconsinradio">www.hmongwisconsinradio</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Wisconsin, Madison</td>
</tr>
<tr>
<td><a href="http://www.hmongforumactif.com">www.hmongforumactif.com</a></td>
<td>monthly</td>
<td>Aides le Peuple Hmong</td>
<td>USA</td>
<td>France, Thebes</td>
</tr>
<tr>
<td><a href="http://www.sacramento-hmongnew">www.sacramento-hmongnew</a> company</td>
<td>monthly</td>
<td>Sacramento Hmong</td>
<td>USA</td>
<td>California, Sacramento</td>
</tr>
<tr>
<td><a href="http://www.hamaa.org">www.hamaa.org</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Minnesota, Minneapolis</td>
</tr>
<tr>
<td><a href="http://www.hmongnewyear.us">www.hmongnewyear.us</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>California, Fresno</td>
</tr>
<tr>
<td><a href="http://www.thehmongradio.com">www.thehmongradio.com</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>California, Fresno</td>
</tr>
<tr>
<td><a href="http://www.hmongpa.org">www.hmongpa.org</a></td>
<td>monthly</td>
<td>Religion</td>
<td>USA</td>
<td>Wisconsin, Sheboygy</td>
</tr>
<tr>
<td><a href="http://www.hmongwomenheritage.association">www.hmongwomenheritage.association</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmongchamber.com">www.hmongchamber.com</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Wisconsin, Minneapolis</td>
</tr>
<tr>
<td><a href="http://www.hmongivt.com">www.hmongivt.com</a></td>
<td>monthly</td>
<td>Culture, Business</td>
<td>USA</td>
<td>Wisconsin, Sheboygy</td>
</tr>
<tr>
<td><a href="http://www.wpt.org/hmong">www.wpt.org/hmong</a></td>
<td>others</td>
<td>Being Hmong Means Site</td>
<td>USA</td>
<td>Wisconsin, Madison</td>
</tr>
<tr>
<td><a href="http://www.hmongforum.com">www.hmongforum.com</a></td>
<td>weekly</td>
<td>Hmong</td>
<td>USA</td>
<td>California</td>
</tr>
<tr>
<td><a href="http://www.hmonglibrary.org">www.hmonglibrary.org</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Wisconsin, Wausau</td>
</tr>
<tr>
<td><a href="http://www.shido.com">www.shido.com</a></td>
<td>weekly</td>
<td>Suabhmgng</td>
<td>USA</td>
<td>Wisconsin, Milwaukee</td>
</tr>
<tr>
<td><a href="http://www.hmongccc.org">www.hmongccc.org</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmontimes.com">www.hmontimes.com</a></td>
<td>weekly</td>
<td>Hmong Times</td>
<td>USA</td>
<td>Wisconsin, Milwaukee</td>
</tr>
<tr>
<td><a href="http://www.hmongabc.com">www.hmongabc.com</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
<tr>
<td><a href="http://www.hmonglibrary.org">www.hmonglibrary.org</a></td>
<td>monthly</td>
<td>Hmong</td>
<td>USA</td>
<td>Minnesota, Saint Paul</td>
</tr>
</tbody>
</table>
## Methodology

**The Linkfluence crawler**

**Ouïghour section**
Methodology
Demonstration

The e-Diasporas **printed atlas**

The website: [http://e-diasporas.fr](http://e-diasporas.fr)

The platform: [http://maps.e-diasporas.fr](http://maps.e-diasporas.fr)
Thanks for your attention!

Mathieu.Jacomy@gmail.com