Position Statement, Mark Johnson
Workshop on Volunteered Geographic Information, December 13-14, 2007[1]
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"Web sites such as Wikimapia and OpenStreetMap are empowering citizens to create a global patchwork of geographic information while Google Earth is encouraging individuals to develop applications using their own data."[2] "In the past few years a flood of new web services and other digital sources have emerged that can potentially provide rich, abundant, and timely flows of geographic and geo-referenced information. Collectively they might be termed volunteered sources."[3]

In the intelligence business this new and poorly understood class of information is categorized as "open source," to distinguish from clandestine source. Newspapers, radio, TV, web portals, and now Web 2.0 services are all open sources of potentially high value for counter terrorist efforts. Congress has agreed, enshrining open source intelligence mandates in numerous legislative and investigatory documents over the past six years—most recently H.R. 3815, the Homeland Security Open Source Information Enhancement Act of 2007.[4]

How does anyone sift through the estimated 15 billion gigabytes of new open source information published each year?[5] Research shows that 70% of information on the internet is user produced—volunteered. Perhaps the same questions, factors, and techniques applied to all open source media can help inform the VGI subset, which is the focus of this workshop.

Good intelligence starts with good questions and here are eight questions I submit concerning VGI reliability, volume, and distribution across the earth.
1. What are the criteria for evaluating VGI for its intelligence value?
2. What are the criteria for evaluating VGI for its geospatial accuracy (time, place, information content)?
3. How much VGI can be expected from/about those places not very "webified," lacking free-speech, and technologically/cartographically challenged?
4. What are the implications of the participation, or lack-thereof, of less internet—connected parts of the world?
5. How are foreign governments or persons treating VGI—how are they actively promoting or discouraging or taking neutral stances on its generation?
6. How are terrorists and criminals using VGI for ulterior purposes—to mount attacks or inserting disinformation into the flow of VGI?
7. What are the implications for the US national security apparatus if, as experts claim, reliable, state-sponsored mapping is actually in decline? What areas and subjects will become less covered and understood geographically? What areas and subjects will become more heavily mapped and understood in increasing detail?
8. How many entities are generating VGI, who are they, and who are their sponsors? How do we categorize and evaluate these sources?

Good intelligence involves sound, common sense methodological approaches to answering good questions. In examining, evaluating, and understanding any open source information one starts, of course, with yet more questions.
- What is new?
- What is different?
- What is important?
- What are the key components?
- Spot the trends

One works with the data to:
- Digest a large, rapidly expanding body of material
- Evaluate reliability of information
- Provide unique insights from understanding of open source, media environments

Basic factors in assessing the information include:
- Know the media environment of your country
- Degree of control over a medium, such as Google Earth©
- Open Source environment shapes how you analyze it
- What can you and can you not get?
- Media and open source environments are dynamic—here today, gone tomorrow
- Need to think outside the box about what is analytically significant

Basic analytical methodologies include:
- Tracking changes over time
- Assessing authoritativeness
- Determining targeted audiences

Factors to consider in assessing new and emerging media:
- Who is doing the posting?
- Where do postings originate?
- How many people are involved?
- Is anyone controlling/guiding discussions?
- Need for better tools to evaluate these media

VGI is of growing importance to the intelligence business. I look forward to discussing and sharing insights on how to better understand and use an emerging and exciting new source of geographic information.

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[1] Workshop on Volunteered Geographic Information, December 13-14, 2007. Sponsored by the National Center for Geographic Information Analysis, Los Alamos National Lab, and The Vespucci Initiative

[2] HULIQ.com, an independent news organization owned by Hareyan Publishing LLC

[3] Dr. Michael Goodchild, National Center for Geographic Information and Analysis, and Department of Geography, University of California, Santa Barbara, CA 931064060,USA

[4] http://www.govtrack.us/congress/bill.xpd?bill=h110-3815

[5] Source: UC Berkeley School if Information Management Sciences, 2003.

Mainstream Media:
    Newspapers (about 26,000 titles globally)
    Radio (about 48,000 stations globally – about 70 million hrs PA of content)
    Television (about 21,200 broadcasters – 31 million hrs PA of content)
    Books (about 1million titles annually - about 32 million in world's libraries)
    Mass market & trade periodicals (about 80,000 titles)
    Scholarly journals (about 40,000 titles)

New Media:
    Websites (top domain) – maybe 42 million?
    Weblogs ~ 70 million (~120,000 new ones daily)
    Podcast feeds ~ 45,000
    News & info portals 8,001 (English only?)
    YouTube ~ 8 million videos (100 million accessed daily)
    Flickr ~ 250 million photos (adding 900,000 daily)
    MMPORGs & Virtual Realities ~ 130 million
    Web-enabled mobile devices ~ 2.5 billion
    Broadband subscribers ~ 36 million (2003)
    Twitter 6 million messages in first year

And then there's whatever they invent tomorrow . . .