## Presentation at the 2013 International Congress on Qualitative Inquiry

Davidson, J. (2013). Swimming in a Sea of Data: Qualitative Research in these Digital Times. Paper presentation at the International Congress on Qualitative Inquiry, May 2013, University of Illinois, Champaign, Illinois.

## Swimming in a Sea of Data: Qualitative Research in these Digital Times

Judith Davidson, Ph.D.

Graduate School of Education

UMass Lowell

What is Big Data...and what does it have to do with qualitative researchers?

Big data<sup>[1][2]</sup> is a collection of <u>data sets</u> so large and complex that it becomes difficult to process using on-hand database management tools or traditional data processing applications. The challenges include capture, curation, storage,<sup>[3]</sup> search, sharing, transfer, analysis,<sup>[4]</sup> and visualization. (Wikipedia; 5/14/13).

#### 5 ?'s

- How did I come to encounter Big Data?
- What did I extract from these encounters?
- How did I find the impulses of Big Data at work in my own qualitative research?
- How do my reflections compare to a Big Data specialist?
- What are my "take aways" as a qualitative researcher?

## Friends Helping Friends

Silvana diGregorio: She who points the way!



Sir Tim Berners-Lee: The future is about data.

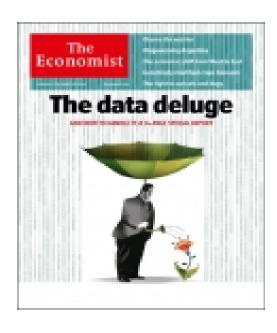


#### **Encounters with New Ideas**

**The Economist: 2/25/2010** 

Big Data becomes a known term in my universe.

**Kevin Kelly: Wired Magazine and Ted Talks—The Internet: Fast and Furious** 





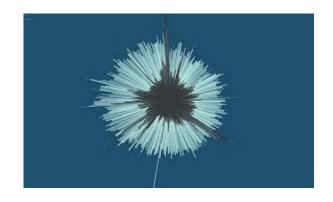
### IBM Cambridge Talks

**Nathan Eagle: Mobile Phones** 

and Data

Jer Thorp: The Aesthetics of Data in formation





#### I began to worry that I was not alone in the universe!

Blogging about my concerns at Qrfrag.blogspot.com

6/13/11: The Future of Qualitative Research.

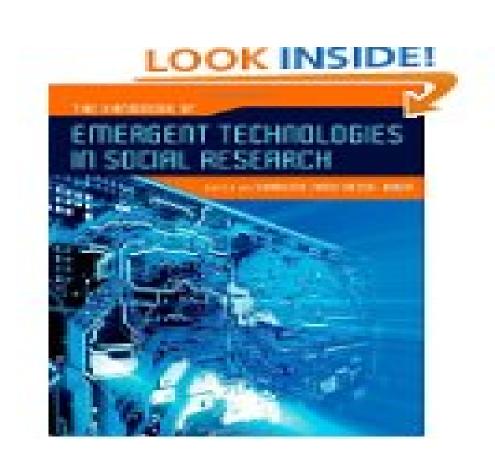
10/14/11: The Qual/Quant Dilemma

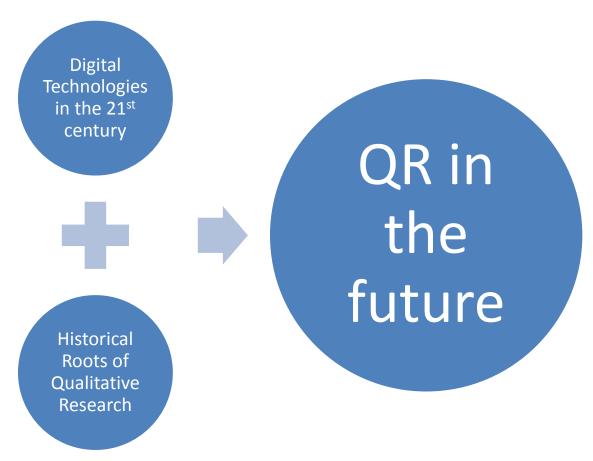
10/2/11: Integrating Numerical and Non-Numerical Data

8/19/11: Qualitative Research in a World of Big Data



### ICQI 2012: Panel on Sharlene Hesse-Biber's new book

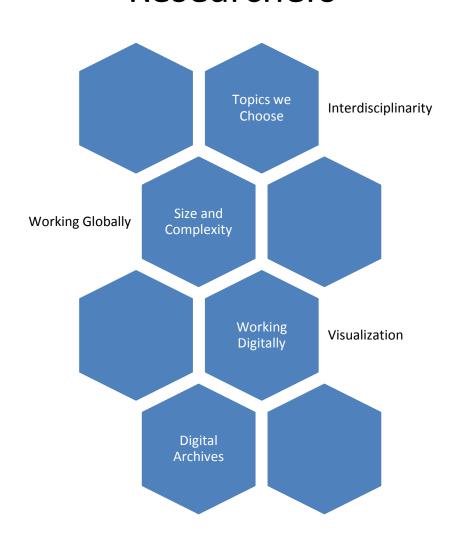




21<sup>st</sup> century: Big Data, Virtual Worlds, Microapplications, visualization/spatialization

Roots of Anthropology and Sociology in colonialism and the industrial age to post-modernism and critical social science

# Big Data as a Set of Impulses Striking Qualitative Researchers



## Case Example: The Sexting Project: 2010-2012 What is the effect of Big Data on this Qualitative Researcher?

 Building a Prevention Framework to Address Teen Sexting

Office of Juvenile
 Justice and Delinquency
 Prevention (OJJDP), part
 of the U.S. Department
 of Justice (OJJDP
 GRANT# 2010-MC-CX 0001



# What are the perspectives of teens, caregivers, and practitioners about teen sexting?

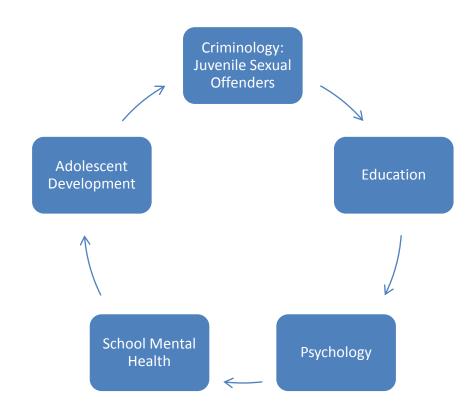
- Primarily a qualitative research study: focus group and survey data
- Three research institutions (UMass Lowell, Miami Ohio, Medical Schl of SC)
- 1 qualitative researcher; multiple quantitative researchers

### Big Data Impulses at Play

#### **Interdisciplinarity**

The topics we choose...



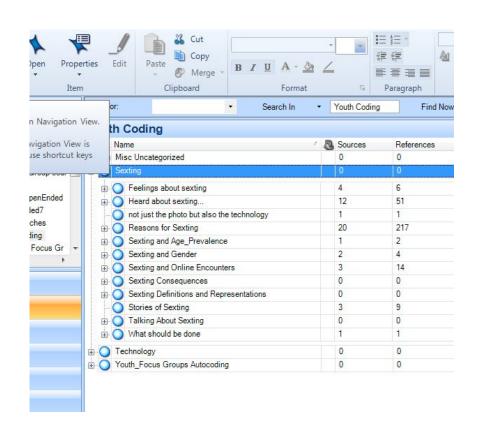


#### Views from 3 US Regions

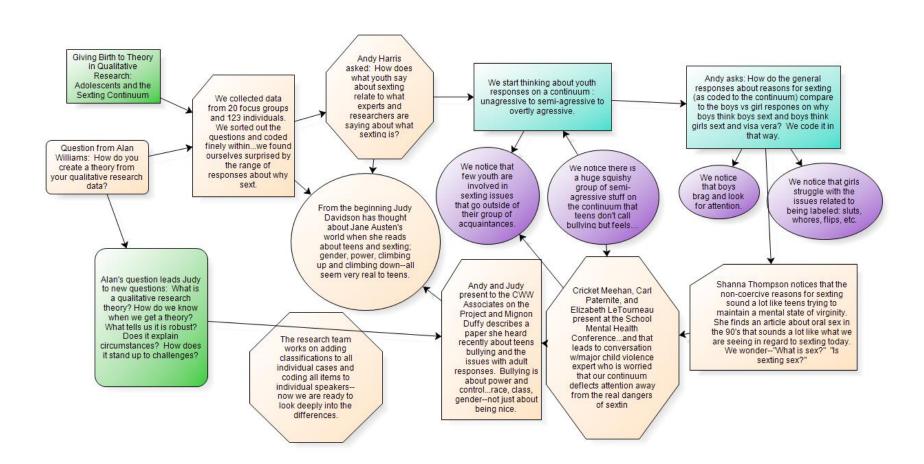
#### **Working Digitally**

#### **Size and Complexity**

- 123 youth in 9 high schools (male and female focus groups)
- 92 caregivers in the same 9 high schools
- 110 educational and community practitioners from the three states.



#### Visualization



#### Archiving Qualitative Research Data

- UK and EU lead the way
- US Projects:
  - ISPCR (University of Michigan; National Institute of Justice and Gates Foundation; IR Partnership)
  - Henry A. Murray Center (Harvard)
- NSF Funded Archival Efforts
  - Archeology Discussion (AAA/Antiquities group)
  - Political Science Data Base (Syracuse University)
- New Mandates from NSF, Department of Justice, and White House

(Davidson & Fisher, 2012. Archiving Qualitative Research Data: The Volcano is Erupting. Presentation to the QSR Nvivo Trainers Conference, Cambridge, MA: August 4, 2012.)

# Evelyn Ruppert: The Economies and Ecologies of Big Data:

The Contexts or Landscapes of Big Data	The Practices of Research
<ul> <li>Requires an Understanding of Economies and Ecologies of Big Data</li> <li>Moves fast and changes rapidly</li> <li>Integrates quantitative &amp; qualitative</li> </ul>	<ul> <li>Interdisciplinary</li> <li>Collaborative</li> <li>Bottom-up and Emergent</li> <li>It finds us!</li> </ul>
The Materials of Research	The Tools of Research
<ul> <li>Extracted from:</li> <li>Interactions</li> <li>Transactions</li> <li>Movements</li> <li>Recorded by digital devices</li> </ul>	<ul> <li>Driven by new forms of visualization</li> <li>Requires new kinds of technologies</li> <li>Instrumental in the drive toward digital archiving</li> </ul>

# Implications for Qualitative Researchers

- We can move out of our methodological clique.
- Blurred boundaries allow us to move beyond declaring allegiance to one form of qualitative research.
- We can exercise digital creativity.
- We will need to learn how to use the technologies of our field.
- We must give careful thought to archiving.

### Big Data Rocks: Even for a Qualitative Researcher

Judith Davidson

**Associate Professor** 

Research Methods

**UMass Lowell** 

Judith Davidson@uml.edu

Qrfrag.blogspot.com

