# Qualitative Research & Technology

IN THE MIDST OF A REVOLUTION

## A Collaboration of Many Years

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## December, 2008!

No sooner had we published this book about Qualitative Data Analysis Software (QDAS) than we realized we were about to be overtaken by the tsunami of Web 2.0 (QDAS 2.0)!

#### Qualitative Research Design for Software Users



Silvana Di Gregorio Judith Davidson

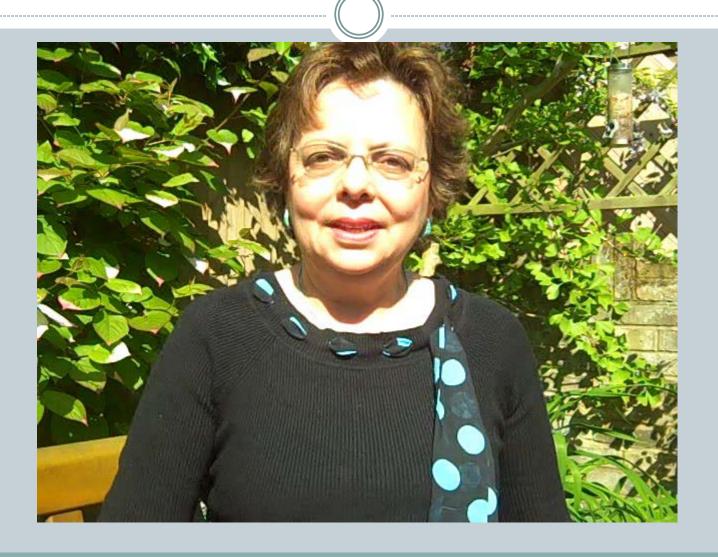
## Today's Focus

- What is QDAS? What is QDAS 2.0?
- How did we get from here (QDAS) to there (QDAS 2.0)?
- How has QDAS use been shaped (or not shaped) by the evolving concerns of qualitative research methodology from post-modernism and critical theory and from crises of representation to crises of legitimation?
- What has three decades of QDAS development taught us about using technology in qualitative research that could be applied to QDAS 2.0?

## Presentation based upon our chapter:

Davidson, J. & diGregorio, S. (forthcoming)
 Qualitative research and technology: In the midst of
 a revolution. In N. Denzin and Y. Lincoln's
 *Handbook of Qualitative Inquiry* (4<sup>th</sup> ed.).
 Thousand Oaks, CA: Sage.

## Welcome from Silvana diGregorio



### In this discussion...

- We are focused on QDAS and QDAS-like functions in technology, specifically the use of digital tools for the organization and analysis of qualitative research materials.
- We are not concerned with technology for presentation of qualitative research.
- We are not concerned with virtual locations or technology as a site for qualitative research study.

## What is Qualitative Data Analysis Software (QDAS)?

Originally developed as Stand Alone Software

Developed by Qualitative Researchers for Qualitative Researchers

## There are multiple brands and features, but all possess similar core capacities.





QDAS offers one-stopshopping for the discerning qualitative researcher.

Over time...the tools have become increasingly comprehensive and interfaces have become increasingly

complex

## QDAS provides

A digital container for organizing and analyzing project materials

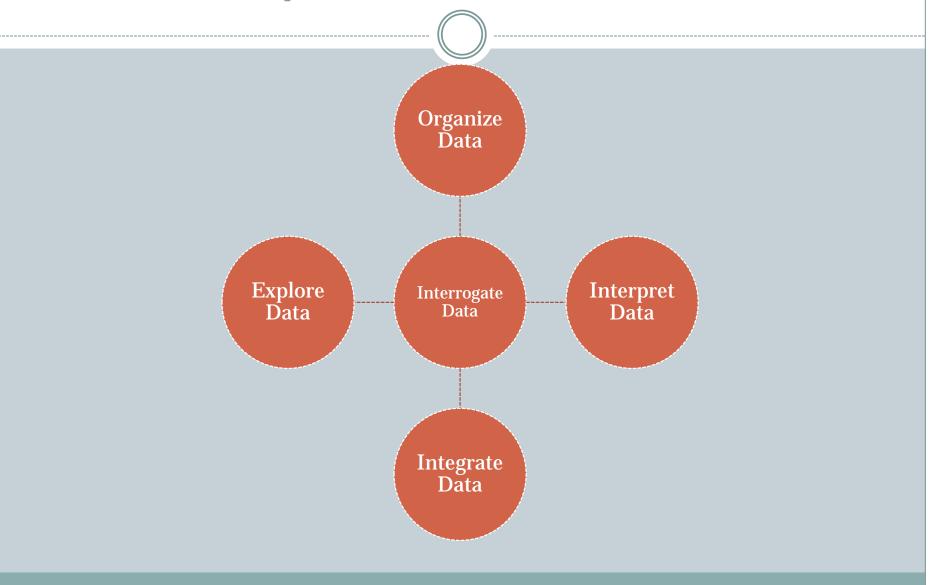
A suite of linked digital tools to apply to those materials.





### What do you do with QDAS?

(concept borrowed from Lewins and Silver)



## Using QDAS offers Qualitative Researchers:

Easy portability of project and materials

New transparency for qualitative research projects





## The E-Project as Genre

The E-project is an emerging research genre with evolving standards and styles.

As a qualitative researcher, you have to learn to communicate effectively using this new genre.

Documents/Sources
Codes/Nodes
Hyperlinks/See Also Links
Relationship Nodes/Models
The Project Shell
Coding Log
Start Here Memo

## **Limitations and Challenges**

- Many senior researchers do not use these tools.
- The use of these tools is confined primarily to qualitative researchers both in- and outside-of academia.
- Few institutions provide sufficient infrastructure support for broad and deep QDAS use.
- QDAS development has not been considered part of the mainstream history of qualitative research methodology.

## QDAS to QDAS 2.0

We believed that to understand QDAS 2.0, it was necessary to chart QDAS development within the context of the evolution of qualitative research methodology. We turned to Denzin and Lincoln's Eight Moments in qualitative research for this framework. We compared this framework with our Stages of QDAS development to produce an historical understanding of the development of QDAS that would inform our views of QDAS 2.0.

## Eight Moments in Qualitative Research

- 1. Traditional Period: Early 1900's to WWII
- 2. Modernist Period: WWII to 1970
- 3. Blurred Genres: 1970-1986
- 4. Crisis of Representation: Mid-1980's to early 1990's
- 5. Post-modernism: Early to mid-1990's
- 6. Post-experimental Inquiry: 1995-2000
- 7. Methodologically Contested Present: 2000-2008
- 8. A Fractured Future

## Qualitative Research and its Technologies ...in Evolution

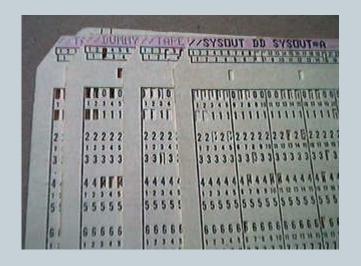
Moments in Qualitative Research (Denzin & Lincoln)	Stages in Technology in Qual Res (Davidson & diGregorio)
1.Traditional: early 1900 to WWII	1.Pre-QDAS: Notebooks, typewriters, carbon paper
2. Modernist: post WWII to 1970	Continues McBee Keysort Cards, Indecks, etc.
3. Blurred Genres: 1970-1986	2. Around 1980 QDAS Begins!
4. Crisis of Representation: mid-80's to early 1990's	3. Typology Era: Matching QDAS to Project
5. Post-Modernism: Early to mid-1990's	4. Comparing features; Experimenting w/ Generic Tools
6. Post-experimental: 1995-2000	Continues
7. Methodologically Contested Present: 2000-2008	5. Metaperspectives in QDAS
8. Fractured Future	6. QDAS and QDAS 2.0

### **Pre-QDAS**

## Traditional/Modernist: early 1900's to 1970

- Classical era of anthropology and sociology (Malinowski, Mead...
- Golden age of rigor in qualitative analysis (Becker, Glaser...)

Notebooks, Typewriters, Carbon Paper, and McBee Keysort Cards!



QDAS exploded onto the qualitative research scene in the early 1980's.

1981-NUD\*IST released

1984-Ethnograph

...and the rest is history

Audio cassets had also recently come into being.

QDAS developers are social scientists and are working in relative isolation.

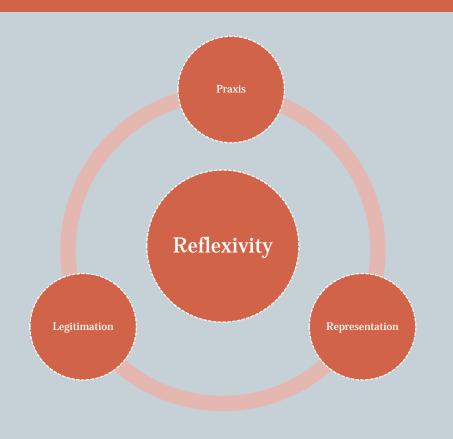


Blurred Genres: 1970-1986 (Think: Geertz, Erickson, Guba, Lincoln, Stake, Eisner)

## Mid 1980's to Early 1990's

#### **Crisis of Representation**

#### The Typology Era



- Matching a specific project to a specific software package
- 1989! First
   International
   Conference on
   Qualitative Computing:
   University of Surrey,
   UK

### Intersections: QR and QDAS

## Strauss and Corbin (1990):

### Renata Tesch (1990):

Basics of qualitative research: Grounded theory procedures and techniques.

 Strauss and Corbin's grounded theory approach became negatively associated with the notion of QDAS Qualitative research: Analysis types and software tools.

- Identifies 46 types of qualitative research and 10 common principles among them
- Most QDAS packages support these forms of research.

## Fielding and Lee (2007)

...looking back on the challenge to QDAS that emerged in relationship to Strauss and Corbin's work. "There was also an assumption that we were seeking to establish some kind of orthodoxy around the analytic process, particularly in relation to grounded theory. This is an assumption we have always strongly resisted. For us, identification of the coding features found in many qualitative data analysis programs with grounded theory has tended to elide program features, analytic procedures and methodological approaches."

## Post-modernism and post-experimental: Early 1990's to 2000

#### In Qualitative Research...

- Writing experiments abound:
  - Autoethnography
  - Multi-media
  - Performance Ethnography

#### In QDAS...

- Competition among QDAS developers to provide packages with core features consumers desire and new whistles and bells.
- Experimentation with Generic Tools as QDAS

## QDAS Texts/Projects/Conferences Emerge

#### **Comprehensive Texts**

- Fielding and Lee (1991)
- Miles and Weitzman (1994)
- Kelle (1995)

#### **Projects and Conferences**

- 1994: CAQDAS
   Networking Project
   funded by ESRC at
   Univ of Surrey, UK
- 1995: Sage QDAS venture

### **Divergences and Convergences**

#### Methodologically Contested Present: 2000-2008



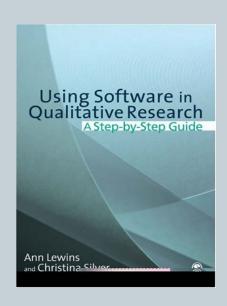
## Meta-perspectives on QDAS

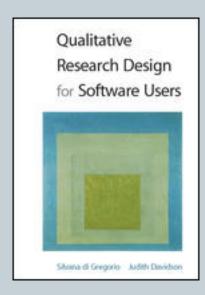
- What are the principles that should guide good/trustworthy QDAS-based QR work?
- How are these principles applicable across QDAS packages?

### Meta-perspectives on QDAS emerge

Lewins and Silver (2007)

diGregorio & Davidson (2008)





### Timeline

NVivo MAXqda ATLAS.ti WinMAX Ethnograph NUD\*IST

PC-Windows MAC decline

PC-Dos MAC mainframe

step-by-step grounded theory <---- Strauss & Corbin all approaches to qual share 10 common principles for managing analysis<-- Tesch

Web-based

applications

Methodologically contested present|Post-Experimental|Post-Modernism|Crisis of Representation| Blurred Genres.....

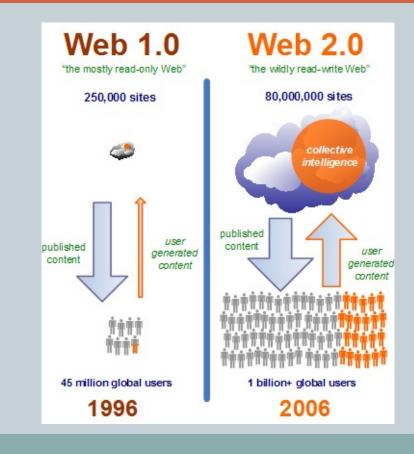
2010\_\_\_\_1990\_\_\_\_1980

### Enter Web 2.0

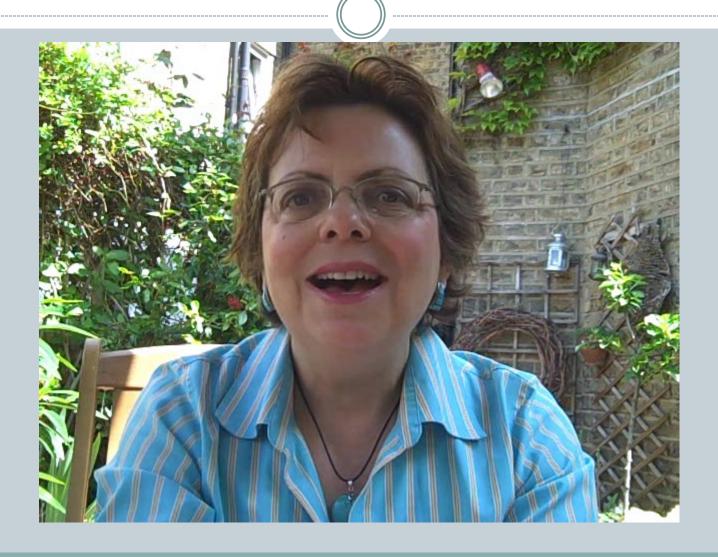


#### How did things change?





## QDAS 2.0



#### Examples of Web 2.0 Tools with QDAS applications

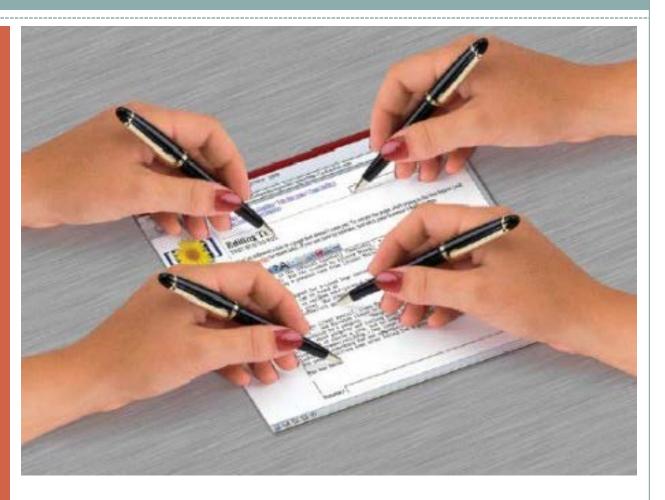
- Wikis
- A.nnotate
- Tagging/Del.icio.us
- Everyday Lives (Ethnosnacker)
  - Blogs as tools for memoing

Wiki's are fantastic tools for collaboration. (Most qualitative research is collaborative in nature.)

In wiki's it is easy to organize and link a specific body of information.

Silvana and I wrote our chapter in a Wiki. She was in London; I was in the US. The wiki was our shared office space.

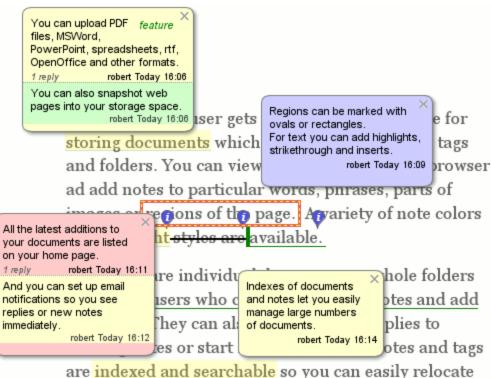
Our wiki is now a comprehensive E-project of information on QDAS and QDAS 2.0.



Wiki's

#### A.nnotate-http://a.nnotat e.com/

A.nnotate lets you share and store notes on documents. When you upload a document A.nnotate displays it in the browser and lets you add notes and tags to specific words, phrases and regions of the page. You can share documents so that other people can add notes and replies. All notes are added to your personal document index.



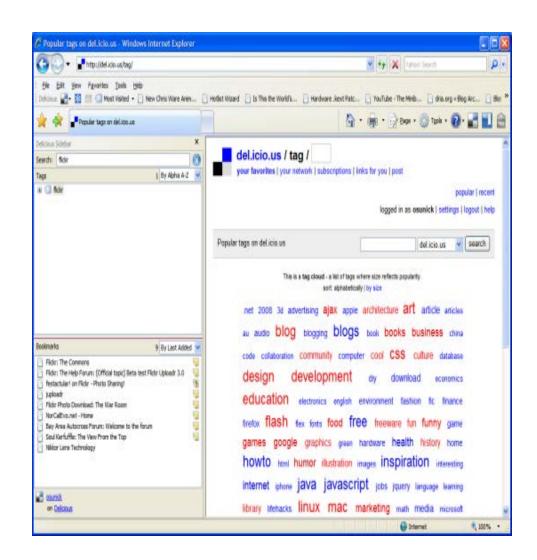
are <u>indexed and searchable</u> so you can easily relocate marked sections of the text.

#### **Tagging**

Del.icio.us is a tagging tool that has become widely popular.

You can tag material on the internet, share tags, and follow the tags of others.

Tagging allows us to draw upon the knowledge of the crowd.



#### **Everyday Lives**

**EverydayLives** is a UKbased research agency that focuses their attention on ethnographic research. They have released a "research tool designed by ethnographic researchers for ethnographic researchers, field anthropologists, agency planners, marketers and research respondents" and it comes in the form of a convenient iPhone app.





#### **Blogs...A tool** for Memoing

In my blog: Qrfrag—I think aloud about higher education and qualitative research.

Over time I find that I return to certain topics, building up a reservoir of ideas about a specific topic.

As in qualitative research, these memos begin to develop shape, weight, substance, etc. and maybe a paper is born!

#### THURSDAY, MARCH 18, 2010

#### Three Cases of Visual Memos

I have blogged thrice about visual memos I have created:

Visual

visual memo developed from writing in my journal



about the journal project. I was thinking about the ways the journal project and its writing was different from formal social science writing.

#### Visual Memos in Qualitative Research: Part II

This memo describes the way an image or art approach (prayer ropes) developed through a series of experiences related to the death of a dear friend.

### **Questions that Confront Us**

- As we enter QDAS2.0, what are the possibilities and challenges that await us?
- What new tools have appeared, and how are QDAS tools being repurposed to meet the challenges of Web 2.0?
- How will the critical methodological discussions of qualitative research figure in the development of these new sets of tools and their applied use in our field?

## What's the future for QDAS and QDAS 2.0?

Co-existence?

One eclipses the other?



### **Questions for Qualitative Researchers**

- What are the tools we need for the conduct of good qualitative research in the 21<sup>st</sup> century?
- How do we insure trustworthiness and validity in projects conducted in new technologies?
- How will we insure that the research conducted with new technologies is safe for participants (and researchers)?
- What skills will qualitative researchers need to survive in the world of QDAS 2.0?
- What implications are there for researcher training, publications, etc.?

### **Thanks**

