

atlas.ti

qualitative data analysis

Introduction to qualitative data management and analysis in ATLAS.ti v.7

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Demographic Research

What we'll cover today

- What is ATLAS.ti?
- Why should I use it?
- Hermeneutic Units and Primary Documents
- Data analysis
 - Transcriptions
 - Coding
 - Team projects
 - Other analysis tools
- Extras
- ATLAS.ti resources
- Selected studies using ATLAS.ti

What is ATLAS.ti?

- Qualitative data analysis software designed to organize, manage, and analyze textual, visual, and audio/video data

Why should I use ATLAS.ti?

- Used by researchers publishing in top journals, such as *American Sociological Review*, *American Journal of Sociology*, *Pediatrics*, *American Journal of Public Health*, *Criminology*, and *Journal of Marriage and Family*
- Used in research across many disciplines
- Flexible interface to visually manage different types of data
- Great for research teams
- Transcribe multimedia files within ATLAS.ti
- Import online survey data to analyze qualitative data (e.g., open-ended questions)
- Export data as SPSS, HTML, XML, or CSV files
- ATLAS.ti provides extensive manuals, webinars, video tutorials, and online support

Before we begin: HUs

- The Hermeneutic Unit (HU)
 - Your “project container”
 - Encompasses everything in your project
 - In v. 7.0, documents are added to a library and not embedded in your HU, so your HU file stays relatively small

Before we begin: PDs

- Primary Documents (PDs)
 - PDs are the data you need to analyze—audio or video files, images, interview transcriptions, maps, or text documents
 - Original data sources are preserved when you make a file into a PD
 - PDs can be RTF, PDF, Microsoft Word, JPEG, AVI, WAV, and more

Getting started

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Opening ATLAS.ti and creating a new HU

- Open the program and create or open an HU
- The software prevents two users from editing the same HU at the same time

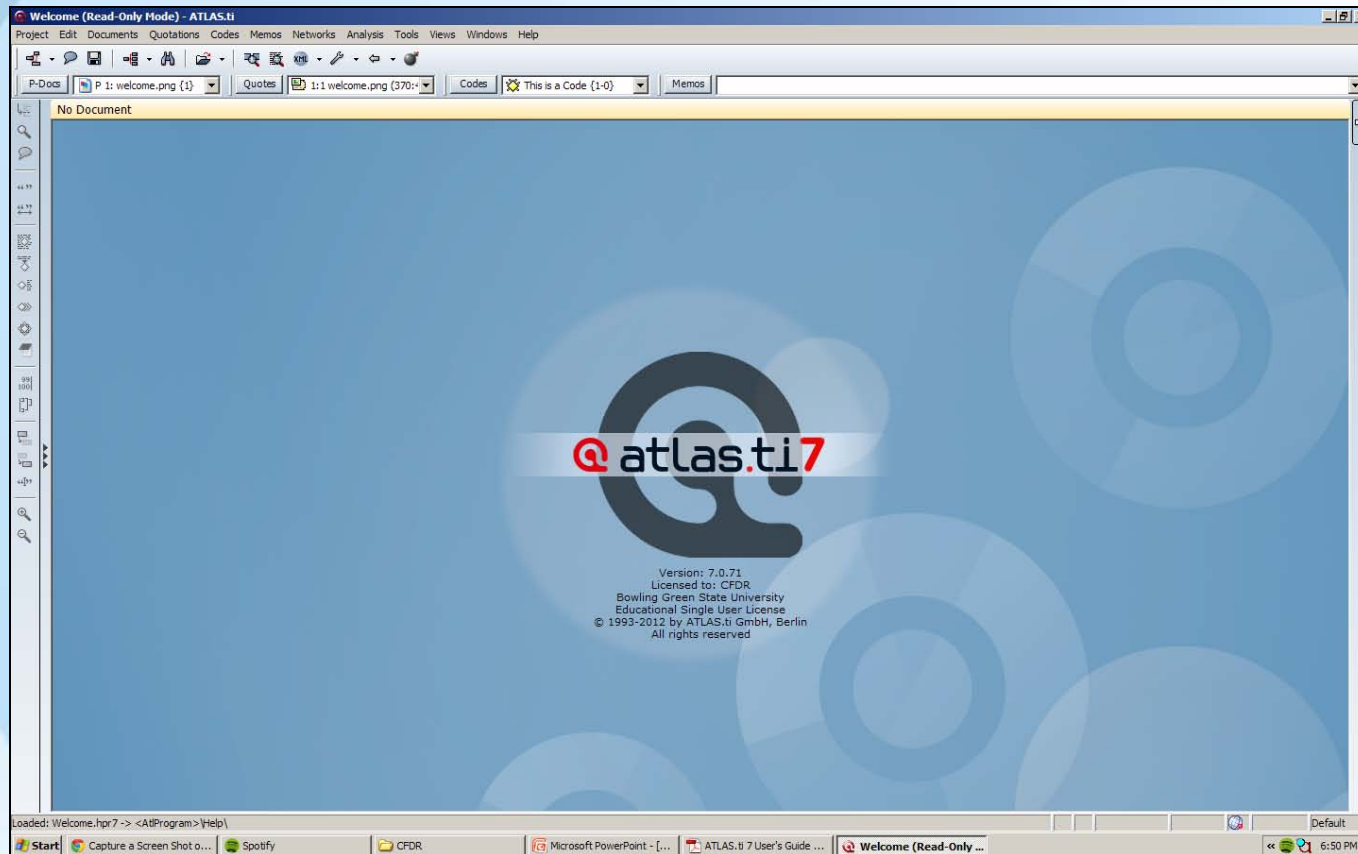
Accessing HUs from different locations

- If you are working with a team, or need to work from different locations, all PDs and objects in the HU need to be available for ATLAS.ti to reference
- Simply dropping your saved HU file into another location will not work
- Making a Copy Bundle tells ATLAS.ti to gather all information necessary to access your PDs and objects saved in your HU

Accessing HUs from different locations, cont'd.

- To ensure access:
 - Go to Project/Copy Bundle/Create Bundle
 - Select the files you wish to be bundled
 - ATLAS.ti will list any files that cannot be bundled (e.g., if a file is missing)
 - The Copy Bundle is saved with an '.atlcb' extension
 - From your new location, open ATLAS.ti, go to Project/Copy Bundle/Install Bundle
 - Select your Copy Bundle file for installation

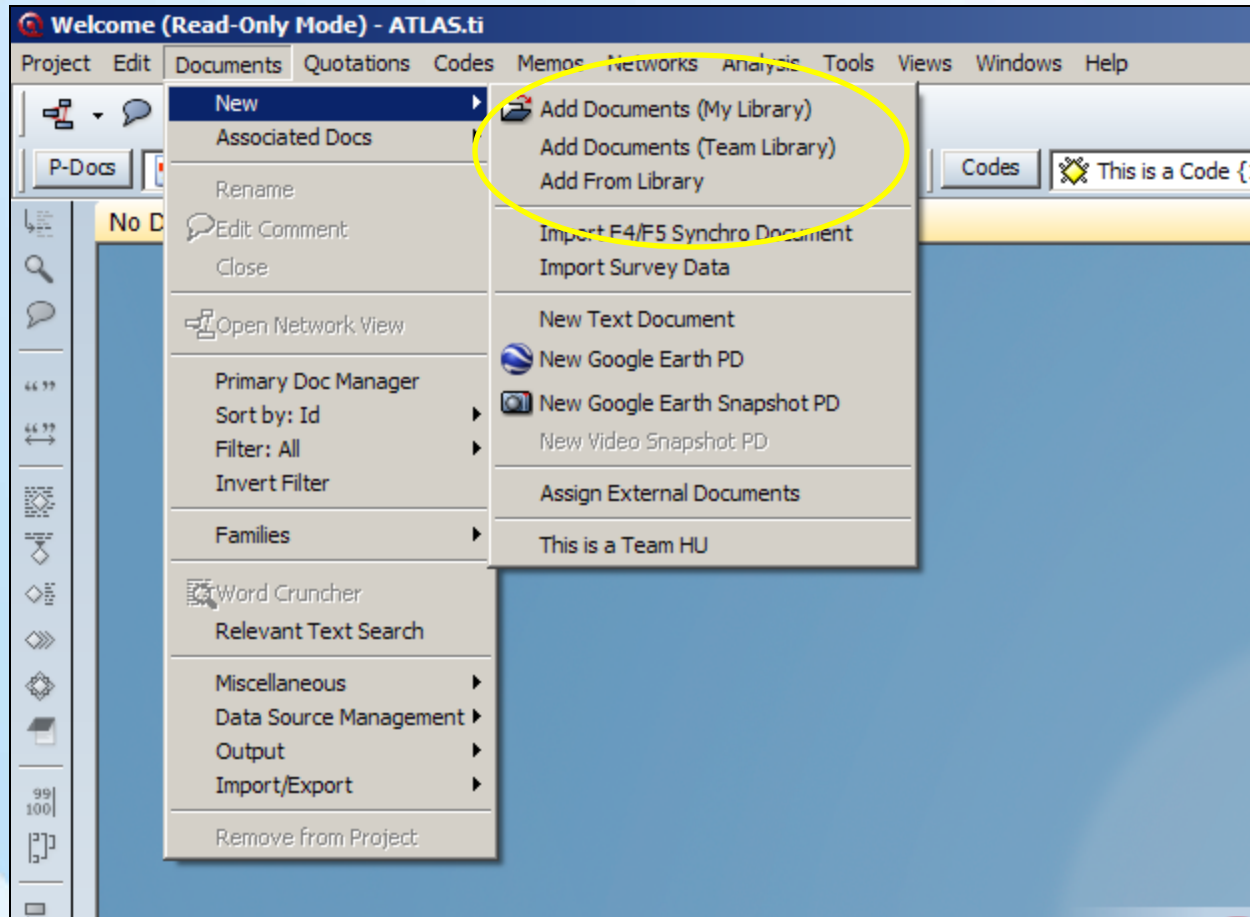
Opening ATLAS.ti



Primary Documents (PDs)

- Add a new PD: Project or Documents/Add Document(s) and select your file to the desired library
- ATLAS.ti will ask which library you'd like to use
 - Use My Library for single-user projects
 - Use Team Library for team projects
 - Library locations can be changed

PDs, cont'd.



PDs, cont'd.

- View up to four documents at one time by clicking on the plus sign on the right side of your HU
- If you no longer want a PD to be part of your HU, you can remove it (“disconnect” in v.6)
- PDs can be grouped together in PD families
- By default, PDs are assigned in order (i.e., P1, P2, etc.), but the user can change the names

Analyzing data

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Transcriptions

- Users can import interview transcriptions, or transcribe directly in ATLAS.ti
- Set a rewind time
- Settings and tools allow you to navigate the text and associated media file together
- Select portions of text to play the corresponding audio or video

Coding

- Codes classify segments of your data
- “Coding” is the process of assigning data segments to particular codes (e.g., “SES_income,” “ED_phd,” “cohab”)
- The ATLAS.ti coding system is based on grounded theory and density
 - *Groundedness*: the number of data segments (e.g., quotations) associated with a particular code
 - *Density*: the number of links (associations) between a code and other codes, families, or memos

Coding, cont'd.

☀ def happiness: a feeling (2-1)
☀ def happiness: a state of mind (2-1)
☀ def happiness: fulfillment (11-2)
☀ def happiness: is subjective (2-2)~
☀ def happiness: long term view (6-1)~
☀ EFFECTS PARENTING (0-0)~
☀ effects parenting: (neg) less... (21-2)~
☀ effects parenting: (neg) more ... (12-1)~
☀ effects parenting: career neg (3-1)~
☀ effects parenting: career pos (1-1)~
☀ effects parenting: improved social and emotional contacts (10-2)~
☀ effects parenting: less focus on self (6-2)~
☀ effects parenting: letting go (2-1)~
☀ effects parenting: marital satisfaction (-) (18-1)~
☀ effects parenting: personal growth (13-2)
☀ EVAL: (0-0)~
☀ Eval: ambivalent (4-2)
☀ Eval: neg (8-2)
☀ Eval: pos (58-2)
☀ EX: EXPLANATION (0-0)~
☀ ex: attitude (9-1)
☀ ex: narcissistic culture (7-1)
☀ ex: salient experiences (7-1)~
☀ HAPPINESS (0-2)
☀ Happiness - Joy (6-0)~
☀ Happiness: effect of wanting children (21-2)~
☀ Happiness: is not the key (12-2)~
☀ Happiness: unrelated to having kids (5-1)~
☀ HARD WORK BUT... (3-1)~
☀ hard work but: a worthwhile trade-off (6-0)
☀ hard work but: fulfillment (6-2)~
☀ hard work but: joy (8-2)
☀ hard work but: rewarding (10-2)
☀ IC: IMAGE COMPOSITION (0-0)~
☀ IC: content_animal (1-0)
☀ IC: content_artifact (2-0)~
☀ IC: content_atmosphere (2-0)~
☀ IC: content_clouds in the sky (3-0)
☀ IC: content_human being (1-0)~
☀ IC: content_nature big picture (3-0)
☀ IC: content_nature focussed view (6-0)
☀ IC: content_open view to the horizon (3-0)~
☀ IC: content_plant (3-0)
☀ IC: content_water (6-0)
☀ IC: FOCUS (0-0)~
☀ IC: focus_centre (8-0)

Source: ATLAS.ti 7 User Manual, © 2012.

Coding, cont'd.

- Work with the margin area displayed, so that codes are shown next to their associated quotations
 - Go to Views/Margin Area
- Assigning a code to a data segment creates a quotation
 - Quotations can be associated with multiple codes
 - Free quotations can be created—i.e., unassociated with codes
 - Export and print a list of your quotations—coded or free
- Several different ways to code (*open coding, in-vivo coding, code-by-list, quick coding*), but you will likely be using a code list
- Codes should be brief for easy and efficient reference

Managing codes

- Output a list of your coded quotations
- Unlink a code from a data segment
- Check codes for redundancy with the Coding Analyzer
- Merge codes—reversing merges is not easy so make sure to save your HU first in case you want to undo it
- Attach comments to codes for reference, especially if you are working on a team project
- Color code
- Rename your codes
- Assign codes to families
- View codes in Network Views

Team research projects

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Team research projects, cont'd.

- Everything covered above applies to both single-user and team projects, but some special considerations should be taken when working with a team
 - Team research projects should have a project administrator
 - Work from the Team Library
 - HUs and PDs should be saved on a server accessible to all team members
 - Merge HUs together to update the full data set and run the Coding Analyzer—ATLAS.ti recommends agreeing on regular merge schedules
 - Unify the same PDs to add codes, or use the same set of codes and merge different PDs
 - Three strategies of merging: Adding, Unifying, and Ignoring

Team research projects, cont'd.

- A Merge Report that keeps track of everything affected by the merge

| Object Type | Source-HU | Target-HU | Strategy |
|----------------------|-----------|-----------|----------|
| Primary Docs | 22 | 22 | Add |
| Quotations | 458 | 456 | Add |
| Codes | 79 | 79 | Unify |
| Codings | 523 | 523 | - |
| Memos | 21 | 21 | Ignore |
| Network Views | 3 | 3 | Ignore |
| Primary Doc Families | 14 | 14 | Add |
| Code Families | 13 | 13 | Ignore |
| Memo Families | 0 | 0 | Ignore |
| Code-Links | 23 | 22 | Target |
| Hyper-Links | 31 | 29 | Target |

Figure 125: First part of the merge report: An overview of the selected merge strategies

Source: ATLAS.ti 7 User Manual, © 2012.

Once your data is coded...

- What tools you use will depend on your research question. For example:
 - Output your codes, coded quotations, families, etc.
 - Query Tool
 - Search for quotations using the codes they are associated with
 - Use operands to specify searches
 - Super Codes
 - Stored queries
 - Co-occurrence Explorer
 - Qualitative crosstab across PDs
 - Code-PD Cross-Tabulation Table
 - Generate and export report on selected crosstabs
 - Redundant Coding Analyzer
 - Weeds out overlapping or redundancies in coding
 - Calculate Inter-Coder Reliability using the Coding Analysis Toolkit (CAT)

Some authors on how they used ATLAS.ti

- Byrd, Stephanie Ellen. 2009. “The Social Construction of Marital Commitment.” *Journal of Marriage and Family* 71:318–336.
 - *...interview text was given orienting codes to mark life history stages and subject matter (such as childhood, high school, college, work history, relationship history)... Memos and comments were attached to quotes during coding and in subsequent reviews of groupings of data.*

Some authors on how they used ATLAS.ti, cont'd.

- Manning, Wendy D. and Pamela J. Smock. 2005. “Measuring and Modeling Cohabitation: New Perspectives from Qualitative Data.” *Journal of Marriage and Family* 67:989–1002.
 - *Once the code list was constructed, we entered all of the interviews into ATLAS.ti... Once all the interviews were entered into ATLAS.ti and the text coded by a member of the research team, similar codes were sorted and analyzed together (e.g., “children interfere with relationship” and “multiple partner fertility”) to determine common themes that emerge from the data.*

A few last things...

- Survey data can be imported for analyzing qualitative aspects (e.g., open-ended questions)
- ATLAS.ti is upward compatible, so you can convert your v.5 or v.6 projects to v.7
- It is not downward compatible
- The full ATLAS.ti manual has extensive instructions, suggestions, and examples on how to go about most functions in a team setting
- Export your coded PDs, your codes, etc., as RTF output, PDFs, XML, SPSS, Excel, graphic files, and more

Helpful ATLAS.ti resources

- www.atlasti.com
- ATLAS.ti offers webinars, student discounts, newsletters, manuals, brochures, user forum, video tutorials, and other products
- *Qualitative Data Analysis with ATLAS.ti* (Susanne Friese, SAGE, <http://sagepub.com/books/Book235168>)
- Nicholas Woolf Consulting (workshops, training, etc.): <http://www.learnatlas.com/>

Published research using ATLAS.ti

- Byrd, Stephanie Ellen. 2009. "The Social Construction of Marital Commitment." *Journal of Marriage and Family* 71:318–336.
- Calarco, Jessica McCrory. 2011. "'I Need Help!' Social Class and Children's Help-Seeking in Elementary School." *American Sociological Review* 76:862–882.
- Carr, Patrick J., Laura Napolitano, and Jessica Keating. 2007. "We Never Call the Cops and Here Is Why: A Qualitative Examination of Legal Cynicism in Three Philadelphia Neighborhoods." *Criminology* 45:445–480.
- Guetzkow, Joshua, Michele Lamong, and Gregoire Mallard. 2004. "What is Originality in the Humanities and the Social Sciences?" *American Sociological Review* 69:190–212.
- Jimenez, Tomas R. 2008. "Mexican Immigrant Replenishment and the Continuing Significance of Ethnicity and Race." *American Journal of Sociology* 113:1527–1567.
- Manning, Wendy D. and Pamela J. Smock. 2005. "Measuring and Modeling Cohabitation: New Perspectives from Qualitative Data." *Journal of Marriage and Family* 67:989–1002.
- Manning, W. D., Trella, D., Lyons, H. and Du Toit, N. C. (2010), Marriageable Women: A Focus on Participants in a Community Healthy Marriage Program. *Family Relations* 59: 87–102.
- Reiss, John G., Robert W. Gibson, and Leslie R. Walker. 2005. "Health Care Transition: Youth, Family, and Provider Perspectives." *Pediatrics* 115:112–120.

Published papers on how they used ATLAS.ti, cont'd.

- Richardson, Laura P., Charlotte W. Lewis, Mary Casey-Goldstein, Elizabeth McCauley, and Wayne Katon. 2007. "Pediatric Primary Care Providers and Adolescent Depression: A Qualitative Study of Barriers to Treatment and the Effect of the Black Box Warning." *Journal of Adolescent Health* 40:433–439.
- Sherman, Susan G., Danielle German, Bangorn Sirojorn, Nick Thompson, Apinun Aramrattana, and David D. Celentano. 2008. "Initiation of Methamphetamine Use Among Young Thai Drug Users: A Qualitative Study." *Journal of Adolescent Health* 42:36–42.
- Smock, Pamela J., Wendy D. Manning, and Meredith Porter. 2005. "'Everything's There Except Money': How Money Shapes Decisions to Marry Among Cohabitators." *Journal of Marriage and Family* 67:680–696.

Thank you

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