This workshop aims to introduce participants to the re-use of qualitative data using Atlas.ti, a software tool for managing qualitative data. The first section provides a basic introduction to the Atlas.ti software covering coding, search and retrieve, and annotation. Then participants will be introduced to the workshop datasets (archived qualitative data from ESDS Qualidata). They will learn how these data can be explored and reworked. Examples might include using “families” in Atlas.ti to generate analytical subsamples and deepening the original research using sub-codes. Participants will gain hands-on experience with re-use and re-coding of the data provided. Participants should have basic grounding in qualitative research methods, but no knowledge of software tools is presumed.
Outline of topics to be covered

1. Overview: what is Qualitative Data Analysis (QDA) and a few things we won't be able to cover in this session
2. Objectives for the session- what we will try to accomplish
3. A quick look (demonstration, not hands-on) at Atlas.ti 5.0 Demo
4. In-depth hands-on practice using Atlas.ti 5.0 Demo
5. Close - final thoughts and questions

Notes:

Items in **bold** (in hands-on section) are menu items, should be visible on the screen somewhere...

Please ask questions at **any** time - don't get lost, it's nearly impossible to problem-solve and listen to new material.
1. Overview

1.1 General research principles:
Whilst tools are useful, the primary tool for analysing qualitative data is you, the researcher

Software is a complement, not a substitute, for a researcher's skills

There are many ways of doing things in Atlas – but it is better to use one you like, not explore endlessly

1.2 Basic steps in working with any computer assisted qualitative data analysis software (CAQDAS), including Atlas:

create a project

associate data with the project

analysing data – sorting and classifying text, creating diagrams (coding text, writing memos) and querying data (making comparisons), etc.

producing outputs - reports, papers, diagrams etc.

1.3 Big topics that won’t be covered in any depth in this workshop

images and other multi-media files

detail on networking diagrams

spss export

collaborative working

not attempting an exhaustive coverage of features – enable you to start with the basics: data management, getting to know your data, coding and classification and querying.

1.4 Objectives for the session, or what we will cover:

What is QDA? - some showing, but there is no substitute for doing it

exposure to the types of data held at ESDS Qualidata

exposure to Atlas - demystify "CAQDAS" and provide a basis for evaluating Atlas and other packages

Why are we using Atlas at the UK Data Archive?

(1) XML export feature essential for sharing archived data
(2) Compared to other software, stays "close" to the data
Figure 1.  Atlas.ti 5.0 Basic Interface

*** Demonstration only - not hands-on ***

1.5 Terms and features - and where they are located in Atlas –

Atlas calls a project "hermeneutic unit." Simply means a tool to support interpretation. From here forward, when you see "Hermeneutic Unit," just think "Project."

primary documents (PD) – text and rtf (rtf preferred), graphics (bmp, tiff, etc), audio (wav)

quotations - segments of data - layer on top of PD, but does not alter PD

codes - descriptive or analytical terms assigned to text, image, and keep them short!!!

memos - tool for writing text, "analytical notes"
comments - longer than code, but attached to single object
families - filters or containers for grouping PDs and codes
networks - graphical representations of objects and relationships among them

1.6 Interface

RightClick is easiest way in many cases, BUT HIGHLY CONTEXT SENSITIVE - when in doubt, right click, move mouse, right click again.

review main menus and toolbars for Files, Documents, Quotations (parallel with combo boxes)

NB There are many ways to do things - E.g., access Explorer through folder icon or through EXTRAS, EXPLORER

some especially handy ones (Right-click for function):

✓ 4th from left, org chart icon: hierarchical display of project components
✓ VIEW, ZOOM click on and off
✓ pointed page flag: text search
✓ 99 icon: line numbers
✓ below 99: turn margin area on and off - margin can display codes or other objects (right click)
✓ [several icons]: coding shortcuts
✓ N.B.: many of these functions are also available under Views menu

1.7 !!Warnings!!

Files are technically editable in A5.0, but only if done very carefully. Need to protect links between primary docs and linked objects. (Also, must use rtf format for this, not Word.doc)

Files are external to HU – helpful to keep all data files stored in default location: C:\Program Files\Scientific software\Atlasti\textbank

There is an undo function (Control-Z), but only in edit mode, so don't count on it.
2. Getting data into Atlas (associate data with an HU)

2.1 Create an HU - **FILE / NEW HERMENEUTIC UNIT** and name it Test.

2.2 **Aside on file formats**

- Files can be saved as text (Word or rtf) image, audio, video.
- Double hard returns (create blank line) where you need to separate content. Single return to start new line, but keep content connected.

- **Ex.A**
  Q1: Where were you born?
  R1: London.

- **Ex.B**
  R1: I think of convenience as being easy to prepare.
  R2: I tend to think more about shopping, a store nearby with easy parking.

2.3 **Making data available to Atlas**

- Data are not actually imported into Atlas; rather they are made available to the HU

- Open **Explorer** (from **Extras** menu) - then drag and drop. Files are in **c:\Program files\Scientific Software\Atlas\Textbank**.

- Or go to **Documents / Assign** / (Look in Textbank folder) Load a few files, text and image files.

- Oops, how do I remove a file from a project? Go to **Documents / Disconnect**, or open the PD combo box and use the "X" icon. You must have highlighted a file in the PD box for “disconnect” to be an option. **Note: this removes the file from the project; it does not delete the file from your computer.**
3. Creating quotations and coding

3.1 **To begin:** close current HU (Test). Go to File/Close. Then open an existing HU named "IASSIST Workshop." **File/Open.** File should be in folder named **Textbank.**

3.2 **Finding text** - can use the search tool - Vertical menu bar / page flag/right arrow icon second from top on left margin; or **Documents, Search;** or Cntrl-F

Will let you search all PDs in an HU - handy for consistency control for coding

3.3 **Multiple ways of coding.** Begin by highlighting passage you want to code, then RightClick to get options:

- **Hint on name of codes** - Atlas does not permit multiple layers of hierarchy for codes. Careful naming of codes can assist in that:

Format: main term-subordinate term, e.g., war-scarcity, war-
rationing.

**Open Coding** - assign new code

**Code in Vivo** - key words taken directly from PD and assigned as code (limited to 1-2 words)

**Coding by List** - can click make selection from list; also drag-and-drop from list in coding combo box (expanded into a window)

To Un-code... right click on code in right margin, click **Unlink**. This deletes codes only, not text. To unmark a quotation, click on the remaining square bracket in the coding margin, and choose **Delete**. Can also do this by right-clicking on highlighted quotation.

3.4 Viewing quotations - use 2nd combo box from left- highlight and jump to that quotation; can also use arrow keys for next and previous quotations.

3.5 **Mark free quotations** - use when you've located text of interest, but don't know or want to assign a precise code yet. Highlight text, RightClick - select **Create Free Quotation. It's very useful to use the Comments box to note WHY this quote was of interest.**

To add comments: click yellow icon in code combo box menu, or directly in yellow background area in coding.

3.6 **Can also create new codes unlinked to any text** - open Code combo box, click icon on far left of top bar (“create new item”), enter new code into **Free Codes** box. Again, use comments here to note why you wanted to create this code.

3.7 **Autocoding:** Autocoding is powerful, but limited. Can be adapted for semi- to fully-structured interview responses. Use example of tinned food codes.

Create a new code called Tinned food
Right-click in coding box, go to **Coding**, then **Auto Coding**
In **Selected Code** box, choose Tinned Food
In **search expression**, type **TINNED FOOD:=tin*|canned**
Then select **Confirm Always** (VERY, VERY IMPORTANT), **All PDs**, and **Paragraph**.
Click **Code it**, for search results of (food) tin, tinned, canned, but check what other results are returned.

3.8 **Can code for multiple purposes simultaneously** - coding for content, and you might also mark passages for use as illustrative
citations in a final paper ("quotes for citation").

3.9 **Coding of graphical and audio files** - Remove one file from the PD list (see 2.3 for instructions). Now assign the USA.jpg file. Left mouse button creates a box marking the area to be coded. Right click to code as usual.

3.10 **Other handy coding tricks and tips**

Output all text associated with a code. From coding box, select **Output/Quotations for Selected Code**. Can send output to screen (editor), printer, etc.

Adjust amount of text assigned to a code. Go to coded quotation. Change highlighting. Click on checkmark (left vertical menu bar). Quotation should be recoded to the new highlighting.

Merging codes: Highlight a code you want to become the “master” code. Then go to **Codes Manager, Miscellaneous, Merge Codes**, then pick the code you want absorbed. **Reminder**: use comments to note your rationale for merging codes, and to track which codes were source for the merge operation.

Codes frequency table: **CODES/OUTPUT/CODES-PRIMARY-DOCUMENTS-TABLE**. Open in Editor.
4. Families and Filtering

4.1 Creating families - same principles apply for codes and documents for documents (interviews, then by categories, such as gender)

**Documents - Edit Families - Open Family Manager** - Right Click again (or use left-most icon in upper right of P-Doc Families window) - **New family**. Name new family "Edwardians". Use arrow buttons to load interviews with "Edw" into Edwardian family.
4.2 Filtering – Open Prim Documents Manager, Filter, Families

Pick a family (Blaxter), now check list of PDs using drop down. Go back to Documents (drop down) and see what has changed. **Very important!!** If you’re getting odd results, check to see what filters are in effect.

Possible use for selecting a code family: might want to have only a limited set of codes showing (to reduce clutter), while coding certain kinds of docs.

5 Query tool

5.1 Is used for retrieval and output of coded text (quotations). Not for text search.

5.2 First challenge-where to find it? Binoculars icon, or from Tools.

**Figure 5. Query Tool in Atlas - Special Note on Printer Icon**

5.3 Basic interface

Operations on left vertical tool bar- Boolean, semantic, proximity
Upper right - term stack - list of all recent expressions searched

Lower right - results

Arguments (things to query) - codes, code families, supercodes

5.4 **Something simple to start with** - I just want a display (or file) of a group of related codes.

Look in **Families** box, select one (such as Good food-defined)

Code populates 2 windows of query box, and quotes appear in result box.

2 icons to right of result box: **X** removes selected items; **Printer icon** is key, and easy to overlook. This is how you get output.

Click printer icon, then select either **List** or **Full Content** (with or without comments).

Then get box of where to send output: **Editor** (screen), **Printer** or **File**

Small icons in upper right area of Query Tool window: "C" clears all the existing queries.

**Scope** (button in lower right) allows you to select subsets of documents for querying. Example: can define groups by gender, age, occupation, etc. Might want to views quotes in different sub-samples to see if meaning is the same (example on “processed” in Blaxter and Edwardians).

5.5 Tricks and tips for search operators - there are "gotchas" here

**OR** - searches all text selected for any codes in search expression (works as you would expect)

**XOR** (V+dot) - Either, or, but NOT both. Not used often.

**AND** (^) - marking of texts has to be **EXACT** (punctuation and spaces) for these searches to work. Do test with "q-test and" codes. Best to avoid XOR and AND...

**NOT** - Returns any text not fulfilling the condition (e.g., not containing a code)

Co-occurrence-proximity operator (bottom of column), with more flexible parameters than Booleans.
✓ More forgiving for slight variations in coding.

✓ BUT, order matters, so use it carefully. The tool searches for the first term, finds co-occurrences of second term. Results will show only quotes with first search term. (search on co-occur codes)

5.6 **Super codes** - it is a saved query expression. Like regular codes, but automatically updated when invoked.

Example-create query of fruit OR veg. Then click on **Super-Code**. Name using query result: Scarce Foods. Note there are 3 hits. Later code another passage using **fruit** or any code included in Scarce Foods. Query Tool will automatically include newly coded quotations (should show 4 results, up from 3)

6. **Networking**

6.1 On main menu bar, **Networks, Network View Manager**, select First test.

6.2 Can pull in existing codes: **Nodes, Import Nodes**, then have choice of importing codes, quotations, or other objects. **Import** additional code **War-rationing**.

6.3 To create links, go to **Links** on menu, **Link Nodes**. Then use cursor to connect two nodes. Get to choose type of association - causal, part of. Later, can right click on link to edit, change type of relation

6.4 Close this network view, open **2nd test** to show use as an analytical tool, e.g., for theory building.

7. **Exporting to XML**

7.1 creating XML files: **Tools, XML, Export**
8. Additional resources:

CAQDAS Networking Project  http://caqdas.soc.surrey.ac.uk
Superb training, I recommend this HIGHLY

Online QDA  http://onlineqda.hud.ac.uk/

Atlas.ti listserve:  LISTSERV@LISTSERV.DFN.DE

Atlas home page  http://www.atlasti.de (link on top menu bar for English version; manual and demo available there)

Atlas demo download available at:  http://www.atlasti.de/demo.shtml

Decent online Atlas tutorial:
http://www.valt.helsinki.fi/atk/atlas/ATLASTU.HTM

Pages that review and compare various caqdas packages:

http://lboro.ac.uk/research/mmethods/research/software/caqdas_comparison.html  (at Loughborough-new methods for analysis of media)

Paper done by staff at Surrey:
http://caqdas.soc.surrey.ac.uk/ChoosingLewins&SilverV3Nov05.pdf