

NVivo 1 for Windows – Walking before Running: Code and Retrieve

Dr Susila Davis, Alex Jager & Dr Charlotte Albury



iT Centre
Learning

iT
services



UNIVERSITY OF
OXFORD



Take a moment to check you have everything you need.

Have you got your:

- 1) **Course slides**
- 2) **NVivo v1 installed with Licence Key enabled**
- 3) **Work files/data** provided for this session
- 4) Something to write with, and write on

We are working with data that should already be on your computer.

Have you saved this somewhere easy to find?

Learning objectives - Today you will find out how to:

- Navigate your way round NVivo
- Import text data into NVivo
- Code text data
- Make notes about your data
- Retrieve coded data using 'queries'









FIRST THINGS FIRST...

WELCOME!

Today you're with **Susie** and **Charlotte**.

Online teaching is not as straightforward as teaching in-person. You're in safe hands, but sometimes the online environment may make the class more 'exciting'. Please bear with us.

If your computer has a problem (for example with your internet connection, or other software) this is not something we can help with.

**! Mac
users**

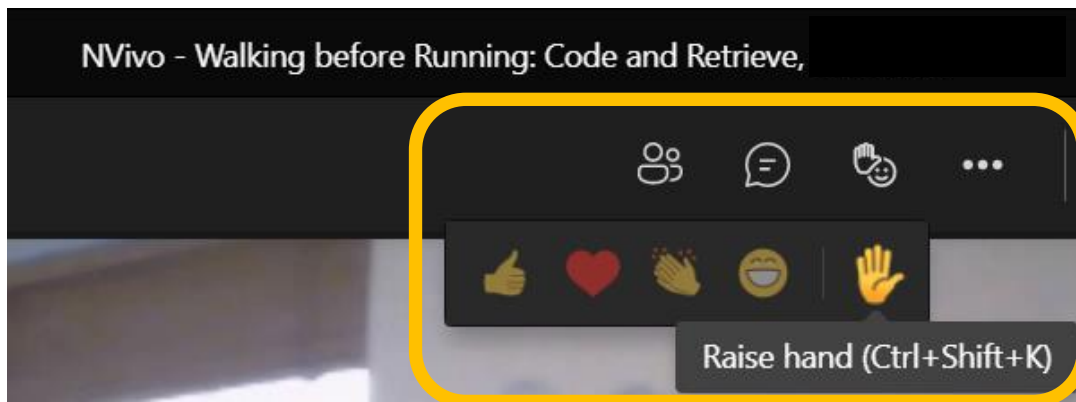
This is a **Windows** course, but we will do our best to signpost or handle Mac-related queries within the time we have – your [slides](#) include extra tips/instructions.

PRACTICAL WORK

Exercises for you to practise today & materials are all in the **ITLC Portfolio** for downloading

<https://skills.it.ox.ac.uk/nvivo-walking-before-running-code-and-retrieve-course-pack>

- There's two of us to help you
- You can ask questions by raising your hand in Teams, or use the chat



WHAT IS NVIVO?

NVivo is a Computer Assisted Qualitative Data Analysis (CAQDAS) software package.

Closeness to data – at least as much as can be had using manual methods – is assisted by enlarged and improved screen display, improved management of and access to multiple sources and types of data, rapid retrieval of coded text and easy ability to view retrieved segments of text in their original context. (Bazeley and Jackson, 2013).

Helps people manage, shape and make sense of unstructured information. It doesn't do the thinking for you; it provides a workspace and tools to enable you to easily work through your information.' (QSRinternational.com)

WHAT IS NVIVO NOT?

- ✗ Your data analysis
- ✗ An approach to data analysis
- ✗ A method of data analysis
- ✗ Something that tells you how to do your analysis
- ✗ Something that tells you when you've come across interesting findings

WHAT VERSION, WHAT COMPUTER, WHAT'S HAPPENING?



- Different versions of NVivo (11, 12 and 'release 1' [not 13!])
- We will be demonstrating using **NVivo v1 for Windows**
 - If you don't have NVivo 1 for Windows things may look a little different... You can open an older version file in newer version software but NOT the other way round... [NVivo will prompt you]
- **NVivo for Mac and Windows** are different – NVivo for Mac generally has **less** functionality than Windows.
 - On the Mac, you can do most of what we are showing you today, but may have to press slightly different buttons
 - There is a Windows-Mac Project Converter, but beware of converting too many times...

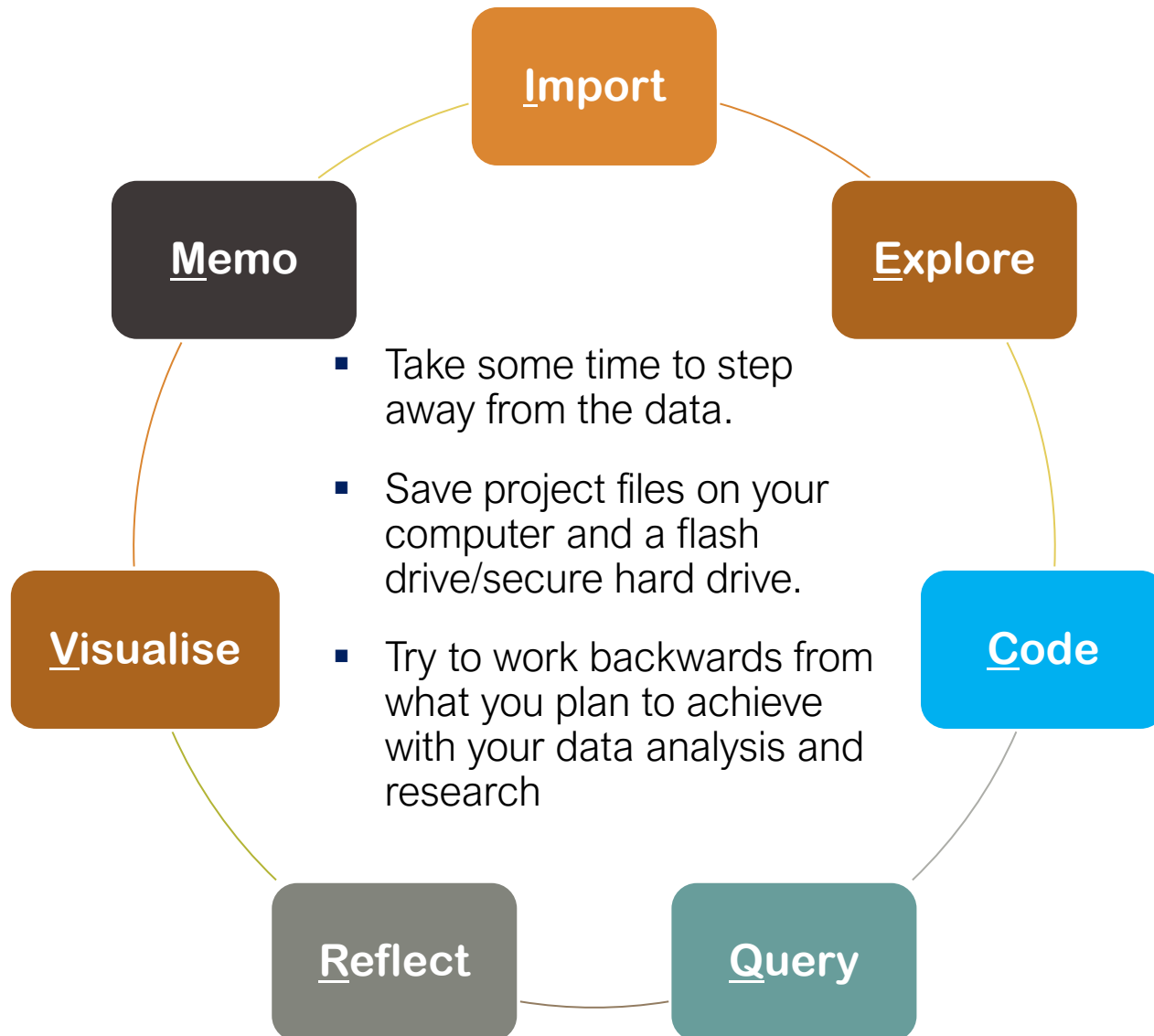
**! Mac
users**

USING SOFTWARE: CAUTION...

Write down in the Chat some **different ways or reasons why** you might need to be **cautious** when using software to analyse qualitative data in your field.



WORKING WITH QUALITATIVE DATA



THE NVIVO WORKSPACE

List view: displays content of folders

Detail view: shows the sources

Navigation view

The screenshot displays the NVivo workspace interface. On the left is the navigation view, which is a dark blue sidebar containing several sections: 'IMPORT' (with sub-items like Data, Files, Focus groups, Interviews, Literature, Pictures, Survey, File Classifications, Externals), 'ORGANIZE' (with sub-items like Coding, Codes, Relationships, Relationship Types), 'Cases', 'Notes', 'Sets', and 'EXPLORE' (with sub-items like Queries). The main workspace is divided into two panes. The left pane shows a 'List view' of the 'Interviews' folder, displaying a table with columns for 'Name', 'Codes', and 'References'. The right pane shows a 'Detail view' of a source named 'Anna', displaying text from an interview with questions like 'Q.1 Current use of time' and 'Q.2 Time use ten years on'. The top of the interface features a menu bar with options like File, Home, Import, Create, Explore, Share, Modules, and Document, along with various toolbars for editing and analysis.

Name	Codes	References
Anna	0	0
Audio interview with Peter	0	0
Bernadette	0	0
Fredric	0	0
Grace	0	0
Ken	0	0
Mary	0	0
Nick	0	0
Phoebe	0	0
Sunil	0	0

Q.1 Current use of time
Ben
In an "ordinary" week, how do you currently spend your time?(What takes most time, how much time spent on work, family, leisure etc...?)

Anna
I am still studying so an ordinary week for me is mainly spent studying and working part time. I send about 32 hours a week at work, 6 contact hours at university, and I spend my weekends and evenings studying. I also play Netball and attend a Yoga class of an evening once a week.

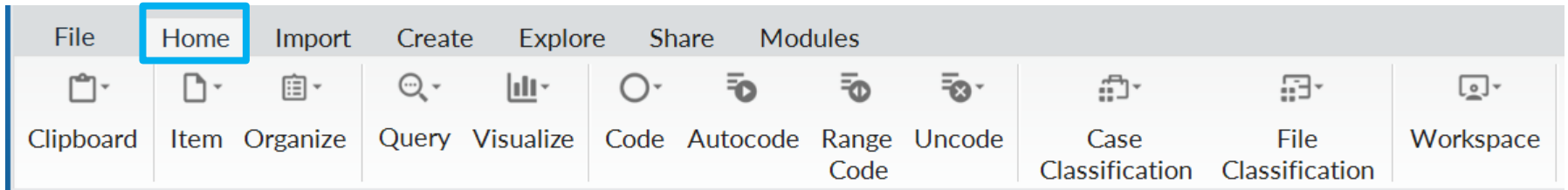
Q.1a Feelings about current time use?
Ben
How do you feel about your time use now? Does it fit with your goals? Are there other things you'd like to fit in?

Anna
Look, it's as effective as it can possibly be given my current commitments. I do wish I had more leisure time to spend with my friends and family and my partner. I also wish I had time to take dancing classes and learn a second language, but these things will need to wait until I have completed my course.

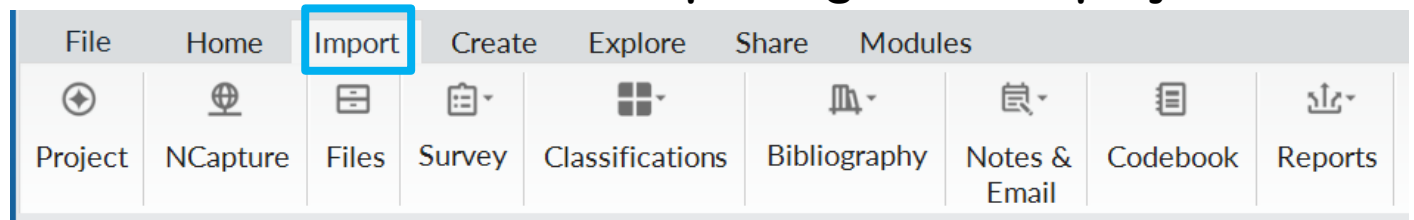
Q.2 Time use ten years on

RIBBON TABS

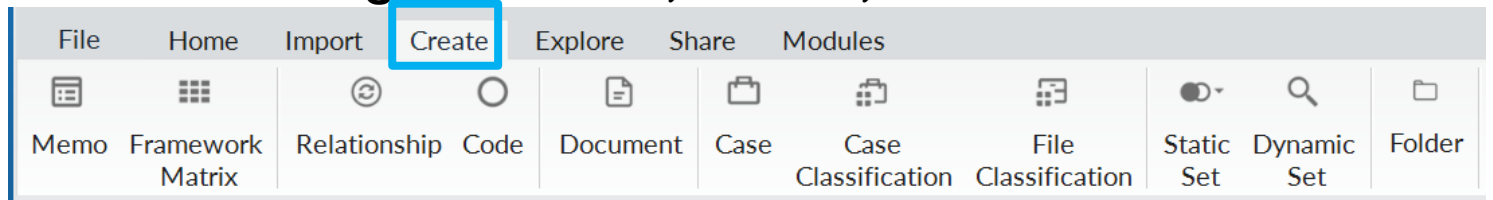
Navigation, coding and classifications



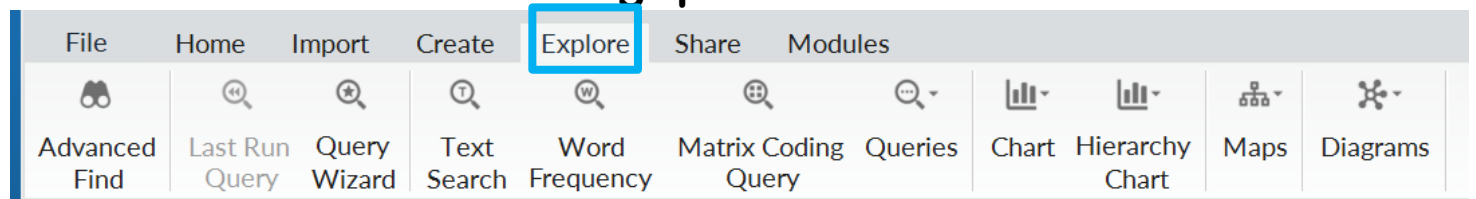
Importing files and project items



Creating documents, memos, codes and classifications



Running queries and visualisation functions



Top tip

If in doubt, right-click wherever you are, see available options!

HELP SYSTEM



Home

About NVivo

Workflow overview

Getting started

Files

Surveys and datasets

Audio and video

Coding

Cases

Classifications

Notes

Visualizations

Queries

Reports

NVivo User Help – Windows

Complete user help for NVivo (Release 1) Windows including NCapture and NVivo modules
(or do you want [NVivo User Help – Mac?](#))

TOP LINKS



About NVivo

What's new

myNVivo

Installing NVivo

GETTING STARTED



Getting started basics

Getting started tutorials (YouTube)

Sample projects

Collaboration Cloud

OTHER RESOURCES



NVivo customer hub

Customer support

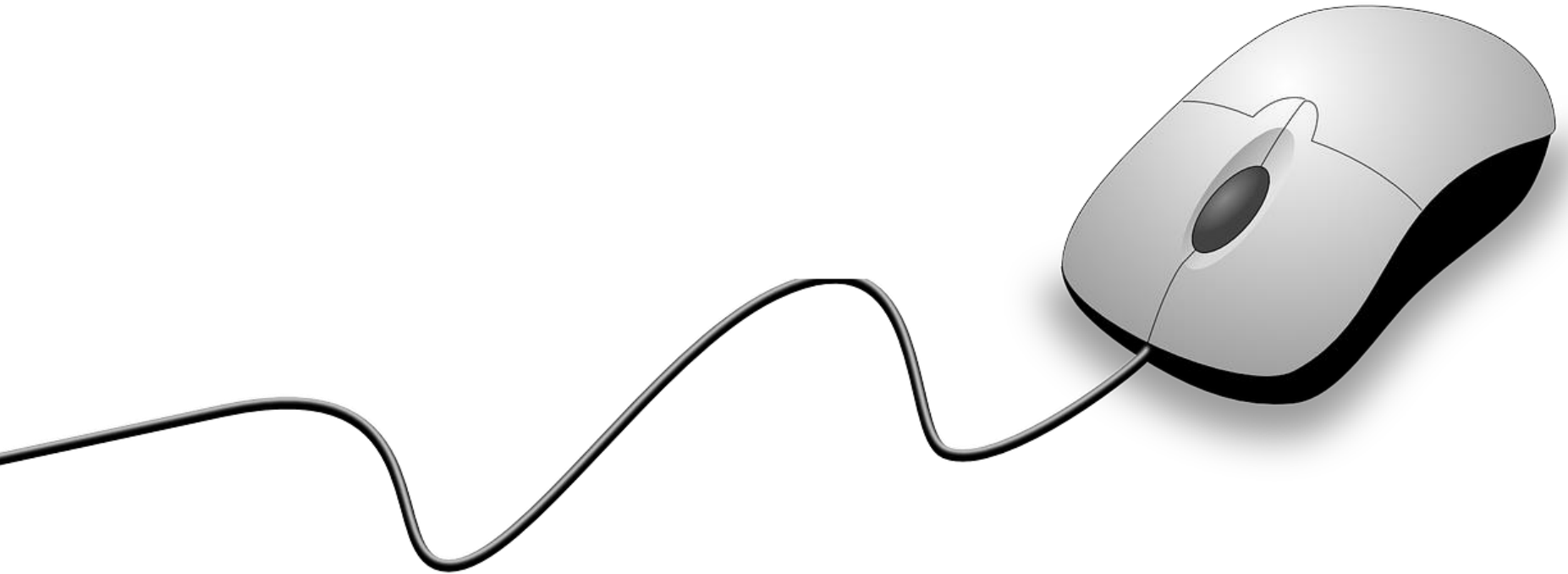
Help for other NVivo versions

IT administrators

Help from earlier versions like NVivo 11 and 12 = also good

If you're not sure...

RIGHT-CLICK in a white space



TIME TO PRACTICE!

EXERCISE 1: Create an NVivo Project

Task 1: Create a new Project

- i. Open NVivo and click on the **'New Project'** button.
- ii. Leave the **'Keep a log of user actions'** box unchecked.
- iii. Fill in a **Project title**, eg. Volunteering. Set the **Text content language**.
- iv. Review the options Step 2 and click on **'Create Project'**.

Task 2: Review the NVivo Workspace

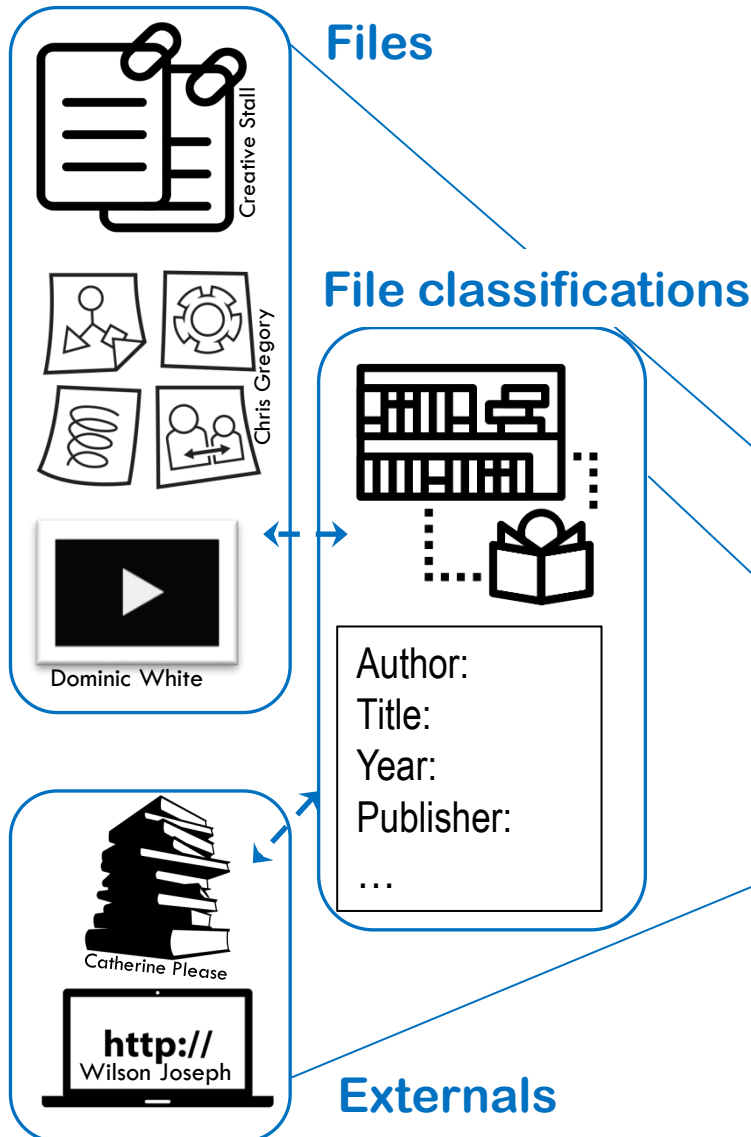
- i. Locate the Navigation view sidebar section.
- ii. Click on different sections.
- iii. Review the changes in the list view of the workspace.

KEY ELEMENTS: DATA



Folders

Noun project: Carla Dias



‘Data’ is where many of the materials connected to your NVivo project will be stored. In **Data** you can store data in three types of folders: **Files**, **File Classifications**, and **Externals**.

TODAY

1. **Files**: data you import or create in NVivo (eg. PDFs, transcripts, audio).
2. **File Classifications**: ‘labels’ with descriptive information assigned to Files (e.g. bibliographic information)
3. **Externals**: links to data you can’t import in NVivo (eg. Websites, books).

EXERCISE 2: Import Files - Word Documents

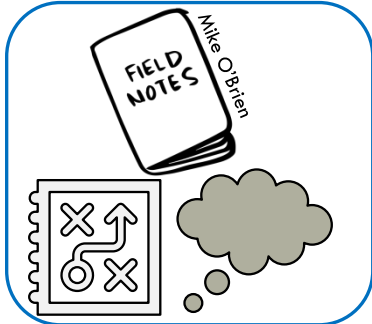
Task 1: Import Interviews

- i. Create a new folder in **Files**, name it **Interviews**.
- ii. Click on the **Import** tab > click **Files** > Locate the 9 files (in 'Interviews' > 'Participant files').
- iii. Leave the box that says 'Create a case for each imported file' unchecked for now. We will create the Cases later.
- iv. Click 'Import'.

Check out your Workbook for instructions on importing other types of files 😊

KEY ELEMENTS: NOTES

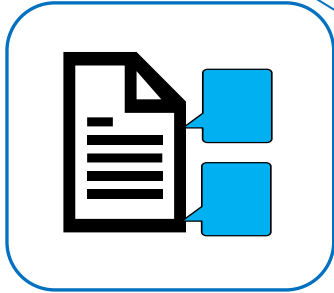
Memos



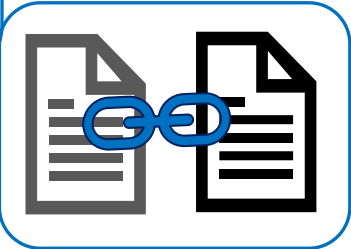
'Notes' is where you can store ideas you might have about your project, or things you might normally scribble in your fieldnotes. In **Notes** you can store data in four types of folders: **Memos**, **Framework Matrices**, **Annotations** and **See Also Links**.

TODAY

	A: experiences of volunt...	B: ima 2
1 : Anna Age Group = 20...	Regular volunteer with Starlight Children's Foundation helping with fundraising and wish granting	Everyday person w passion for helping others and the community.
2 : Fredric Age Group = 30...	Used to help organize Church socials. Enjoyed it because I like-minded people.	Community-minded person with plenty spare time. Ones I know are housewiv married ladies who
3 : Bernadette Age Group = 60+	Involved in com-groups. Helping injured wildlife and representing consumers in Mental Health.	Community minded sharing people. Mu be energetic.
4 : Mary Age Group = 60+	Meals on Wheels in late 1980's, but friend couldn't continue with it and so lost interest. Forc last five years have	Someone with time who is financially secure (can work fo money). Typical an older woman in



1. **Memos**: notes and reflections about your project.
2. **Annotations**: notes about a specific section of a project item, phrase or marking content for follow-up.



3. **Framework Matrices**: tables for summarizing data about ① cases and ② themes. Beware the word limit...
4. **See Also Links**: marking if a project item or section of text might be related to another

Framework matrices

EXERCISE 3: Create a Record of Work (a Memo)

- Memos can be created for any purpose: what you observe during fieldwork, impressions you are left with after an interview, content of your coding protocol, strategies for analysis, etc.

Create Memos

- i. In **Notes**, highlight the **Memos** folder > right click in list view > select New Memo > name new memo: NVivo course
- ii. Create a memo listing the things you have learned thus far.
- iii. Create another memo listing your remaining questions.

! Mac users: In **Detail View**, select the content you want to annotate. In the context menu, select **New Annotation** (or keyboard shortcut Shift+⌘+A).

EXERCISE 4: Creating an Annotation

- Annotations are useful for sections of text that you are not sure what to do with yet, but you want to make a note or comment about. Be aware that annotations are not ‘searchable’, whereas memos are.

Highlight some text that you’re not sure how to code yet, right-click, and select **New Annotation**. Write some text to reflect ideas you might have for a future code you might create later. (**Annotations** are equivalent to Comments in Word or PDF documents)

WHAT DATA DO YOU THINK
YOU CAN PUT INTO
NVIVO?



DATA SOURCES



Online data
(e.g. Twitter,
Facebook,
webs, etc.)

Video files

Interviews/
focus groups

References

Pictures

Audio files

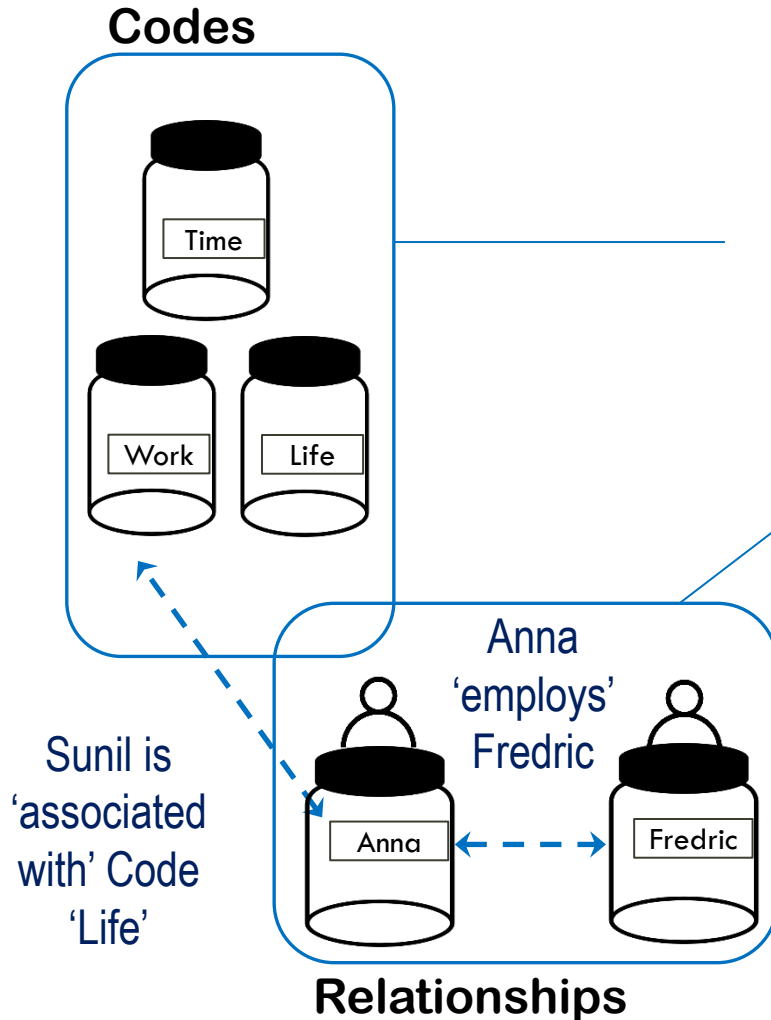
Memos
(i.e. your own
thoughts)

DATA SOURCES

Check out your Workbook for more details on NVivo's functionality 😊

Break time...

KEY ELEMENTS: CODES



Codes: 'containers' in which wholes or parts of sources are kept for analysis.

1. **Codes:** identified patterns & themes (according to data, lit. review)

TODAY

2. **Relationships:** a type of code that defines the connection between two project items

3. **Relationship types:** Different kinds of connection available between project items

TYPES OF CODING

Coding: the analytical process through which data is fractured, conceptualized, and integrated to form theory. (Strauss & Corbin)

- Deductive Coding
 - Codes used by other researches
 - Codes developed from literature review/extant theories
- Inductive Coding
 - Codes developed from raw data
- Hybrid Approach
 - Deductive & inductive coding

Characteristics of a good code: label; definition; descriptive (how/when occurs & any qualifications/exclusions)

CODES & CODING IN NVIVO

- **Codes** are used to identify a theme, a person, a place, a case, etc.
- Codes can be organized into **hierarchies** from a general topic (**parent code**) to specific topics (**child codes**).
- Approaches:
 1. **Manual coding**: codes are created based on selected content in the data.
 2. **Auto-Coding** questions: a code is created for each question and contains all the answers. (Ideal when working with structured data.)
 3. **Running text queries**: a code is created based on the results of text searches that retrieve the occurrences of a word in the data. (Ideal when the literature review is used to generate codes.)

CODING TEXT

- Coding at new codes

Select the text > Home or Document tabs > code selection at new code

- Coding “in vivo”

Select the text > Home or Document tabs > Code In Vivo

- Uncoding

Select the text > Home or Document tabs > Uncode selection

! Mac users: Select your text in Detail view, go to the **Home tab**, in the **Code menu**, in **Code Selection**, click **'To New Code'**, or right-click [Ctrl+click] to see your options.

EXERCISE 5a:

Manual coding: basic, 'in vivo' & recent

Exploring what you've imported

- i. Go into one of your **Interview Files** – e.g. **Anna**. Have a look at the interview. What structural features do you notice about that File – how are the questions and responses arranged and formatted?
- ii. What kinds of Codes can you create by inductively coding your Interview File? Highlight the text you want to code, right-click and select **Code Selection**. Under **Create New**, select **Top-level Code**. Type a name for that code that reflects what you have highlighted. Click on **OK**. Open the Code you've just created and explore its content.
- iii. Using the right-click method, code something **'In Vivo'** or using **'Code to recent codes'**.

EXERCISE 5b:

Manual Coding – dragging & dropping

Create Thematic Codes

- i. Create a folder in the **Codes** area called **Theme**.
- ii. Go to your '**Interviews**' folder and open the Interview with **Grace**.
- iii. Read the first passage of **Grace**. She's talking about 'doing family activities'. Create a code about the notion of **Family activities**.
- iv. Select, **drag & drop** Grace's answer to the code **Family activities**.
- v. Review **Mary**'s answers and code at the same code. (highlight, drag & drop).
- vi. Create another code called, '**Elderly home**' and code some text.

! Mac users: Open a file in Detail View. In the **View** menu, select '**Coding Stripes**'.

EXERCISE 6: Visual Markers of Coding

Task 1: Visualize Codes Using Coding Stripes

- i. Open any Interview file > go to the ribbon > in the **Document** tab > click on the icon **Coding Stripes** > select **Recently Coded**.
- ii. Coloured stripes appear on the right side of the **Detail View**.

Task 2: Visualize Codes Using Highlight

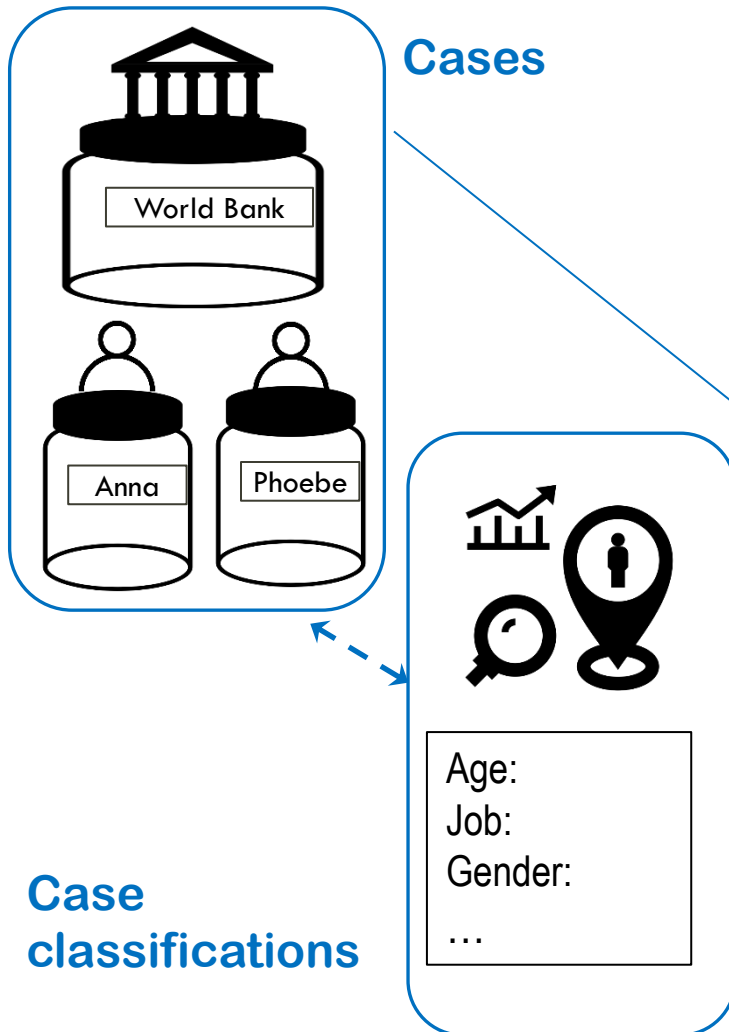
- i. **Document** tab > **Highlight** > Select the Codes you would like to visualize.

! Mac users: Auto-coding of Word files is **not** available on NVivo for Mac, but you can auto-code Excel files. Search '[Autocode datasets](#)' in the [Help](#) menu.

Demo: Auto-Coding – Question codes

- i. Create a folder called **Questions** in the **Codes** section.
- ii. Go to **Files** > click on the **Interviews** folder > select the 9 interviews > right click > click on **Auto Code**.
- iii. In the Auto Code Wizard – Select '**Code by paragraph styles**'.
Step 1: Select **Heading 1** and **Heading 2**, then the '>>' button > **Next** > **Step 2:** at the option **Under**, change to **Existing folder** > at the option **Name**, select **Questions** folder > **OK** > **Finish**.
- iv. Review codes in the **Questions** folder.

KEY ELEMENTS: CASES



‘Cases’ is where the units of analysis and their ‘labels’ connected to your NVivo project will be stored. In Cases you can store data in two types of folders: **Cases**, and **Case Classifications**.

TODAY

1. **Cases**: units of analysis from the data (respondent, institution, country) that can be ‘coded’ to project items.
2. **Case Classifications**: ‘labels’ with descriptive information assigned to demographic, institutional, or geographical data about cases.

! Mac users: Create cases from interviews by going to List View, select all your interview files > on the **Home** tab, click '**Organise**' > '**Create as Cases**'. Then in the 'Classification' menu, in List view, select your cases and choose a Classification. Search '[Set up cases from interviews](#)' in the [Help](#) menu.

Demo: Auto-Coding - Cases

- i. We are now going to create a case for each interview participant. Return to **Files** > click on the **Interviews** folder > select the 9 interviews > right click > click on **Auto Code** again.
- ii. In the Auto Code Wizard – Select '**Code by speaker name**'.
- iii. Enter all the **speaker names** – use the '**Preview**' menu to help you – make sure the spellings are correct. [The names you will input are: Anna, Ben, Bernadette, Fredric, Grace, Ken, Mary, Nick, Phoebe, Sunil]
- iv. Click **Next** when you're done.
- v. Next to '**Create new classification**', type '**Respondents**'. Click **Finish**.
- vi. You'll see that a Case has been created for each interview respondent.

CLASSIFICATIONS

- **Classifications** are **descriptive** information you assign to **sources** or **codes**.
- This information can be used to **classify** your sources or codes by groups which are called **Sets**.
- **File classifications** are used to store bibliographic information about your data.
- **Case classifications** are used to store demographic, institutional, or geographical data about case codes.
- Your Classification data can be imported from Excel or txt.
- If you work with a small number of cases and with few attributes, you may want to create a **case classification** directly in NVivo.

! Mac users: Use the **'.csv'** file to Import your Case Classification sheet, **not** the **'.xlsx'** file.

Demo: Case Classifications

Task 1: Import Case Classification from Excel

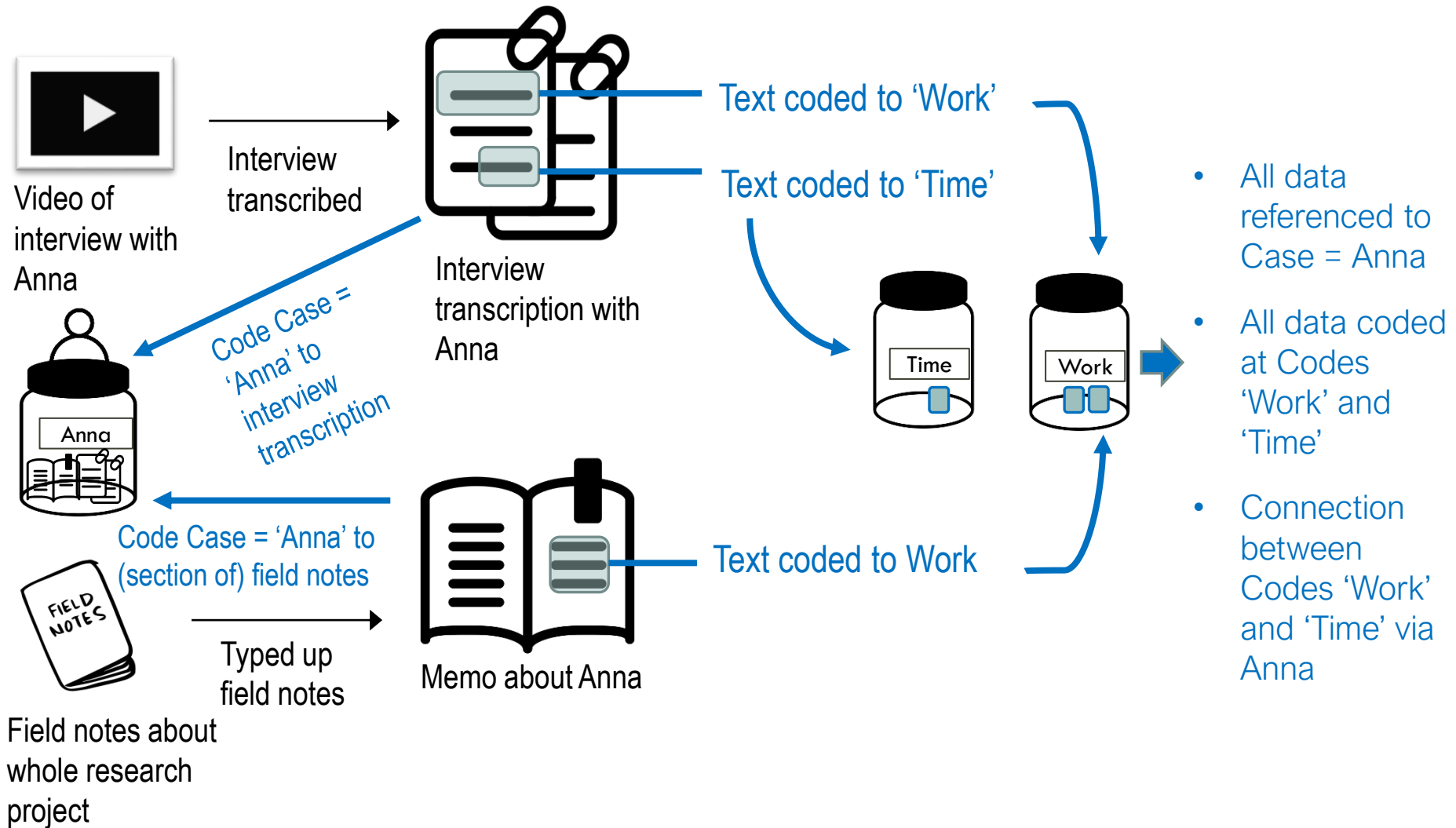
- i. Go to the **Case Classifications** folder > right click in List View > click Import Case Classification Sheet.
- ii. In the **Wizard step 1** > locate the **Case Classification Sheet** file in the Volunteering Data on your computer
- iii. In Step 3, click the option **As names**. In the **Select location** window > highlight the folder **Cases** > **OK** > **Next** > **Finish**.

Task 2: Check that your Cases are classified as 'Respondents'

- i. Go to **Cases** > select all cases > right click > go down to **Classification**, is **'Respondents'** selected?

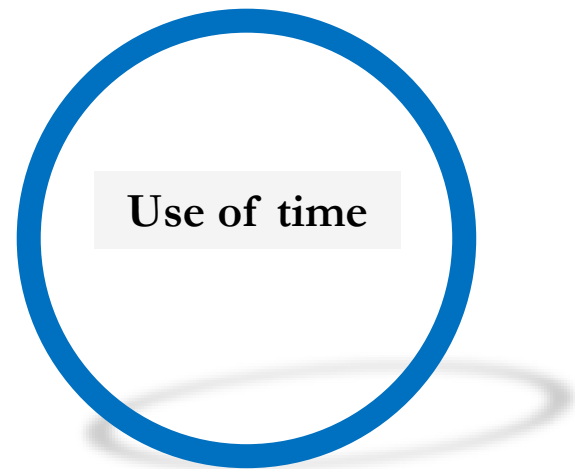
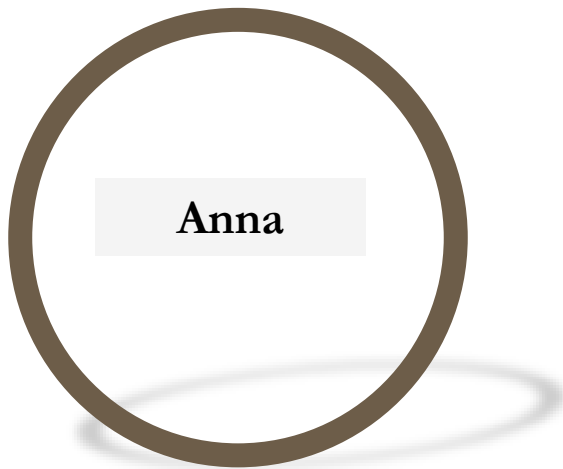
**An example scenario to recap
everything you've just done...**

NVivo: What can I learn about Anna?



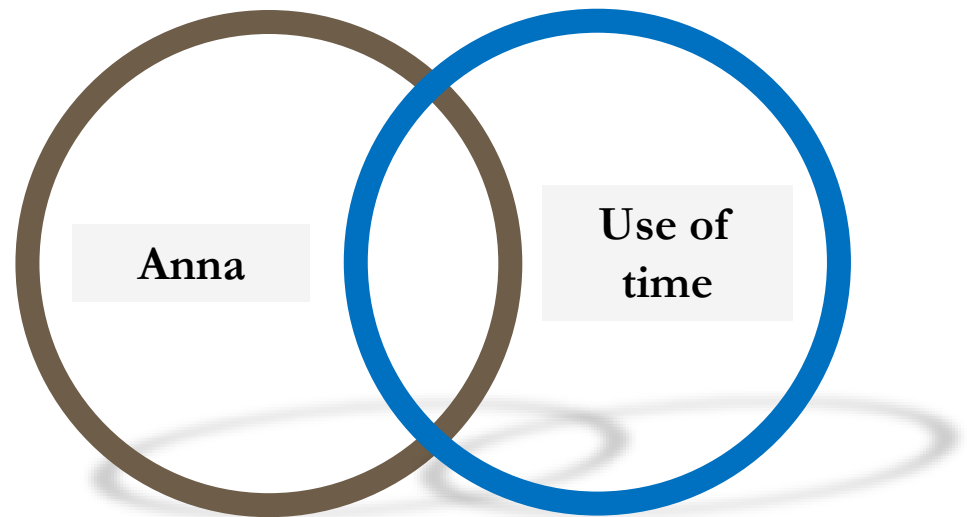
HOW CAN YOU EXPLORE YOUR DATA AFTER CODING AT CODES?

You may retrieve all the data relating to a specific person or a certain topic in your study.



HOW CAN YOU EXPLORE YOUR DATA AFTER CODING AT CODES?

Using more advanced functionality You may search for content by one informant on a particular issue.



This is called a 'coding query' and there's a step-by-step video here:
<https://www.youtube.com/watch?v=Gh2orDf1O9A>

RUNNING QUERIES

- Word frequency queries identify the most frequently occurring words (or sets of similar words around a concept).
- Text search queries identify all references to a word or phrase, also looking for similar words (useful for quick coding).
- Coding queries look for content coded at selected codes, a combination of codes, or a combination of codes and attributes.
- Compound queries combine text search and coding queries, text searches where one term precedes the other or two coding queries when content coded at one code is near content coded at another.

EXERCISE 7: Word Frequency Searches

- i. In the **Explore** tab > **Word Frequency** > Set parameters > **Run Query**.
- ii. Examine the Word Cloud, Tree Map, and Cluster Analysis on the right-hand side of your screen.
- iii. Re-try your search but eliminate shorter words or move the **Finding Matches** bar from **Exact** to **Similar**.

Check out your Workbook for more details on NVivo's functionality 😊

EXERCISE 8:

Text Searches

- i. In the **Explore** tab > **Text search** > Insert: volunteer > **Run Query**.
- ii. Review results in Detail View; Word Tree Tab
- iii. Try the same word with an asterisk at the end: volunteer* and see the difference in results
- iv. Try using the Special instructions button on the right to narrow your search:
 - Asterisk (*) as a substitute for zero or more characters.
 - Question mark (?) as a substitute for a single character.
 - Use “” marks for phrases
 - You can use Boolean operators AND, OR, NOT or + (required)
 - Fuzz search: ‘color~’ will find ‘colors’ or ‘colour’
 - Specify proximity: “happy busy” ~102

Check out your Workbook for more details on NVivo’s functionality 😊

! Mac users: On the **Share** tab, in the **Export** menu, select '**Export Codebook**'. (Optional: Select which code folders you want to see.) Click '**Select**', make any necessary changes (e.g. the format of the codebook), then click '**OK**'.

EXERCISE 9: Creating a Codebook

- i. Under the **Share** tab > **New Formatted Report** (via the Wizard).
- ii. Select the option **From a view: Code**.
- iii. Expand the submenu under **Code**.
- iv. Choose **Name** and **Description** fields and move to right column.
- v. Continue clicking **Next**.
- vi. Name your report **Volunteering Codebook**.
- vii. **Finish**.


! All users: Don't worry if your query doesn't show any results – it could be that your case classification import hasn't worked. You can practise more in NVivo sample projects provided by QSR International: search for 'sample projects' in NVivo Help online (or click here for [Windows](#) and [Mac](#))

Demo: Matrix Query



The Matrix Query looks for content coded a pair of items and displays the results in a table.

Run a Matrix Query


- i. Go to **Explore > Matrix Coding Query**.
- ii. In the **Matrix Criteria** section > in **Rows** > click on the  > click **Select Items**.
- iii. In the **Select Project Items** window > highlight the folder **Case Classification** > click on **+sign** of **Age group** > tick all values from **20-29** to **60+**. (Do not tick **Unassigned & Not Applicable**.) > **OK**.

! All users: Don't worry if your query doesn't show any results – it could be that your case classification import hasn't worked. You can practise more in NVivo sample projects provided by QSR International: search for 'sample projects' in NVivo Help online (or click here for [Windows](#) and [Mac](#))

Demo: Matrix Query (cont'd)



Run a Matrix Query (cont'd)

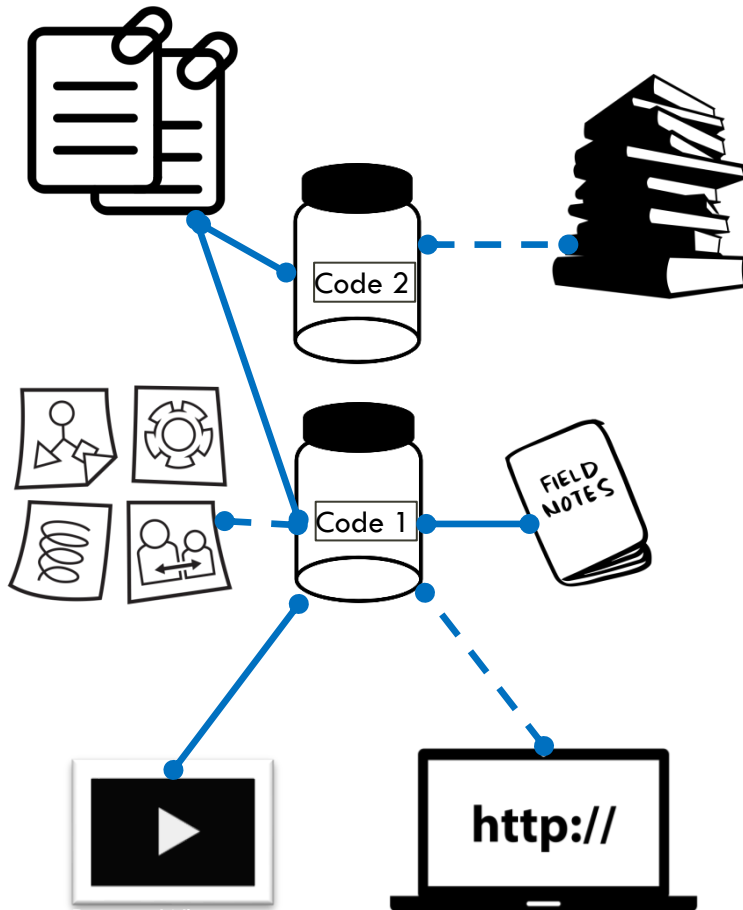
- i. In **Columns** > click on the  > click **Select Items**.
- ii. In the **Select Project Items** window > click on **Codes** on the left.
- iii. On the right, **tick all codes** > **OK**.
- iv. Click **Run**.

By default, the **matrix** displays the **number of coded references** for each pair of items.

Check out your Workbook for more details on NVivo's functionality 😊



THINKING AHEAD



NVivo can help you to:

- ⇒ Manage your data & literature (to keep track of and store)
- ⇒ Manage your ideas and keep a journal of the research process
- ⇒ Ask interesting questions of your data
 - ⇒ Visualise your data, concepts, relationships
- ⇒ Report from the data

Adapted from Bazeley and Jackson (2013: 3)

Learning objectives - Today you found out how to:

- Navigate your way round NVivo
- Import text data into NVivo
- Code text data
- Make notes about your data
- Retrieve coded data using 'queries'
- Float or stay above water...

WHAT NEXT?

Here are some other places **on YouTube** where you can go to find out more about NVivo, and the different functionalities. [The videos feature NVivo v12 but the principles are the same.] There are many introductory **mini-lectures** on key features of NVivo (qualitative data management software) – QSR International:

*Please note: these URLs are **case-sensitive***

- Analysis with NVivo 12 for Windows:
<https://bit.ly/3fBnWq7>
- Coding with NVivo 12 for Windows:
<https://bit.ly/3tZN5jC>
- Importing data with NVivo 12 for Windows:
<https://bit.ly/3u6rUfC>
- Tutorials for NVivo 12 for Mac:
<https://bit.ly/33Z6oPI>

[Click here to check out extra resources in the Workbook 😊](#)

*Please note: these URLs are **case-sensitive***

- QSR international have regular webinars and tutorials online: <https://bit.ly/3fy7JcI>
- University of Hull have developed online tutorials: <https://bit.ly/3f4ZzCj>
- QSR international have step-by-step instructions for NVivo's full functionality here (NVivo 1 for Windows Help System): <https://bit.ly/3nxBnMU>
- Download NVivo sample projects provided by QSR – search for 'sample projects' in NVivo Help online (or click here for [Windows](#) and [Mac](#))

[Click here to check out extra resources in the Workbook 😊](#)

If you know of any other helpful resources, please let us know

Thank you!

All the best with your research and
adventures with NVivo 😊





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courses@it.ox.ac.uk

