NVivo: Data Analysis and Professional Practice

IT LEARNING CENTRE, UNIVERSITY OF OXFORD, 6 JUNE 2019

CHARLOTTE ALBURY, SUSILA DAVIS, SUSAN DIVALD

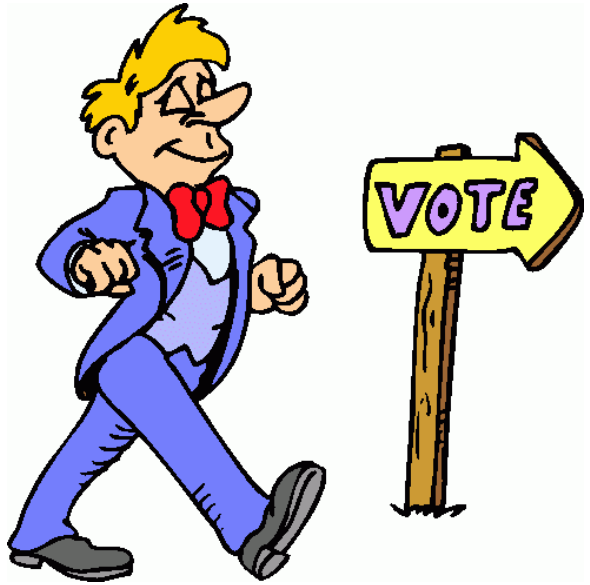
Aim

- The course will cover in practical terms ideas for different approaches that can be used to manage, structure and analyse qualitative data sets. You can work through and discuss your own data with the course convenors and rest of the class.

Outline of the day

- Designing a data repository, and how to structure and store different data sources in NVivo 12.
- Working backwards from presenting and writing up qualitative research.
- Producing a coding framework and case structure for a research study.
- Methods of analysis, including coding, assembling narratives and running queries while maintaining research integrity and rigour.
- Exploring qualitative data visualisation in NVivo and other software.
- Thinking about your thesis and NVivo

Group Survey and Introductions



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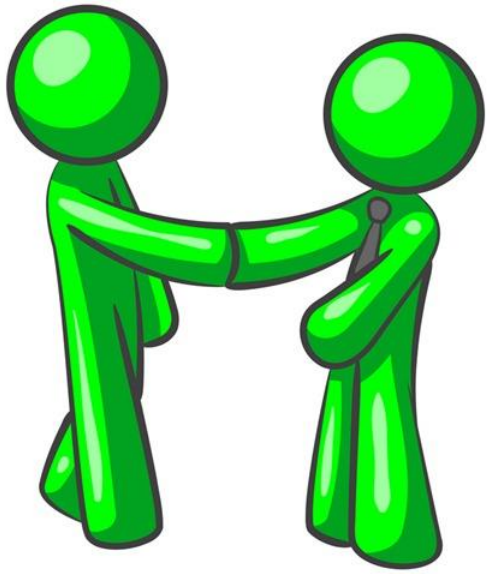

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Designing a data repository

SUSILA DAVIS (SUSIE)

Designing a data repository in NVivo/other software – what can I put in? (1)

- Text (handwritten, documents, webpages, blogs)
- Audio
- Video
- Images
- Social media (Twitter; FB posts – using NCapture)
- Documents from the field (e.g. plans, policy documents, brochures, publications, participant writings, etc.)

Designing a data repository in NVivo/other software – what can I put in? (2)

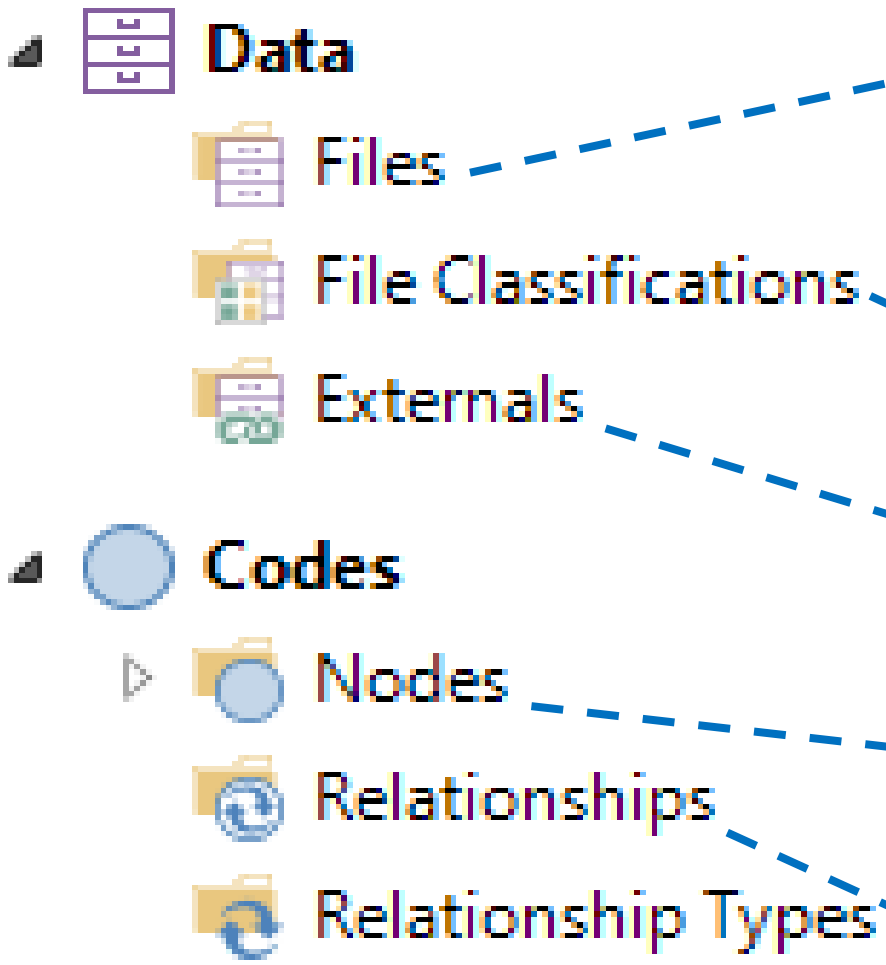
Consider **multimodality** *-- analyzing and describing the full repertoire of meaning-making resources that people use (visual, spoken, gestural, written, three-dimensional, and others, depending on the domain of representation) in different contexts, and on developing means that show how these are organized to make meaning.* (National Centre for Research Methods)

- How a particular 'mode' or set of modes has meaning; how have these meanings come about
- What are the affordances of using different types of media

Voice, colour, gesture, gaze, movement.

What mode is 'best' for what.

NVivo



Your data (1) (that you **can** edit) – documents, videos, images, transcripts, field notes, audio recordings etc.

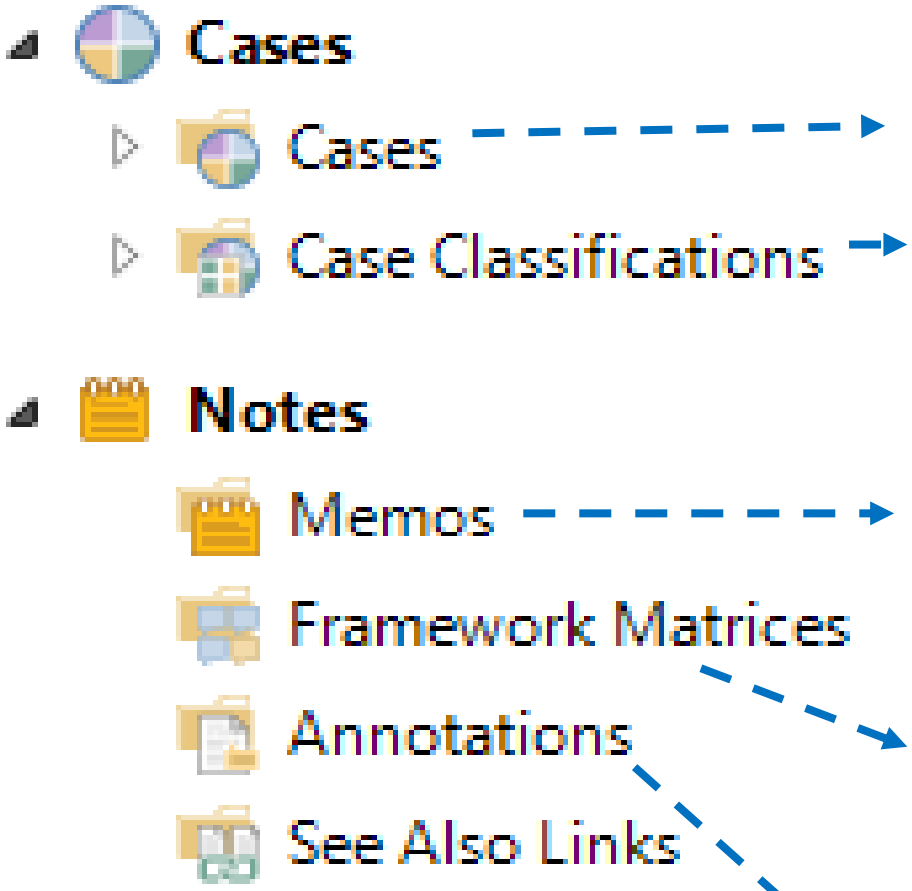
Labels (1) for your documents, literature, externals, books, websites type sources

Your data (2) (that you **can't** edit) – websites, books etc.

Containers (1) - Codes, themes, concepts, ideas, points to remember/discuss further – the how of your data.

How different concepts, people, containers etc. are **related to each other.**

NVivo



Containers (2) People, things, places – the <u>what and who</u> of your data.

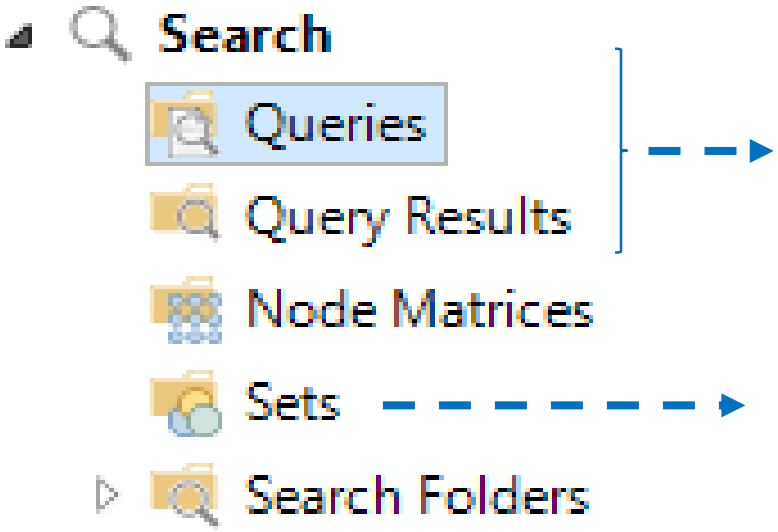
Labels (2) for your people/places/things containers

Your journal – notes on procedures, how you are defining your codes, analytic memos, written reflections…

Cross-tabulations – **rows** of research participants/your list of documents comparing **columns** of codes. [You have to fill in the cross-tab yourself with comparisons or use 'Autosummarise' – but be careful.]

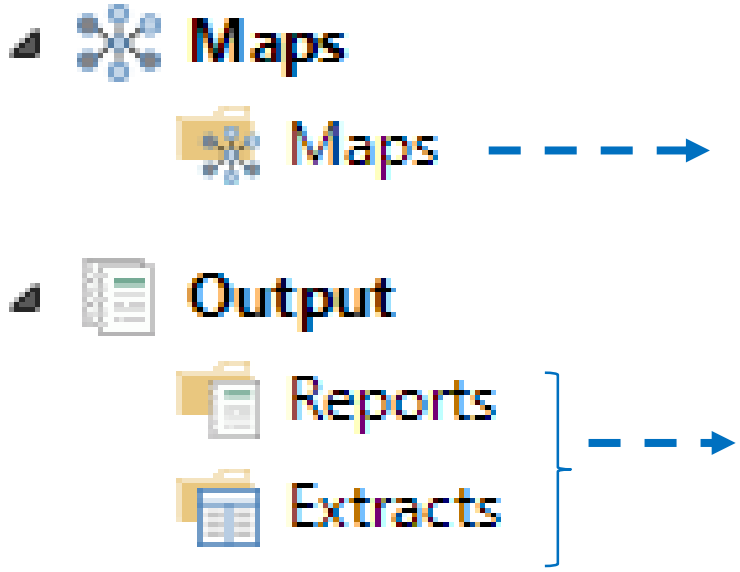
Your comments before your coding, or when you're not sure what to do but want to make a note.

Written connections between documents/pieces of text



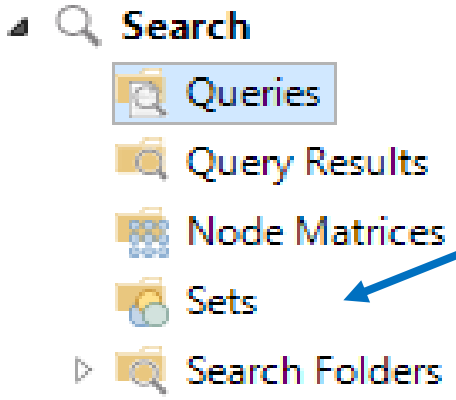
Do your codes make sense? Where do particular phrases/concepts occur in your data? How frequently do terms occur? How can you assemble your 'story'? What do you have so far? What connections can you make?

Shortcuts to search terms, interesting sections of your data, a bunch of nodes/cases/project items etc. that you want to remember in some way.



How are your data sources connected? How can you **visually summarise** your data repository; your codes; connections/relationships?

"Produce a codebook: a list of codes and descriptions.., what was I thinking when I..."



Sets—a set is a group of selected sources or nodes. For example, a group of video sources that you need to transcribe.

Sets [from NVivo 11 Help] – remember that unlike nodes, sets are not 'dynamic' and; sets group together whole 'project items' while nodes group pieces/portions of project items.

"You can use sets to organize project items into groups, or manage research tasks, e.g.:
To order and organize a set of pictures—put picture sources in a set and display them as thumbnails to make a 'photo gallery'.
To see stages, progress and changes in data construction, or to manage research timetables—for example, *Items created this week*, or *Nodes without coding*.
To direct and inform coding—for example, *Sources not yet coded* or *Nodes created since yesterday*.
To manage coding and auto coding—for example, *Nodes to discuss and re-describe*, or *Sources not yet auto coded*.
Group items around a theme or an area of analysis
Identify and compare the work of team members, a set for each team member could contain the interviews they conducted, memos they wrote and nodes they introduced
As the scope of a query—for example, you could make a set for related documents (stored in different folders) and run a Text Search query."

Classifications & Attributes
What are they and how might they be useful?

- **Defining characteristics, context and descriptions of the people / places / concepts / items / units of analysis in your study** so you can make comparisons later. Attributes and values in NVivo are akin to variables and values in quantitative research (Bazeley and Jackson, 2013: page 129); Figure 6.3 [Source: ibid. p130)

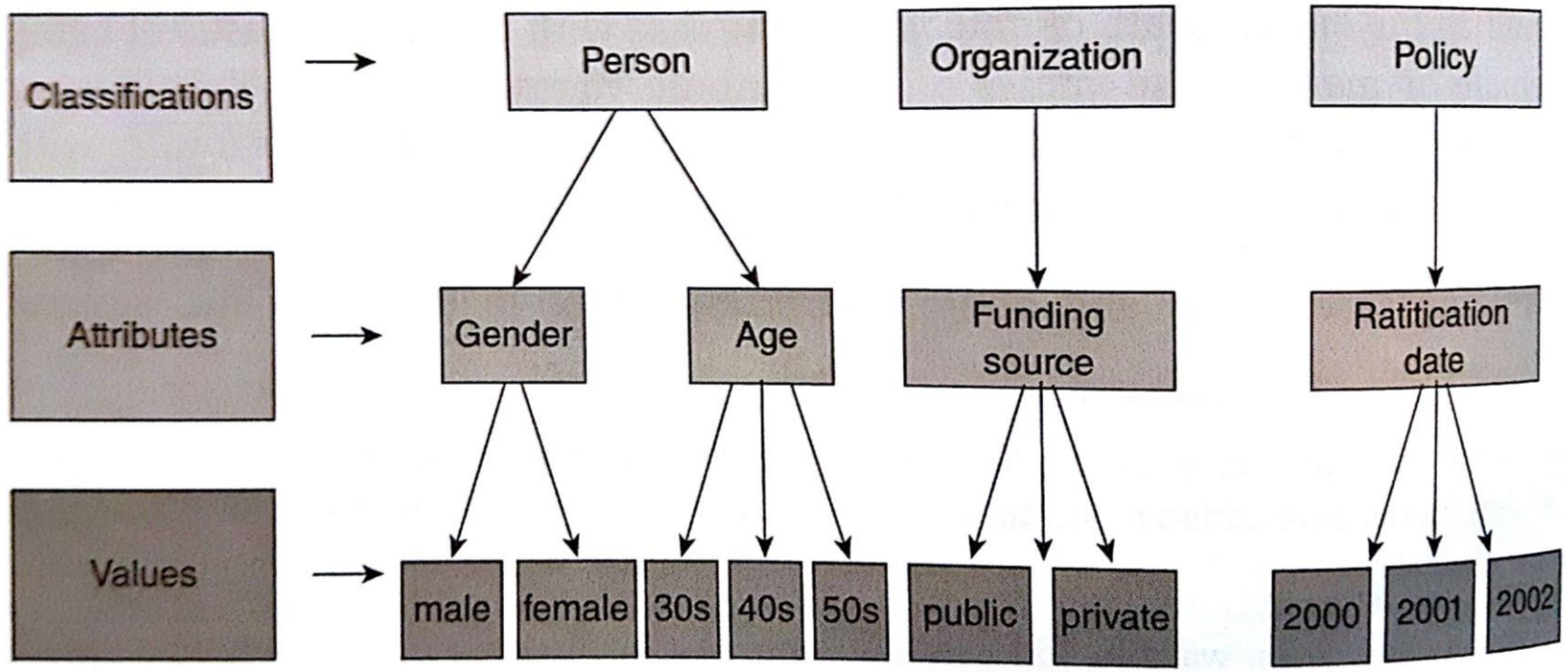


Figure 6.3 The structure of classifications, attributes and values

Where can my data go? (1)

Data needs	Places in NVivo
Making notes: in the field, your journal, or procedures you are following in NVivo	Memos, Maps, Files, Annotations
Coding: attaching key words or tags to segments of text to permit later retrieval	Nodes, Cases
Data management: keeping all your text and documents in an organised structure	EVERYTHING.. Files, Classifications, Cases, Memos et al…
Search and retrieval: locating relevant segments of text and making them available for inspection	Nodes, Search folders, Sets, Queries
Data "linking": connecting relevant data segments with each other, forming categories, clusters or networks of information	Annotations, Memo Links, See Also Links, Maps, Relationships, Sets, Nodes
Analytic memoing: writing reflective commentaries on some aspect of the data, as a basis for deeper analysis	Memos, Files, Annotations, Memo Links, See Also Links

Where can my data go? (2)

Data needs	Places in NVivo
Content analysis: counting frequencies, sequence or locations of words and phrases	Queries, Nodes, (Word tree in 'text search query')
Data display: placing selected data in a condensed, organised format, such as a table or matrix	Maps, Framework matrices, Node matrices
Conclusion drawing and verification: aiding the analyst to interpret displayed data and to test or confirm findings	Nodes, Queries, Memos, Annotations, Relationships
Theory building: developing systematic, conceptually coherent explanations of findings; testing hypotheses	Nodes, Queries, Memos, Annotations, Relationships, Maps, Framework matrices, Nodes matrices
Graphic mapping: creating diagrams that depict findings or theories	Maps, Framework matrices, Nodes matrices
Preparing interim and final reports.	Maps, Reports, Framework matrices, Node matrices, quotes from Files et al.

Qualitative data analysis: An expanded sourcebook 2nd ed. Miles and Huberman (1994); cited in Qualitative Data Analysis 3rd ed., Miles, Huberman and Saldaña (2014: 46)

Working backwards from presenting & writing up qualitative research

What do you want to achieve with NVivo/other QDAS?
What are your intended outputs?
What can you produce during this course?

- Literature review?
- Data collection/recording?
- Analysis -- what exactly? >> how will you get data back out again and in what form?
- Data display/representation?
- Data management?

"You can't display what you don't know." (Miles & Huberman, 1994)

Some steps to consider (1)

- **Anonymising data** – to avoid identification – can you change some details so people/places etc. are less identifiable?
- **Cleaning up data** – e.g. surveys so that values are standardised per column; interviews – adding headings into transcripts so that codes/nodes make more sense
- **OCR software**, look into: https://www.theguardian.com/technology/askjack/2014/dec/18/how-can-i-convert-my-handwritten-notes-into-word-documents; http://www.techsupportalert.com/best-free-ocr-software.htm

Some steps to consider (2)

- **Voice recognition software** (popular choice: Dragon) http://www.bbc.co.uk/accessibility/guides/factsheets/factsheet_VR_intro.pdf
- **Video transcription software**, maybe try: https://www.inqscribe.com/ ; http://otranscribe.com/
- **Capturing web data** – NCapture (PDF) http://help-ncapture.qsrinternational.com/desktop/topics/install_ncapture_for_chrome.htm
- **Scan images & printed materials using your phone** – CamScanner https://www.camscanner.com/

Some steps to consider (3)

Assembling your NVivo project

- **Import data sources** into NVivo. Check what you have imported is what you expect to find/compare with the original(s).
- Make **cases** for your study sites/people, create or import your **case classification sheet**
- Make initial **annotations** on a key source or other project items to help guide the coding process
- Do a **word frequency query and text search query** to see what nodes you might create
- Design your coding frame, apply **nodes** to your project for one/two data sources, step back and run a **coding query**, make a **project map** to check that you are getting the results or tables/charts you expect

Some steps to consider (4)

Assembling your NVivo project

- Make **'sets'** of data sources, nodes and other project items that fall into specific categories to organise your workflow
- Import literature (e.g. from **reference management software**) or articles (PDFs etc.) in a folder
- Import **external data sources** that you have visited (websites, books)
- Make sure to keep **regularly** 'zooming out' or stepping back from your data to reflect on what you've done, and to check you're not following a 'dead-end' with your coding framework/analysis approach overall.

Types of coding (after Boeije, 2010: 95)

- **Open coding:** "breaking down, examining, comparing, conceptualising and categorising data" (Strauss and Corbin, 2007: 61) > data fragmented into groups
  outputs: list of codes & memos
- **Axial coding:** making connections between categories (for example after open coding)
  outputs: categories are described & 'main' categories + 'subcategories' are created & memo file of ideas, definitions and verifiable assertions
- **Selective coding:** making connections between categories AND linking these to the literature > determining "core concepts" & relationships between them & verification > situating categories in the (theoretical) literature > moving towards answering your research questions

Narratives: Creswell (2007: 155 & 158)

- "Chronology of unfolding events, and turning points or epiphanies"
- Different approaches:
  > Searching for a "plot structure" (Yussen and Ozcan, 1997)
  "characters, setting, problem, actions, and resolution"
  > Three elements: "action (personal and social), continuity (past, present, and future), and situation (physical places or the storyteller's places)"
- Biographies, life histories, some kind of chronology of events

Creswell, J. (2007) *Qualitative Inquiry & Research Design: Choosing among five approaches.*

- Asking 'how' not 'why' (Becker, 1998: 58)

Becker, H. (1998) *Tricks of the Trade: How to Think about Your Research While You're Doing It*

Approaches to coding

SUSAN DIVALD

Approaches to Qualitative Analysis

Things to consider when deciding on an approach:

- Ontology – Epistemology – Methodology

There are several approaches to Qualitative Analysis, including:

- Content Analysis
- Discourse Analysis
- Thematic Analysis
- Grounded Theory, Narrative Analysis, Conversation Analysis, Others…

http://clipart-library.com/clipart/404749.htm

Preparing the ground…

http://clipart-library.com/clipart/95123.htm

Before you start coding, several important steps have to happen:

- ❑ Have a clear research question
- ❑ Clean and organise your data
- ❑ Think through how you want to organise your data in NVivo
  - Case classifications; Source classifications; Files/Externals; etc
- ❑ Develop a coding frame – and pilot it

Group Discussion: Your project and approach

Discuss with 1-2 people next to you:

- ❑ What is your research question?
- ❑ What is your data? How did you collect it?
- ❑ What approach to qualitative analysis are you using?
- ❑ What are some strengths/weaknesses of this approach?

What exactly is “coding”?

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- “Coding is the process of analysing qualitative text data by taking them apart to see what they yield before putting the data back together in a meaningful way” (Cresswell 2015 p. 156).
- “Coding should always be for a purpose. It is never an end in itself” (Richards 2015 p.105).
- It can be to: describe – to evaluate – to assign a value
- Do I code everything?
- The bigger the better? Do I need many codes?

Source: Elliot, Velda “Raising Questions about Coding Qualitative Data”, QualHub 17 May 2018, University of Oxford

What's in a coding frame? (1)

- Content analysis "stands or falls by its categories" Berelson (1952, p. 147)
- No right/wrong way, but it has to be appropriate to your research question and you need to justify it.
- Helpful resources found at end of the slides
- Requirements of a coding frame (Schreier 2012):
  - Unidimensionality
  - Mutual exclusiveness of sub-categories
  - Exhaustiveness
  - Saturation

http://clipart-library.com/clipart/1961508.htm

What's in a coding frame (2)

Building a coding frame

- Concept-driven (deductive) approach: Hypothesis testing
- Data-driven (inductive) approach: Description
- Hybrid

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Coding

- Create rules and definitions for inclusion in category/subcategory
- Know your unit of analysis – and unit of coding – and context units
- Piloting

Post Piloting: Achieving Reliability and Validity

What is *Reliability*? – to be free from error

- Consistency across people
- Consistency across time

What is *Validity*? – to capture what you intend to capture

- Face validity
- Content validity

How do I achieve this in coding?

- Never Yes/No but to a certain degree
- Be transparent and honest with shortcomings

Source: Schreier 2012 Chapter 9

Tips for coding

- Context and evaluative categories
- "Quotes"; "other"; "miscellaneous" categories
- If in doubt, code it, you can always discard later

http://clipart-library.com/clipart/432809.htm

Example – Frazer (2000)

Frazer, L. (2000). "'Probably the most public occasion the world has ever known': 'Public' and 'private' in press coverage of the death and funeral of Diana, Princess of Wales," *Journal of Political Ideologies,* 5(2), pp. 201-223.

Question: What are the distinctions between public and private life that were drawn by the London press during the death and funeral of Princess Diana?

Data Sources: Broadsheet print journalism – *Financial Times, Guardian, Independent, Mirror*

Dates: 31 August 1997 – 8 September 1997

Frazer (2000) con'd

"During the process of selection and transcription an initial coding scheme was devised which separated out 'discourse genre' (reportage, opinion, editorial leader, letters to the editor) from 'topic'. At this point and during the initial coding exercise five main topics and a number of sub-topics were identified: monarchy, its role, possible reform, the Royal Family, and Diana's relation to it; the media, regulation, culpability, Diana's relation to it, and her death as itself a media event; politics, including party politics, the constitution , and Diana's political legacy; grief, including the grief of the Royal Family and the grief of the public; and biography or profiles of Diana. An initial coding of the text, using these codes, was then conducted.

In the next stage I conducted text searches on the terms 'public' and 'private'. Nud-ist searches the imported text and finds text units that include specified word strings. Careful reading of the resulting print-outs then formed the basis for a second interpretative coding exercise. In this exercise I identified various meanings of 'public' and 'private' and their cognates. For instance, sometimes private means 'invisible', sometimes it means 'owned by one person or body'. I also found a range of categories for which 'public' and 'private' were modifiers, for instance 'occasions', 'places', 'appearances', etc. During this exercise the coding scheme was also modified and revised in various ways (for instance, the category 'public good' was disaggregated into three categories: 'public good', 'public interest' and 'public service').

Table III sets out the resulting final complex coding scheme.

After this, I was able to explore in more detail some of the textual relationships between these categories. For example, the relationship between 'genre' and the content of discussion of 'public' and 'private' was explored, using Nud-ist's facility for searches for units of text which are coded with particular combinations of codes. Just as there was no notable difference, discernible anyway by my analytic techniques, between the approaches to these topics as between titles, so these various genres generated a remarkably uniform (although that is not to say consistent) discourse of 'public and private'." (pp.220-221).

Frazer (2000) con'd

Table III *Coding scheme resulting from text analysis*

(1)				/genre
(1	1)			/genre/reportage
(1	2)			/genre/opinion
(1	3)			/genre/editorial leader
(1	4)			/genre/letters to editor
(2)				/topic
(2	1)			/topic/monarchy
(2	1	1)		/topic/monarchy/monarchy role
(2	1	1	1)	/topic/monarchy/monarchy role/reform
(2	1	1	2)	/topic/monarchy/monarchy role/emotional display
(2	1	2)		/topic/monarchy/Diana's relation to
(2	1	3)		/topic/monarchy/royal family
(2	2)			/topic/media
(2	2	1)		/topic/media/regulation
(2	2	2)		/topic/media/culpability
(2	2	2	1)	/topic/media/culpability/media pries
(2	2	2	2)	/topic/media/culpability/media distorts
(2	2	2	3)	/topic/media/culpability/seek profit only
(2	2	3)		/topic/media/media event
(2	2	4)		/topic/media/Diana's relation to
(2	2	5)		/topic/media/relations with monarchy
(2	3)			/topic/politics
(2	3	1)		/topic/politics/party politics
(2	3	2)		/topic/politics/constitution
(2	3	3)		/topic/politics/her political legacy
(2	3	3	1)	/topic/politics/her political legacy/populism
(2	3	3	2)	/topic/politics/her political legacy/sexual
(2	3	3	3)	/topic/politics/her political legacy/campaigns
(2	3	13)		/topic/politics/political
(2	4)			/topic/grief
(2	4	1)		/topic/grief/royal
(2	4	2)		/topic/grief/public
(2	4	3)		/topic/grief/funeral
(2	5)			/topic/profile
(2	6)			/topic/the crash
(2	7)			/topic/private
(2	7	1)		/topic/private/the private broadcast
(2	7	2)		/topic/private/grief, thoughts, etc.
(2	7	3)		/topic/private/prayer
(2	7	4)		/topic/private/funeral, etc.
(2	7	5)		/topic/private/buildings, flags
(2	7	6)		/topic/private/occasions
(2	7	7)		/topic/private/places
(2	7	8)		/topic/private/person, person within
(2	7	9)		/topic/private/property
(2	7	10)		/topic/private/business
(2	7	11)		/topic/private/privacy, private life
(2	7	12)		/topic/private/privacy law, right
(2	8)			/topic/public
(2	8	1)		/topic/public/property
(2	8	2)		/topic/public/places
(2	8	3)		/topic/public/occasions

P222; second half on p223 (not included here)

Group Discussion: Coding

http://clipart-library.com/clipart/327413.htm

Discuss with 1-2 people next to you:

- How did you arrive at your coding frame? (inductive/deductive/hybrid)
- How is your coding frame linked to your research question?
- How are you ensuring reliability and validity?
- What challenges did you have coding your data? Any lessons learned?

Working on your coding frame

Exercise:

- ❑ Create a coding frame in NVivo
- ❑ Import the relevant sources
- ❑ Start to code!
- ❑ Create a memo of what you did and export it

Case Study

CHARLOTTE ALBURY

Project Background

Data

-audio recordings of consultations

-verbatim transcripts

-specialised transcripts

-patient outcome data

Outcomes:

-Analyse audio recorded data

-Find most effective consultation strategies

-Map the consultation

Excerpt 1:

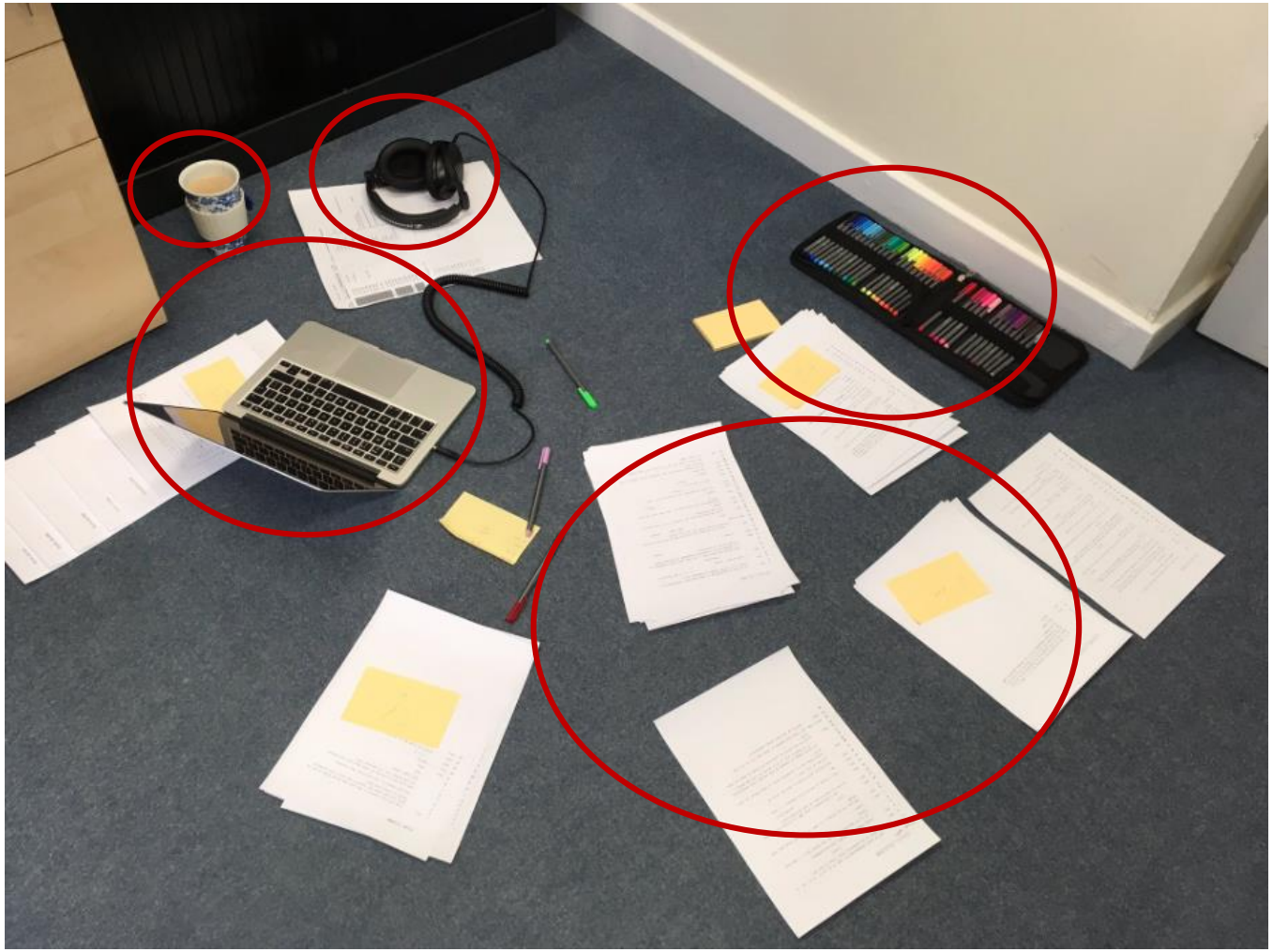
DOC: We know that the best wa:y of- for you to lose weight is to go on a >commercial< weight management service like say weight watche:rs or .hh e:m s- slimming world >ok<,
I can refer you for free: if you would like ↓to.

PAT: yeah.

Excerpt 2:

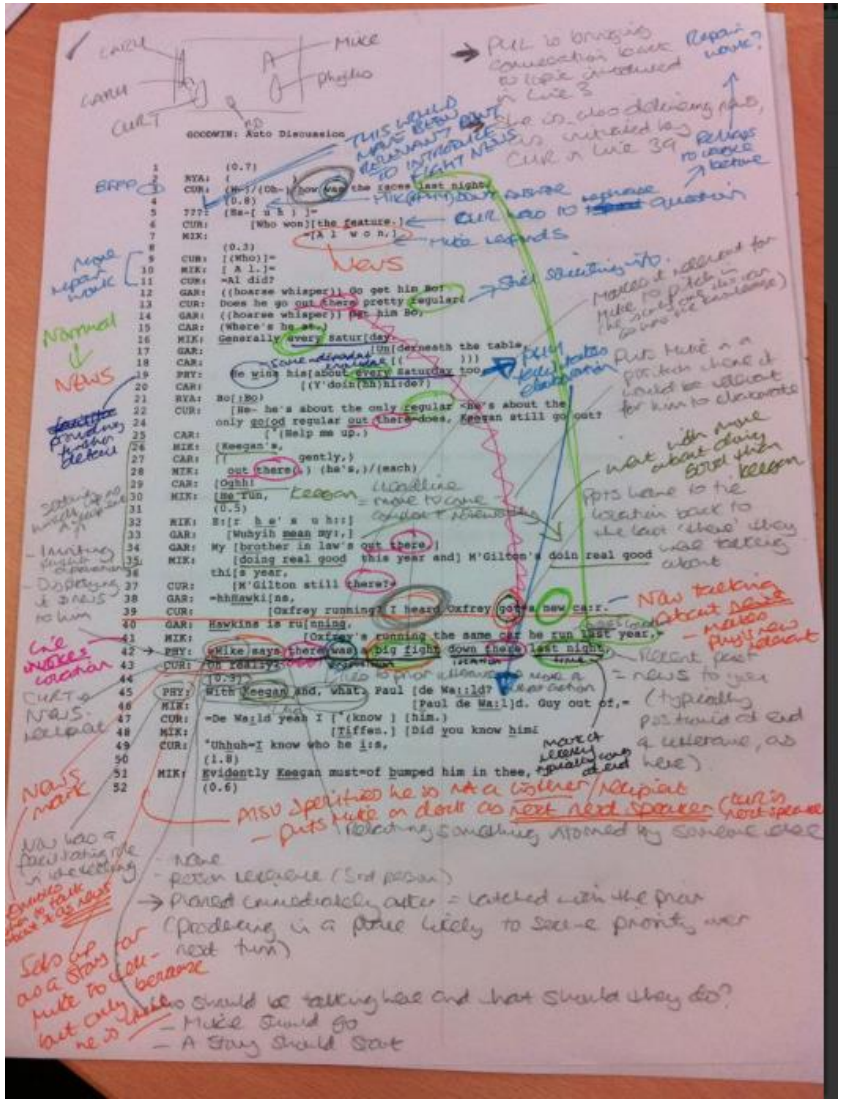
DOC: =of this (.) research group is that w- we are (.) er randomising some people (0.6) into that kind of
category so we can offe:r (0.6) certain people (0.8) fre:e (0.4) um (0.4) membership to (.) >slimming world and weight watchers< and you have bee:n ↑categorised in
that (.) category .
↓if that's something tha:t you're interested in.

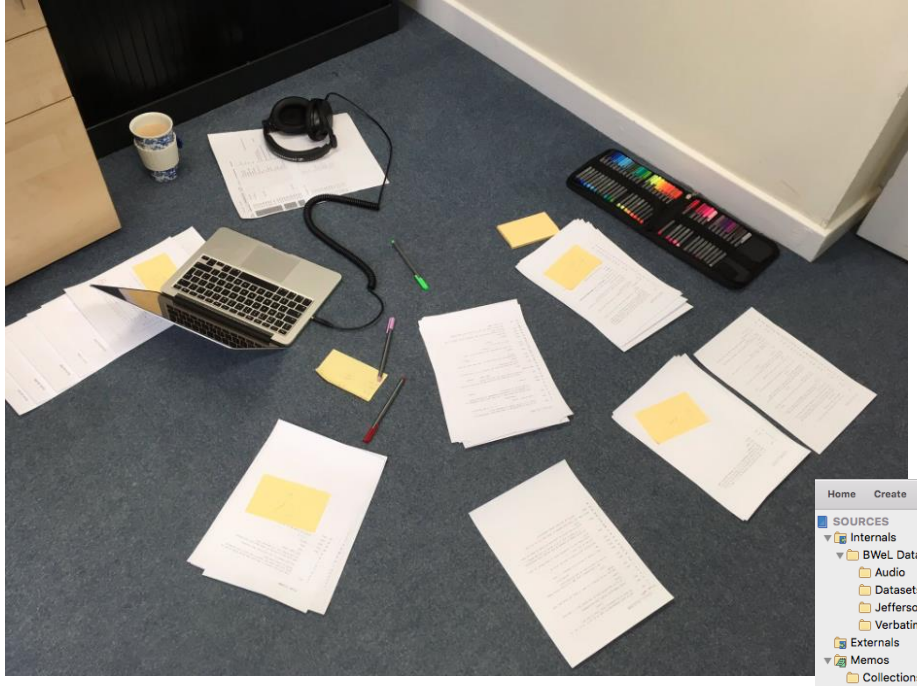
PAT: yeah;

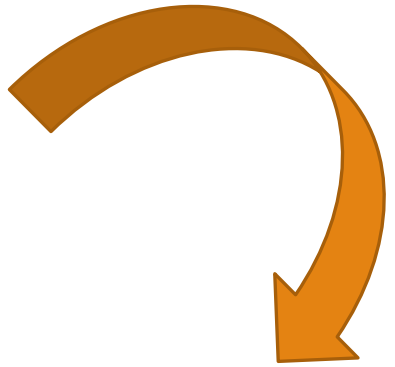


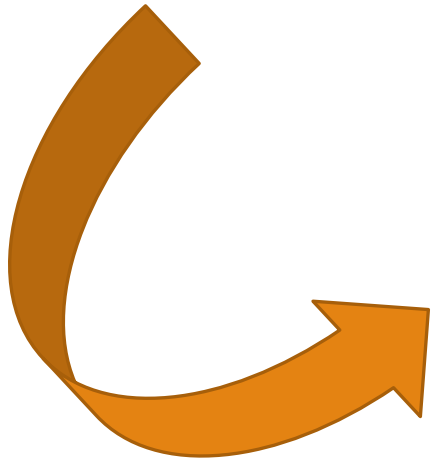
Managing Data

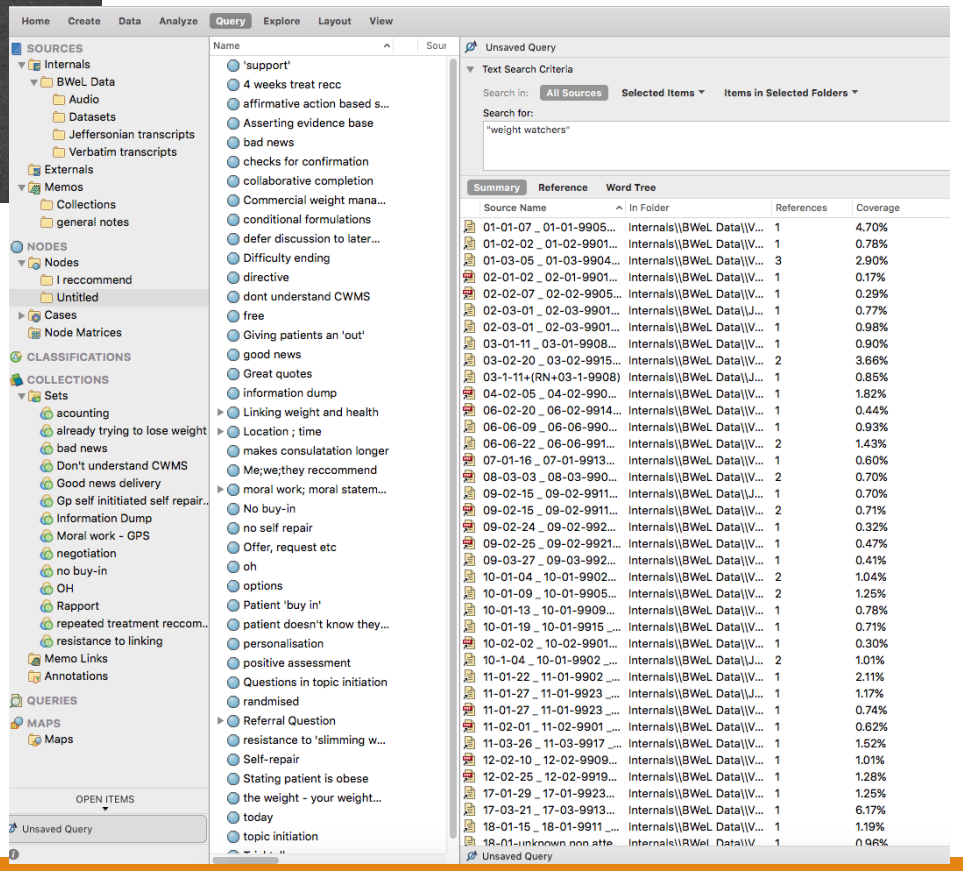
- Not searchable
- Difficult to fit analysis, notes, comments and how it relates to other data on one page
- Can't compare with statistical data
- Over 300 consultations
- Not very secure










Home
Create
Data
Analyze
Query
Explore
Layout
View
SOURCES
Internals
BWeL Data
Audio
Datasets
Jeffersonian transcripts
Verbatim transcripts
Externals
Memos
Collections
general notes
NODES
Nodes
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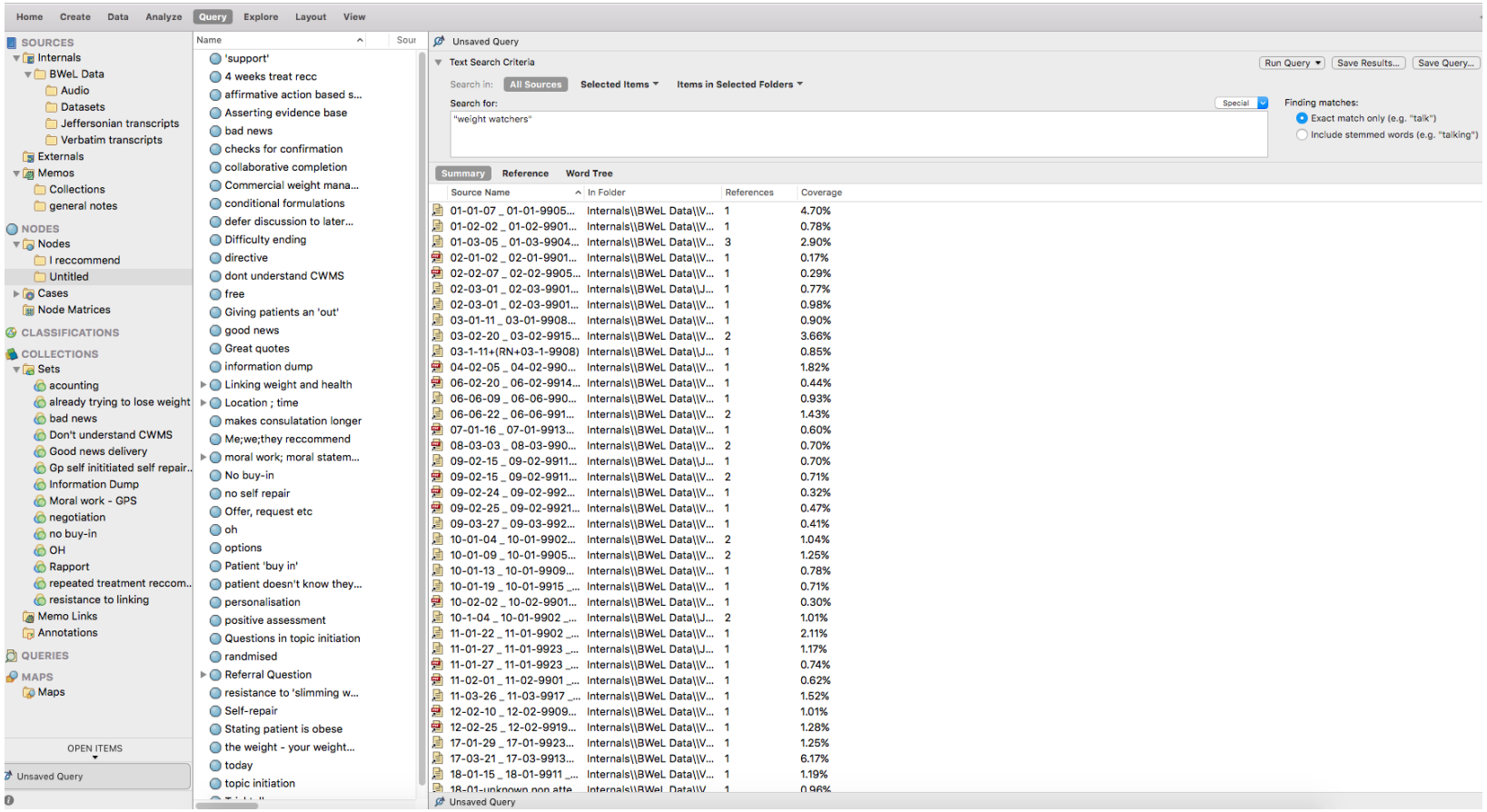
Untitled
Cases
Node Matrices
CLASSIFICATIONS
COLLECTIONS
Sets
acounting
already trying to lose weight
bad news
Don't understand CWMS
Good news delivery
Gp self inititiated self repair..
Information Dump
Moral work - GPS
negotiation
no buy-in
OH
Rapport
repeated treatment reccom..
resistance to linking
Memo Links
Annotations
QUERIES
MAPS
Maps
OPEN ITEMS
Unsaved Query
Name
'support'
4 weeks treat recc
affirmative action based s...
Asserting evidence base
bad news
checks for confirmation
collaborative completion
Commercial weight mana...
conditional formulations
defer discussion to later...
Difficulty ending
directive
dont understand CWMS
free
Giving patients an 'out'
good news
Great quotes
information dump
Linking weight and health
Location ; time
makes consulatation longer
Me;we;they reccommend
moral work; moral statem...
No buy-in
no self repair
Offer, request etc
oh
options
Patient 'buy in'
patient doesn't know they...
personalisation
positive assessment
Questions in topic initiation
randmised
Referral Question
resistance to 'slimming w...
Self-repair
Stating patient is obese
the weight - your weight...
today
topic initiation
Unsaved Query
Text Search Criteria
Search in:
All Sources
Selected Items
Items in Selected Folders
Search for:
"weight watchers"
Summary
Reference
Word Tree
Source Name
In Folder
References
Coverage
01-01-07 _ 01-01-9905... Internals\\BWeL Data\\V... 1 4.70%
01-02-02 _ 01-02-9901... Internals\\BWeL Data\\V... 1 0.78%
01-03-05 _ 01-03-9904... Internals\\BWeL Data\\V... 3 2.90%
02-01-02 _ 02-01-9901... Internals\\BWeL Data\\V... 1 0.17%
02-02-07 _ 02-02-9905... Internals\\BWeL Data\\V... 1 0.29%
02-03-01 _ 02-03-9901... Internals\\BWeL Data\\J... 1 0.77%
02-03-01 _ 02-03-9901... Internals\\BWeL Data\\V... 1 0.98%
03-01-11 _ 03-01-9908... Internals\\BWeL Data\\V... 1 0.90%
03-02-20 _ 03-02-9915... Internals\\BWeL Data\\V... 2 3.66%
03-1-11+(RN+03-1-9908) Internals\\BWeL Data\\J... 1 0.85%
04-02-05 _ 04-02-990... Internals\\BWeL Data\\V... 1 1.82%
06-02-20 _ 06-02-9914... Internals\\BWeL Data\\V... 1 0.44%
06-06-09 _ 06-06-990... Internals\\BWeL Data\\V... 1 0.93%
06-06-22 _ 06-06-991... Internals\\BWeL Data\\V... 2 1.43%
07-01-16 _ 07-01-9913... Internals\\BWeL Data\\V... 1 0.60%
08-03-03 _ 08-03-990... Internals\\BWeL Data\\V... 2 0.70%
09-02-15 _ 09-02-9911... Internals\\BWeL Data\\J... 1 0.70%
09-02-15 _ 09-02-9911... Internals\\BWeL Data\\V... 2 0.71%
09-02-24 _ 09-02-992... Internals\\BWeL Data\\V... 1 0.32%
09-02-25 _ 09-02-9921... Internals\\BWeL Data\\V... 1 0.47%
09-03-27 _ 09-03-992... Internals\\BWeL Data\\V... 1 0.41%
10-01-04 _ 10-01-9902... Internals\\BWeL Data\\V... 2 1.04%
10-01-09 _ 10-01-9905... Internals\\BWeL Data\\V... 2 1.25%
10-01-13 _ 10-01-9909... Internals\\BWeL Data\\V... 1 0.78%
10-01-19 _ 10-01-9915 _... Internals\\BWeL Data\\V... 1 0.71%
10-02-02 _ 10-02-9901... Internals\\BWeL Data\\V... 1 0.30%
10-1-04 _ 10-01-9902 _... Internals\\BWeL Data\\J... 2 1.01%
11-01-22 _ 11-01-9902 _... Internals\\BWeL Data\\V... 1 2.11%
11-01-27 _ 11-01-9923 _... Internals\\BWeL Data\\J... 1 1.17%
11-01-27 _ 11-01-9923 _... Internals\\BWeL Data\\V... 1 0.74%
11-02-01 _ 11-02-9901 _... Internals\\BWeL Data\\V... 1 0.62%
11-03-26 _ 11-03-9917 _... Internals\\BWeL Data\\V... 1 1.52%
12-02-10 _ 12-02-9909... Internals\\BWeL Data\\V... 1 1.01%
12-02-25 _ 12-02-9919... Internals\\BWeL Data\\V... 1 1.28%
17-01-29 _ 17-01-9923... Internals\\BWeL Data\\V... 1 1.25%
17-03-21 _ 17-03-9913... Internals\\BWeL Data\\V... 1 6.17%
18-01-15 _ 18-01-9911 _... Internals\\BWeL Data\\V... 1 1.19%
Unsaved Query

Start

•End



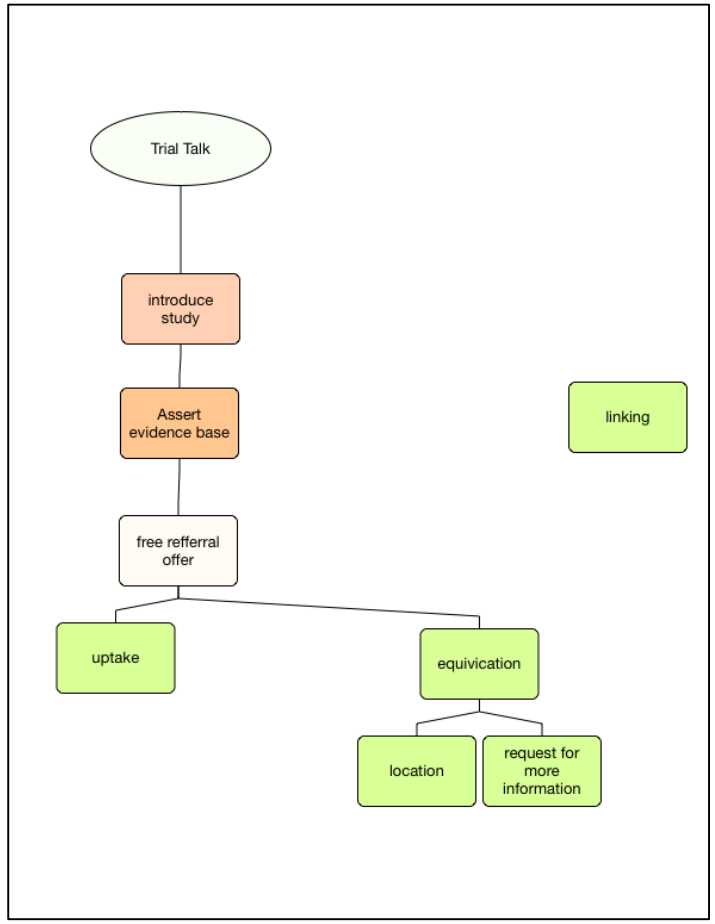
Code & Retrieve, Searches, Organisation, Links to other data

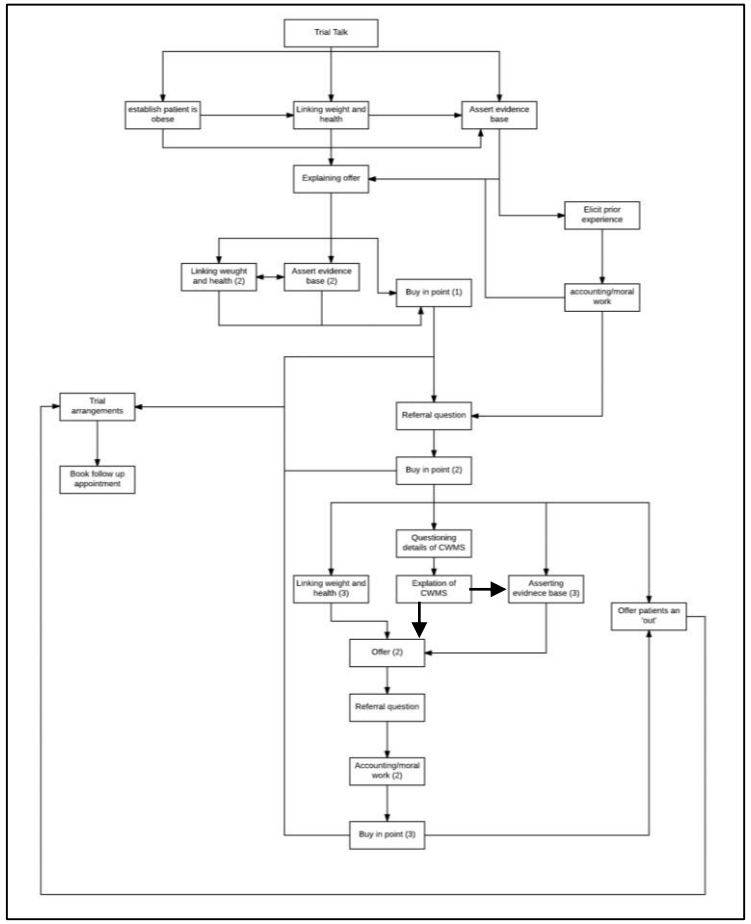
Strengths

Data Security

Strengths

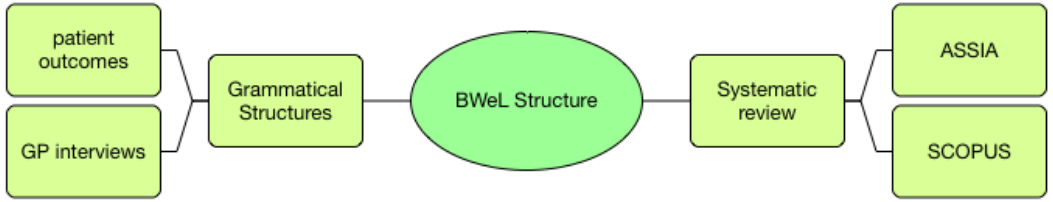
- Can be password protected
- Edit transcripts to insert pseudonyms
- Doesn't need the cloud to store data
- Doesn't need the internet so can use in the field

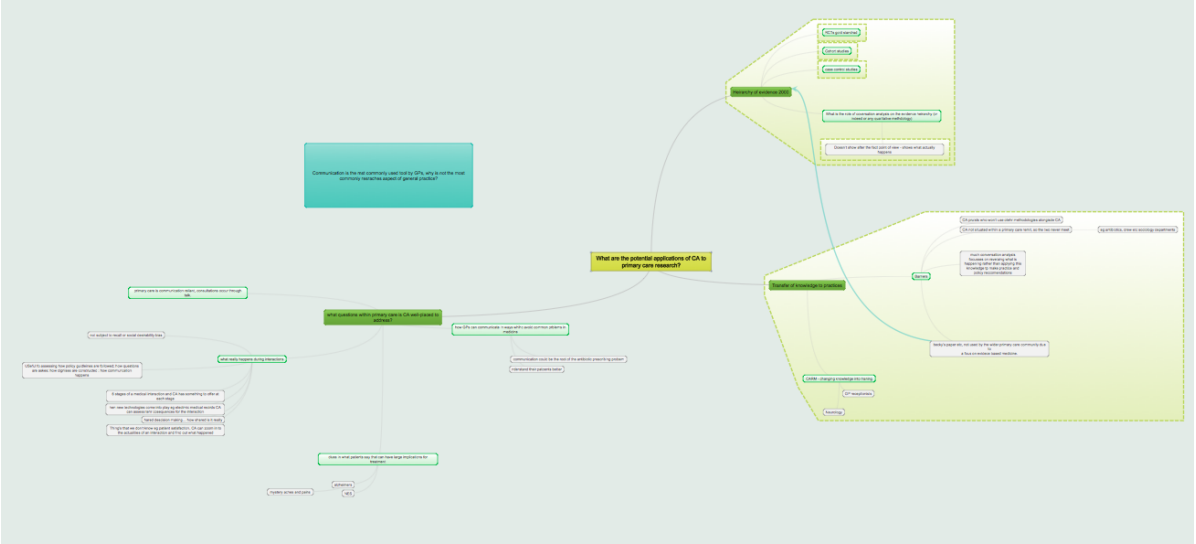




Complex Visualisations

Weakness





Concept Mapping

Weakness

NVivo – Strengths and Limitations

Benefits:

- Run queries to quickly find key terms I'm looking for (verbatim for searches, make all into cases)
- Organizes data for fast retrieval
- Use 'cases' to link outcome data and transcripts
- Links key terms with key references or my to my notes through memo links

Limitations

- Can't handle large audio files
- More specialized tools needed for complex visualization

Let’s talk about weight: a step-by-step guide to conversations about weight management with children and families for health and care professionals

Ref: PHE publications gateway number 2017402
PDF, 314KB, 14 pages

This file may not be suitable for users of assistive technology. Request an accessible format.

Let’s talk about weight: infographic

Ref: PHE publications gateway number 2017402
PDF, 362KB, 1 page

This file may not be suitable for users of assistive technology. Request an accessible format.

Public Health England

BJGP

The British Journal of General Practice

Coding Frameworks: Being Flexible

CHARLOTTE ALBURY

Keeping track of your decisions

- Keep a code book showing your codes and definitions
- There are a number of ways NVivo supports you to keep and mange code books
- Why is keeping a code book a good idea?

Making a codebook

To add definitions to your nodes, open them in ‘List View’:

- Right-click on the node → Choose Node Properties → Add definition to the ‘Description’ box

To create the codebook:

1. Under the Explore tab → New report: via Wizard
2. Select the option From a View: Node → Next
3. Expand the submenu under Node
4. Choose Name and Description fields and move to right column
5. Continue without changing anything else
6. Name your report: Codebook
7. Click Finish

Scenario

You are doing 50 interviews.

You have completed 20.

You have built a coding framework and are happy that it reflect the data you have collected.

When doing interview 21 you release new themes and topics are emerging that also could mean you need to re-classify your codes.

What could you do?

Merging nodes

Right-click on the node to be merged → Select: Cut

Right-click on node you would like the previous one to be merged with → Select: Merge into selected node

Click OK

You can also Copy a node and merge with another node, without losing the original node.

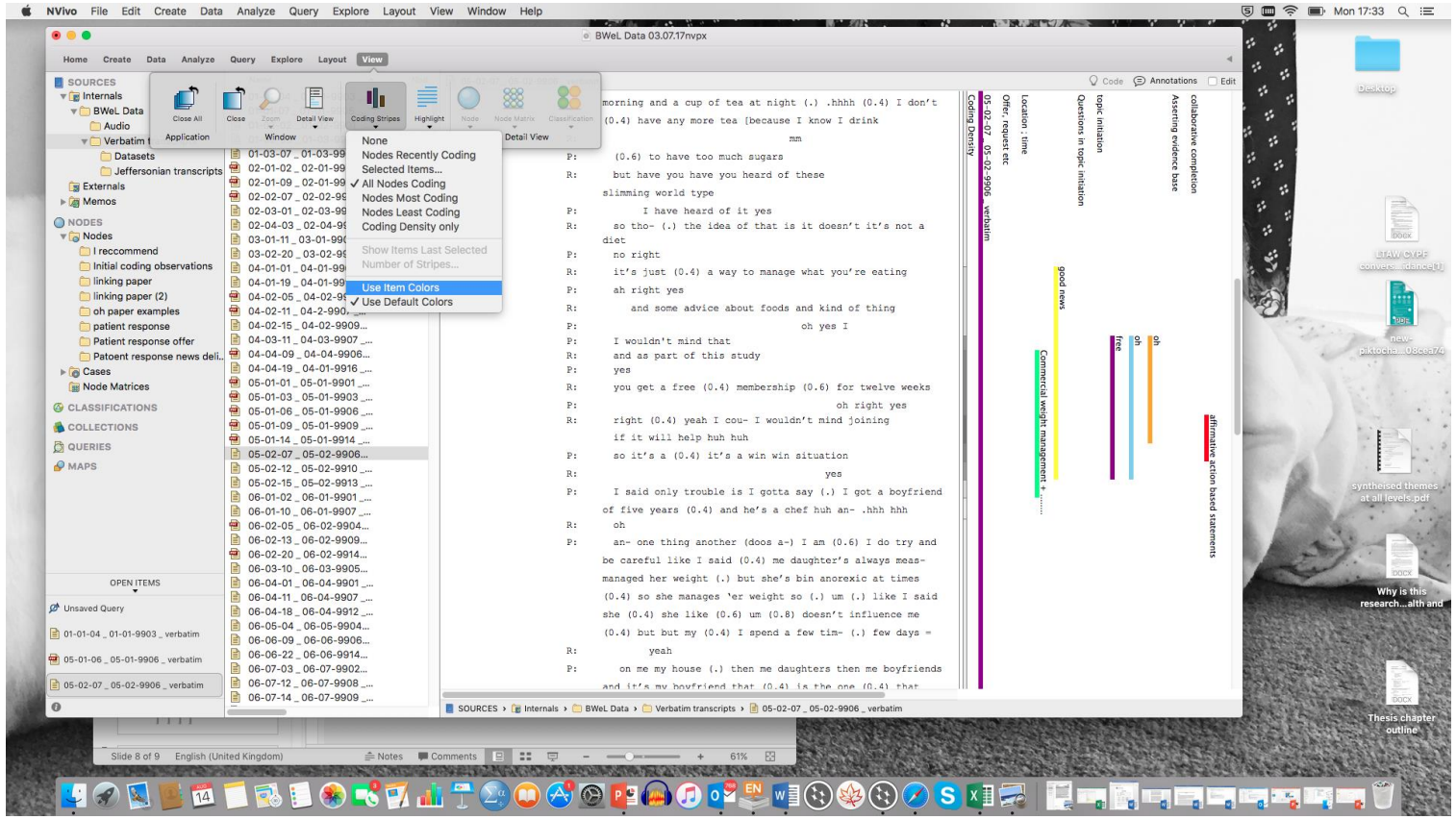
Activity: Aggregating nodes

1. Find the ‘aggregate coding from child nodes’ function.
2. What does it do?
3. How could this be useful during analysis?
4. Are there any drawbacks?

Visualising Data

CHARLOTTE ALBURY

Coding stripes



Coding stripes

Visualise your nodes using coding stripes:

View → Coding stripes → Select the nodes you would like to visualise OR All nodes coding

Using colour

Visually distinguish nodes.

Identify items assigned to different users

Keep track of significant nodes by giving them a color

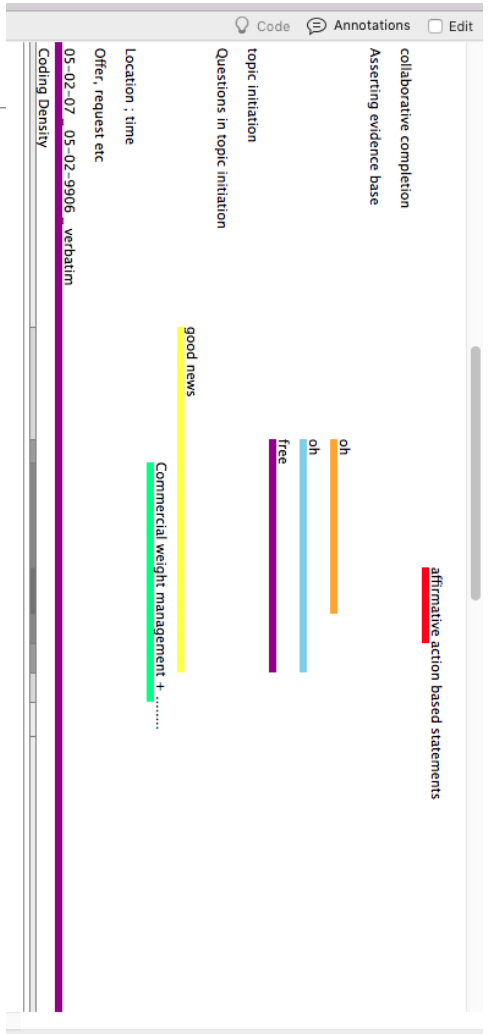
Add emphasis to particular sources or nodes

Differentiate sources or nodes by attribute values in charts

Make it easier to see patterns or to compare charts created at different times.

Indicate progress

Emerging vs existing themes



Assigning colour

1. Assign color to a source

2. In **List View**, select the **source**

3. On the **Home** tab, in the **Item** group, click the arrow below **Properties**, and then click **Color**

Viewing colour schemes

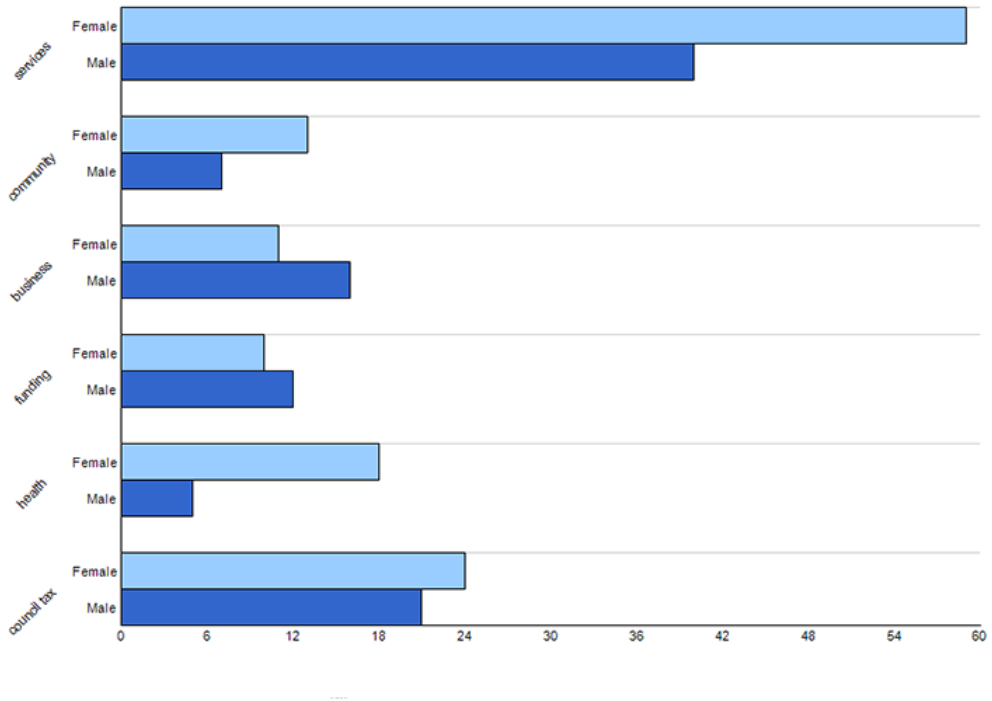
When you display coding stripes or work with charts, NVivo uses the **default color scheme—**this may be automatic or item colors (show user assigned colors)

To change the color scheme for the item currently displayed in Detail View:

1. On the **View** tab, in the **Visualization** group, click **Color Scheme**, and then select **Automatic** or **Item Colors**

2. On the **View** tab, in the **Coding** group, click **Coding Stripes**

Charts



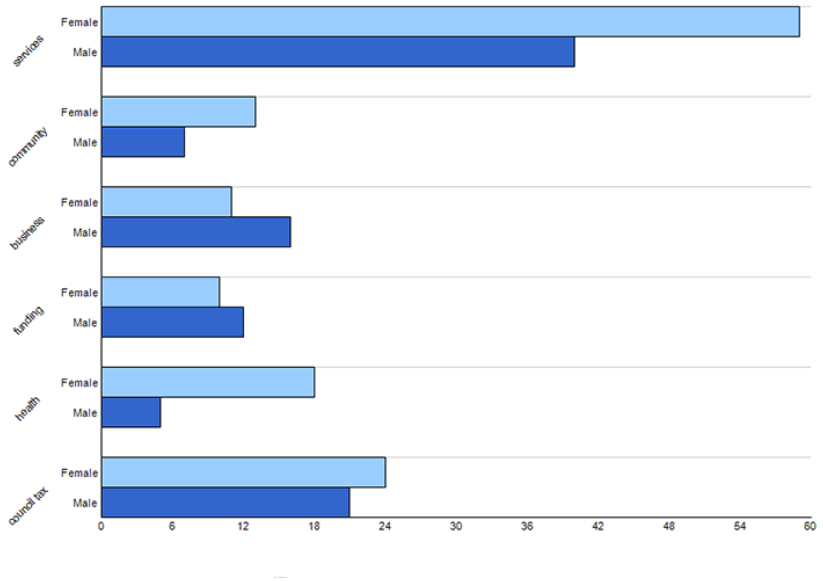
Visual representation of your data

Choose from multiple chart types and options to **see the spread of themes, participants and data sources**.

Discover key emerging themes across all of your data, or from single sources.

Track your analysis as you progress, and **export findings** to share conclusions.

Charts

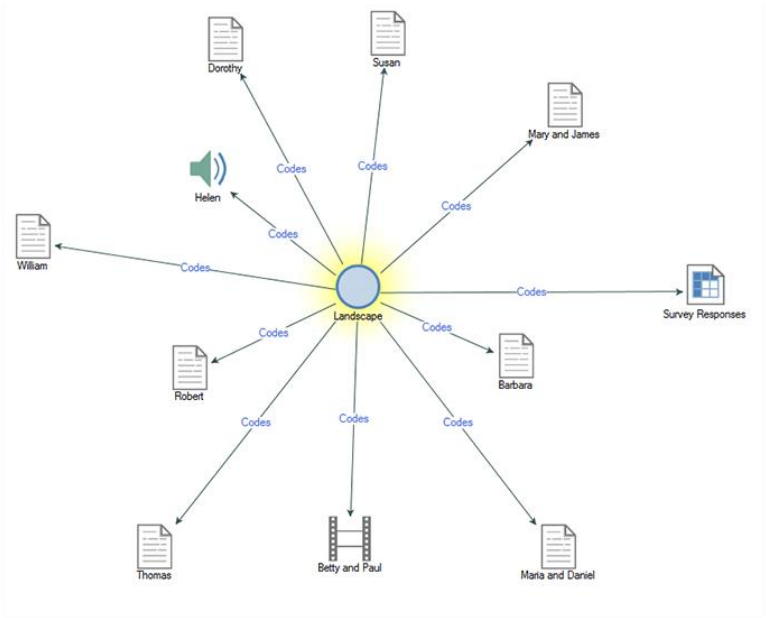


1.On the Explore tab, in the Charts group, click the Chart image.

2.Follow the steps in the Wizard, and then click Finish.

3. You can use the options on the **Chart** tab to change the appearance of your chart

Explore Diagrams

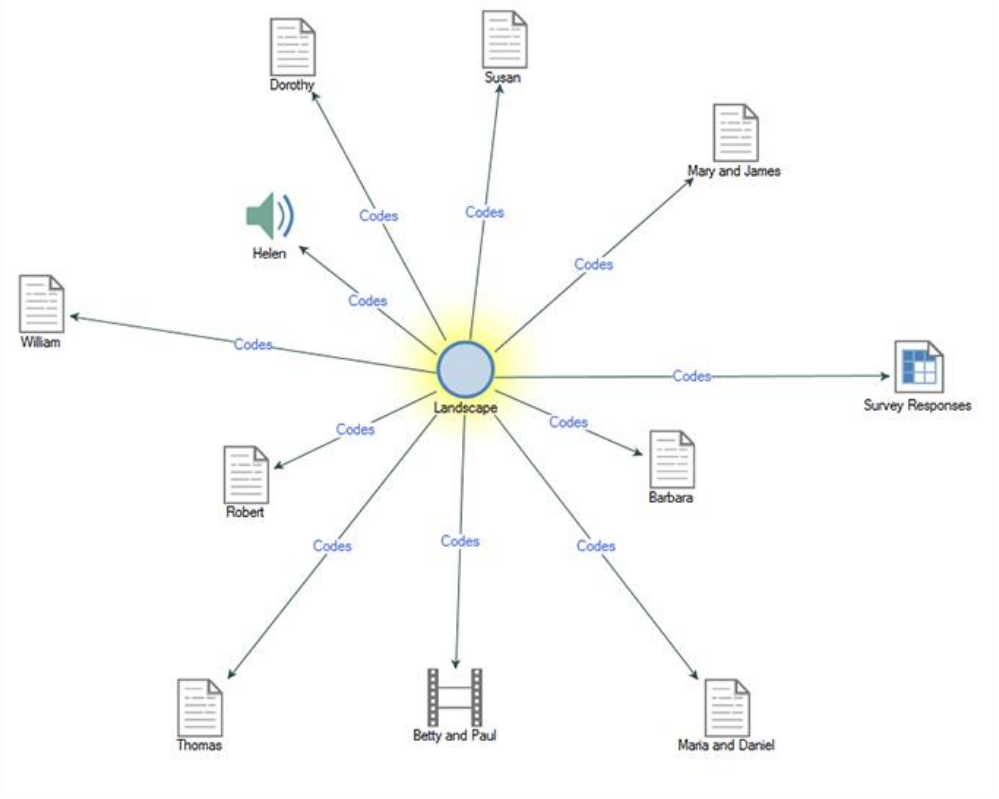


Explore the connections between your project items visually.

See how project items relate to a central item and navigate through the connections to go deeper.

Quickly and easily discover and share the connections that are forming in your data as you're moving through your analysis.

Explore Diagrams

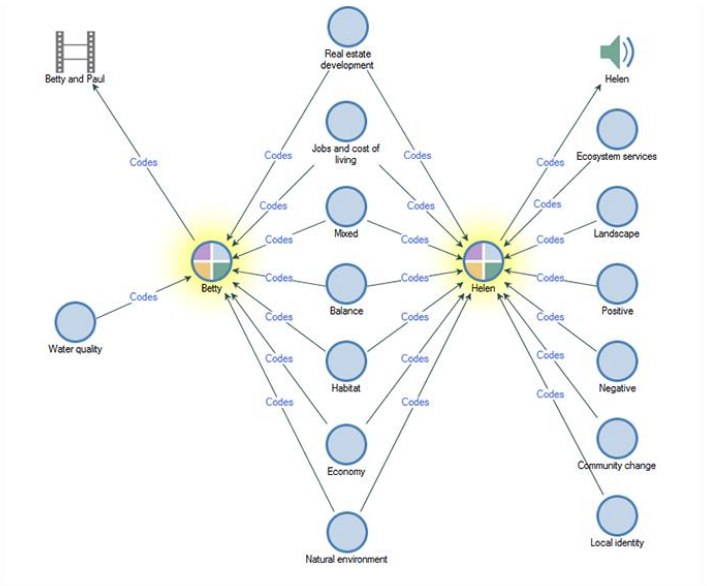


1.In List View, select the source, node or case you want to explore.

2.On the **Explore** tab, in the **Diagrams** group, click **Explore Diagram**.

3.On the **Explore diagram** tab, in the **Display** group, select or clear the check box for the items you want to show or hide.

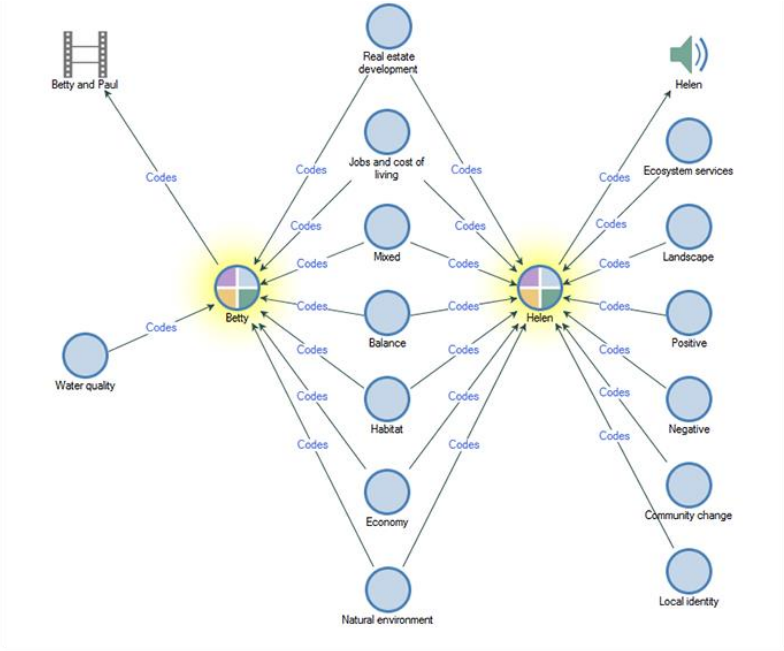
Comparison Diagrams



Visualize the similarities and differences between project items

Visually compare two sources, nodes or cases to quickly see what they share in common and what is different.

Comparison Diagrams



1.On the Explore tab, in the Diagrams group, click Comparison Diagram.

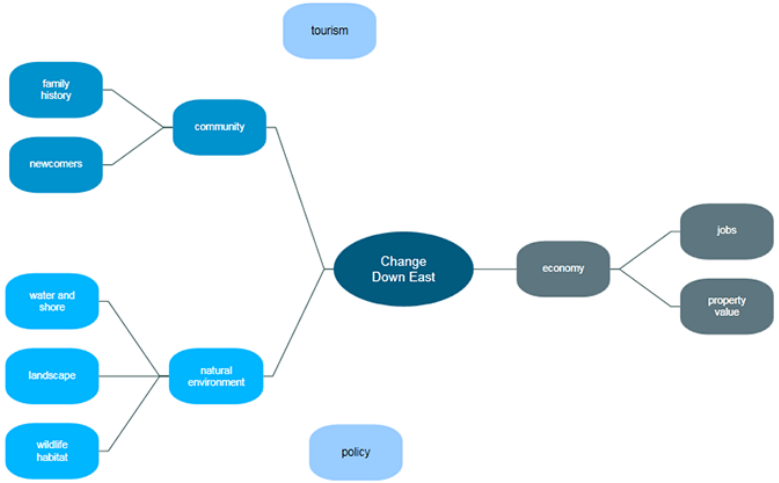
2.Select an option to Compare Sources, Compare Nodes or Compare Cases.

3.The Select Project Items dialog box opens.

3.Choose the two items you want to compare

4.Click OK.

Mind Maps



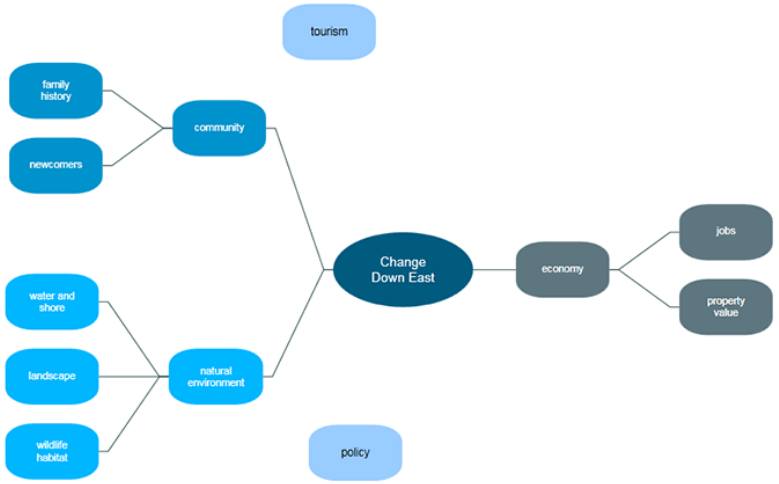
Brainstorming tool to visualize your thoughts and ideas

Start with a central topic or main idea, then map out ideas that relate to the central topic with connectors and shapes

Explore expectations and initial theories

Map out and create your node structure

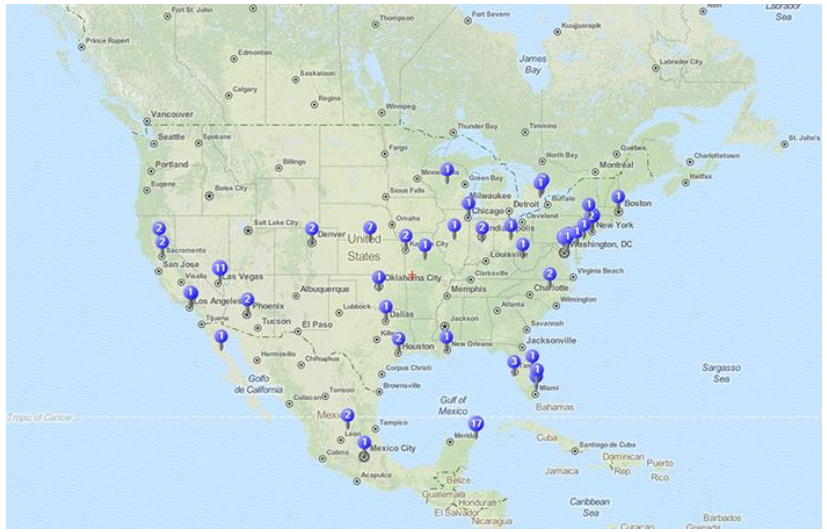
Mind Maps



1. **Explore** tab
2. **Maps** group
3. click **Mind Map**.

Other visualisations

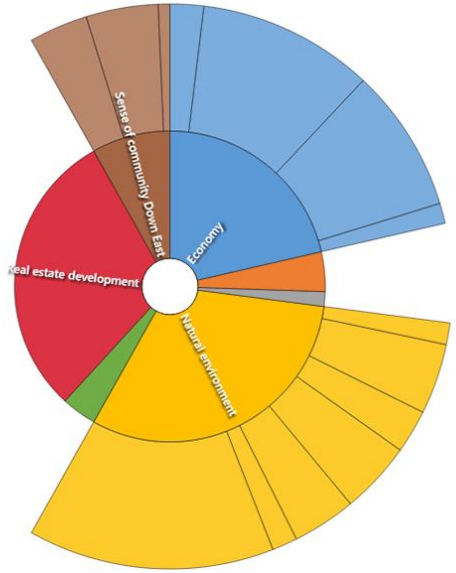
Geovisualisations



Show locations of data from Facebook and Twitter

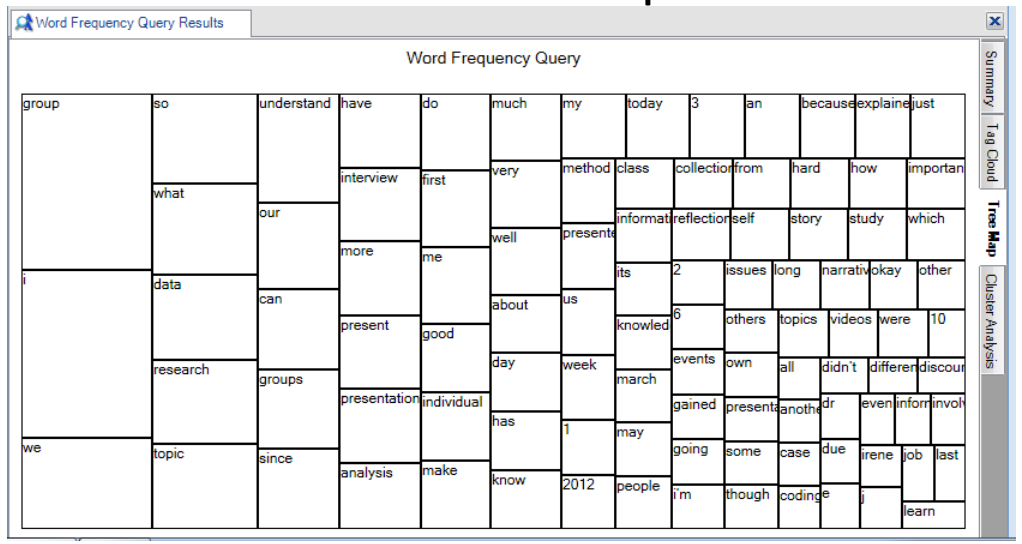
Answer questions like:
Does my dataset represent views from a global area or from a smaller region?
What did people from a particular region have to say?

Hierarchical Charts

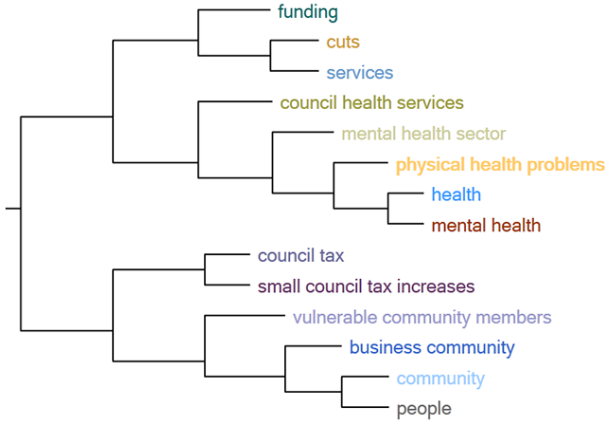


Visualise and compare data and themes
Answer questions like:
Are themes evenly spread over my sources, or are they coming from a small group?

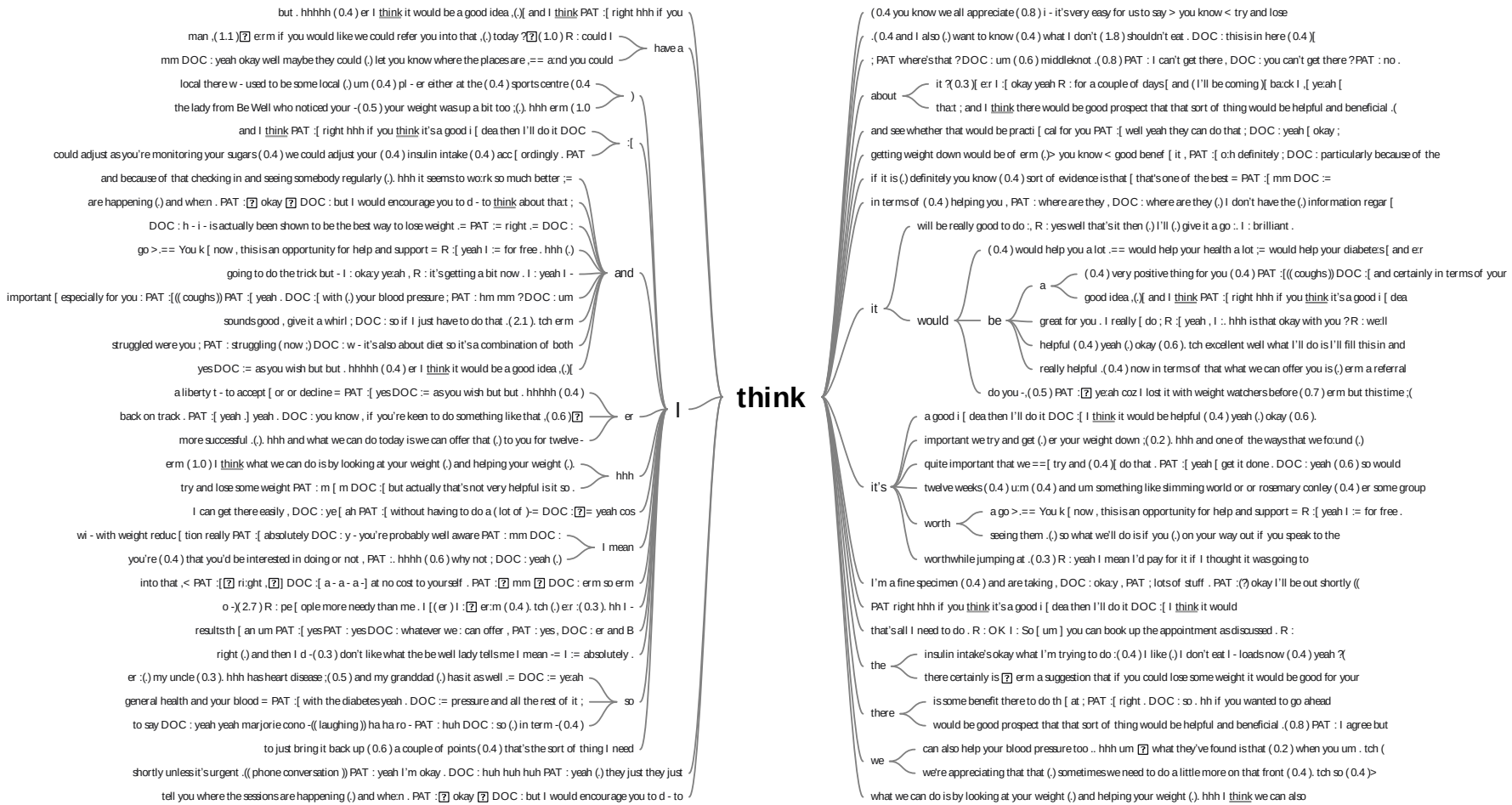
Word Cloud



Tree Map



Cluster Analysis


think
I
have a
man ,(1.1) [?] e:rm if you would like we could refer you into that ,(.) today ? [?] (1.0) R : could I
mm DOC : yeah okay well maybe they could (.) let you know where the places are ,== a:nd you could
)
local there w - used to be some local (.) um (0.4) pl - er either at the (0.4) sports centre (0.4
the lady from Be Well who noticed your -(0.5) your weight was up a bit too ;(.). hhh erm (1.0
:[
and I think PAT :[right hhh if you think it's a good i [dea then I'll do it DOC
could adjust as you're monitoring your sugars (0.4) we could adjust your (0.4) insulin intake (0.4) acc [ordingly . PAT
and
and because of that checking in and seeing somebody regularly (.). hhh it seems to wo:rk so much better ;=
are happening (.) and whe:n . PAT : [?] okay [?] DOC : but I would encourage you to d - to think about that ;
DOC : h - i - is actually been shown to be the best way to lose weight .= PAT := right .= DOC :
go >.== You k [now , this is an opportunity for help and support = R :[yeah I := for free . hhh (.)
going to do the trick but - I : oka:y ye:ah , R : it's getting a bit now . I : yeah I -
important [especially for you : PAT :[((coughs)) PAT :[yeah . DOC :[with (.) your blood pressure ; PAT : hm mm ? DOC : um
sounds good , give it a whirl ; DOC : so if I just have to do that .(2.1). tch erm
struggled were you ; PAT : struggling (now ;) DOC : w - it's also about diet so it's a combination of both
yes DOC := as you wish but but . hhhhh (0.4) er I think it would be a good idea ,(.)[
er
a liberty t - to accept [or or decline = PAT :[yes DOC := as you wish but but . hhhhh (0.4)
back on track . PAT :[yeah .] yeah . DOC : you know , if you're keen to do something like that ,(0.6) [?]
more successful .(.). hhh and what we can do today is we can offer that (.) to you for twelve -
hhh
erm (1.0) I think what we can do is by looking at your weight (.) and helping your weight (.).
try and lose some weight PAT : m [m DOC :[but actually that's not very helpful is it so .
I can get there easily , DOC : ye [ah PAT :[without having to do a (lot of)-= DOC : [?] = yeah cos
I mean
wi - with weight reduc [tion really PAT :[absolutely DOC : y - you're probably well aware PAT : mm DOC :
you're (0.4) that you'd be interested in doing or not , PAT :. hhhh (0.6) why not ; DOC : yeah (.)
so
into that ,< PAT :[[?] ri:ght ,[?]] DOC :[a - a - a -] at no cost to yourself . PAT : [?] mm [?] DOC : erm so erm
o -)(2.7) R : pe [ople more needy than me . I [(er) I : [?] er:m (0.4). tch (.) e:r :(0.3). hh I -
results th [an um PAT :[yes PAT : yes DOC : whatever we : can offer , PAT : yes , DOC : er and B
right (.) and then I d -(0.3) don't like what the be well lady tells me I mean -= I := absolutely .
er :(.) my uncle (0.3). hhh has heart disease ;(0.5) and my granddad (.) has it as well .= DOC := ye:ah
general health and your blood = PAT :[with the diabetes yeah . DOC := pressure and all the rest of it ;
to say DOC : yeah yeah marjorie cono -((laughing)) ha ha ro - PAT : huh DOC : so (.) in term -(0.4)
to just bring it back up (0.6) a couple of points (0.4) that's the sort of thing I need
shortly unless it's urgent .((phone conversation)) PAT : yeah I'm okay . DOC : huh huh huh PAT : yeah (.) they just they just
tell you where the sessions are happening (.) and whe:n . PAT : [?] okay [?] DOC : but I would encourage you to d - to
(0.4 you know we all appreciate (0.8) i - it's very easy for us to say > you know < try and lose
.(0.4 and I also (.) want to know (0.4) what I don't (1.8) shouldn't eat . DOC : this is in here (0.4)(
; PAT where's that ? DOC : um (0.6) middleknot .(0.8) PAT : I can't get there , DOC : you can't get there ? PAT : no .
about
it ?(0.3)[e:r I :[okay yeah R : for a couple of days [and (I'll be coming)[ba:ck I ,[ye:ah [
that ; and I think there would be good prospect that that sort of thing would be helpful and beneficial .(
and see whether that would be practi [cal for you PAT :[well yeah they can do that ; DOC : yeah [okay ;
getting weight down would be of erm (.)> you know < good benef [it , PAT :[o:h definitely ; DOC : particularly because of the
if it is (.) definitely you know (0.4) sort of evidence is that [that's one of the best = PAT :[mm DOC :=
in terms of (0.4) helping you , PAT : where are they , DOC : where are they (.) I don't have the (.) information regar [
it
will be really good to do :, R : yes well that's it then (.) I'll (.) give it a go :. I : brilliant .
would
(0.4) would help you a lot .== would help your health a lot ;= would help your diabetes:s [and e:r
be
a
(0.4) very positive thing for you (0.4) PAT :[((coughs)) DOC :[and certainly in terms of your
good idea .(.)[and I think PAT :[right hhh if you think it's a good i [dea
great for you . I really [do ; R :[yeah , I :. hhh is that okay with you ? R : we:ll
helpful (0.4) yeah (.) okay (0.6). tch excellent well what I'll do is I'll fill this in and
really helpful .(0.4) now in terms of that what we can offer you is (.) erm a referral
do you -,(0.5) PAT : [?] ye:ah coz I lost it with weight watchers before (0.7) erm but this time ;(
it's
a good i [dea then I'll do it DOC :[I think it would be helpful (0.4) yeah (.) okay (0.6).
important we try and get (.) er your weight down ;(0.2). hhh and one of the ways that we fo:und (.)
quite important that we ==[try and (0.4)[do that . PAT :[yeah [get it done . DOC : yeah (0.6) so would
twelve weeks (0.4) u:m (0.4) and um something like slimming world or or rosemary conley (0.4) er some group
worth
a go >.== You k [now , this is an opportunity for help and support = R :[yeah I := for free .
seeing them .(.) so what we'll do is if you (.) on your way out if you speak to the
worthwhile jumping at .(0.3) R : yeah I mean I'd pay for it if I thought it was going to
I'm a fine specimen (0.4) and are taking , DOC : oka:y , PAT ; lots of stuff . PAT :(?) okay I'll be out shortly ((
PAT right hhh if you think it's a good i [dea then I'll do it DOC :[I think it would
that's all I need to do . R : OK I : So [um] you can book up the appointment as discussed . R :
the
insulin intake's okay what I'm trying to do :(0.4) I like (.) I don't eat I - loads now (0.4) yeah ?(
there certainly is [?] erm a suggestion that if you could lose some weight it would be good for your
there
is some benefit there to do th [at ; PAT :[right . DOC : so . hh if you wanted to go ahead
would be good prospect that that sort of thing would be helpful and beneficial .(0.8) PAT : I agree but
we
can also help your blood pressure too .. hhh um [?] what they've found is that (0.2) when you um . tch (
we're appreciating that that (.) sometimes we need to do a little more on that front (0.4). tch so (0.4)>
what we can do is by looking at your weight (.) and helping your weight (.). hhh I think we can also

Activity: Visualising your data

1. Try visualising your data in the ways that could be most helpful
2. Are there any drawbacks to visualizing your data these ways?
3. How can you mitigate or address these drawbacks?

Thinking about your thesis (and NVivo)

SUSIE DAVIS

‘Methodology’ of data analysis

- Research aims & objectives
- Research questions
- Research design & methodology
- Literature review and identifying ‘gaps’ & contributions to knowledge
- Fieldwork, collecting, collating & interpreting data
- Telling a ‘story’ – the ‘golden thread’ running through your writing
- “Keep your mind wide open!” (Lichtman, 2010: 189)

Different parts of NVivo can be used for what purpose(s)

Section	Possible Content
Introduction	Project purpose and goals

Materials you might review
Project journal, early memos and maps

Source: http://help-nv11.qsrinternational.com/desktop/concepts/Preparing_for_final_write-up.htm?rhsearch=%22tree%20map%22&rhsyns=%20

Section	Possible Content
Contribution to literature	Why is this research needed? What gaps does it fill?

Materials you might review
Review items created during the literature review process, including: ▪ Memos related to articles, books and other literature; See Also Links & Memo Links ▪ Annotations in articles and other literature ▪ Quotes, descriptions or abstracts stored in Externals (which represent and link to literature outside the project) ▪ Maps and other visualizations you created to explore the ideas covered in the literature

Run a **coding query** to see references to a specific concept (or node)?

Make a **project map** to compare which nodes are coded to sources of literature and empirical cases?

Section	Possible Content
Methodology	What methods or theoretical framework did you use and why?

Materials you might review
Review items created during the research design, including: ▪ Methodological memos ▪ Annotations in articles and other literature related to qualitative methodologies ▪ Matrix coding queries comparing the use of different methods ▪ Maps demonstrating your approach

Create a **hierarchical chart** to compare how sources related to two different cases were coded?

Section	Possible Content
Context	Describe the research setting including the places and people that are part of your study. Why did you choose this setting?

Materials you might review
Review the materials created during research design and data collection: ▪ Memos related to people, places or other cases ▪ Queries that explore cases based on their demographic attributes ▪ Charts showing the spread of respondents

Review your case demographics by looking at the case classification sheet?

Run word frequency queries comparing cases?

Section	Possible Content
Central analysis (1)	There are many approaches you could take depending on your methodology. For example, you might have chapters that focus on particular hypotheses, themes or case studies.
Materials you might review	
Review the materials created during the coding and analysis phase–these might include: • Thematic memos that describe the significance of nodes or sources • Coding queries that explore the co-occurrence of themes • Matrix coding queries that compare respondent attitudes across a range of themes • Illustrative quotes that have been coded to a ' great quotes' node.	

Run a **matrix coding query** to compare 'what was said' between two sources, and a set of nodes?

Run a **group query** to see items coded at specific nodes?

Section	Possible Content
Central analysis (2)	There are many approaches you could take depending on your methodology. For example, you might have chapters that focus on particular hypotheses, themes or case studies.

Materials you might review

- Word Frequency and Text search queries that explore the use of language
- Visualizations (like charts or tree maps) that show the frequency and coverage of particular themes
- Maps that illustrate your growing understanding of the data
- Reports that summarize your data at various points in your project

Do a **text search query** to see how a particular combination of words appears in different sources?

Section	Possible Content
Conclusion	Discuss the impact of your research including ideas, recommendations, unresolved issues and areas for future investigation.

Materials you might review
Return again to review your project journal, memos and maps.

Source: http://help-nv11.qsrinternational.com/desktop/concepts/Preparing_for_final_write-up.htm?rhsearch=%22tree%20map%22&rhsyns=%20

Section	Possible Content
References	A list of all references and citations.

Materials you might review
Export your bibliographical data to a reference management tool like EndNote, Mendeley etc., and use its features to insert citations and format references. For information about citing NVivo in your report, refer to the FAQs on the QSR website.

What advice would you give to your peers just starting out in NVivo?

Write a quick message on a post-it note and hand it to us. We will pass on your words of wisdom to the next class!

Thank you, and all the best with your projects!

Resources

Bazeley, P. and Jackson, K. (2013) Qualitative Data Analysis with NVivo

Becker, H. (1998) Tricks of the Trade: How to Think about Your Research While You're Doing It

Berelson, B. (1952). *Content Analysis in Communication Research.* Glencoe: THE FREE PRESS.

Cresswell, J. (2015) *30 Essential Skills for the Qualitative Researcher*. Los Angeles: SAGE.

Creswell, J. (2007) Qualitative Inquiry & Research Design: Choosing among five approaches.

Lichtman, M. (2010) Qualitative Research in Education: A User's Guide

Miles, M. B. and Huberman, A. M. (1994) Qualitative data analysis: An expanded sourcebook 2nd ed.

Miles, M. B., Huberman, A. M. and Saldaña, J. (2014) Qualitative Data Analysis: A methods sourcebook 3rd ed.

Richards, L. (2015) *Handling Qualitative Data A Practical Guide*. (3rd ed.) London: SAGE.

Saldaña, J. (2016) *The Coding Manual for Qualitative Researchers*. London: SAGE.

Schreier, M. (2012) *Qualitative Content Analysis in Practice.* London: SAGE.