

Analysing Open-ended Survey Question Responses in CAQDAS

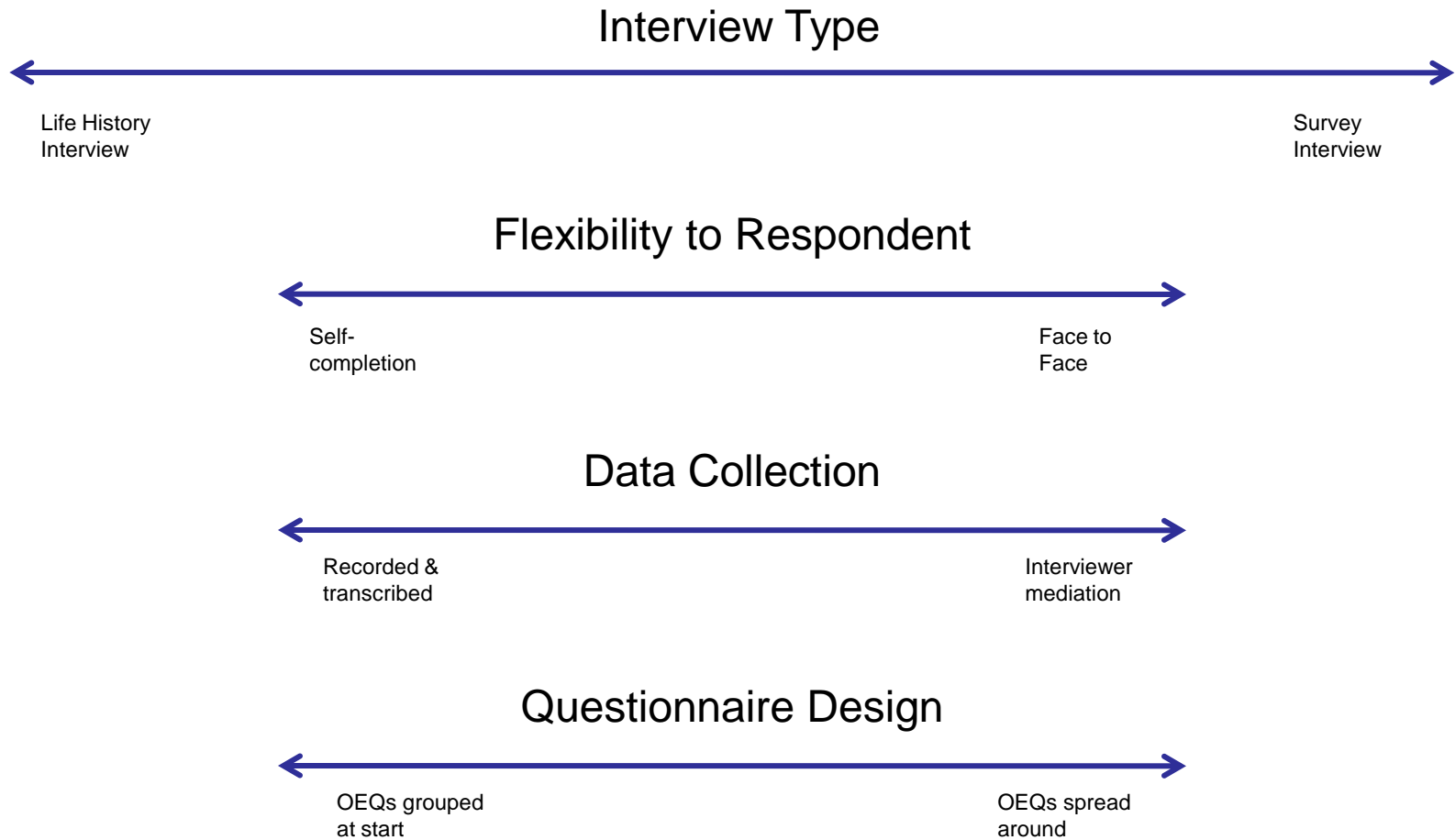
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Data collection methods and OEQ data quality



Data used in these examples

- Professional survey of flooding experiences
- Households in England
- Events in 2000
- 1,250 respondents
- Face to Face using CAPI
- Mainly closed questions, but 8 OEQs
- Interviewers typed responses in real time

Who might be asked to analyse it?

- Quantitative survey analyst:
 - Because you are analysing the rest of the data
- Qualitative research analyst:
 - Because it's qualitative and that's what you do
- Online research analyst:
 - Because it is easier to phrase open ended questions

Why use CAQDAS?

- ATLAS.ti, Nvivo, MAXqda, QDA Miner
- Speed
- Accuracy
- Transparency
- Replicable
- Tools designed for the task

Four main phases of work

- Data preparation & introduction to CAQDAS
- Development & application of themes (coding)
- Exploration of relationships between codes, respondent attributes, and the texts
- Export of selected coding data to SPSS for further analysis (“Quantitising”)

Nvivo Main Screen

The screenshot displays the Nvivo software interface. At the top, the title bar reads "Demo Survey 0705.nvp - NVivo". The menu bar includes "File", "Edit", "New", "Go", "Project", "Links", "Code", "Format", "Tools", "Window", and "Help". Below the menu bar is a toolbar with various icons for file operations and navigation. The main window is divided into several sections:

- Sources:** A left-hand pane showing a tree view of sources. Under "Internals", there are folders for "Search Folders", "All Sources", and "All Sources Not Embedded".
- Search:** A search bar with "Look for:" and "Search In: Internals" fields, and buttons for "Find Now" and "Clear".
- Internals Table:** A table listing internal sources with columns for Name, Nodes, References, Created, Created By, Modified On, and Modified By.
- Source View:** A large central pane showing the content of a selected source, "QADVI2". It displays a list of responses (RESP.07202 to RESP.07223) with their corresponding text.
- Navigation:** A bottom-left pane with buttons for "Sources", "Nodes", "Sets", "Queries", "Models", "Links", "Classifications", and "Folders".
- Status Bar:** At the bottom, it shows "NGH 8 items | Nodes: 324 | References: 324 | Read Only | Line: 1 | Column: 0".

Name	Nodes	References	Created	Created By	Modified On	Modified By
QADVI2	324	324	15/07/2	NGH	15/07/2009 14	NGH
QBETT2	226	226	15/07/2	NGH	15/07/2009 14	NGH
DVAL2	120	120	15/07/2	NGH	15/07/2009 14	NGH
QBLO2	87	87	15/07/2	NGH	15/07/2009 14	NGH
QCARS2	52	52	15/07/2	NGH	15/07/2009 14	NGH
DFLO2	165	165	15/07/2	NGH	15/07/2009 14	NGH
QLDC2	91	91	15/07/2	NGH	15/07/2009 14	NGH
QMDRE	361	361	15/07/2	NGH	15/07/2009 14	NGH

QADVI2

RESP.07202
given leaflet from environment agency but did not take much notice

RESP.07203
by the police in our house came to explain one hour before the flood to move out of the house and move stuff upstairs

RESP.07211
information pack take furniture upstairs don't drink water from taps take important documents upstairs

RESP.07216
do not touch flood water

RESP.07217
to put a torch upstairs switch off mains take valuables upstairs

RESP.07219
we've had flood packs telling us that we were in flood risk area

RESP.07220
turn off power, move valuables

RESP.07223
move valuables, and if water enters house switch off gas and electric

Code: 0 | Name: | Free Marker

NGH 8 items | Nodes: 324 | References: 324 | Read Only | Line: 1 | Column: 0

MAXqda Main Screen

The screenshot displays the MAXqda 2007 software interface. The main window title is "Q:QUICMICS Stream 1 - Integration\Data\Docs for MAXqda\Demo Data OEQs.mx3 - MAXQDA 2007". The interface is divided into several panes:

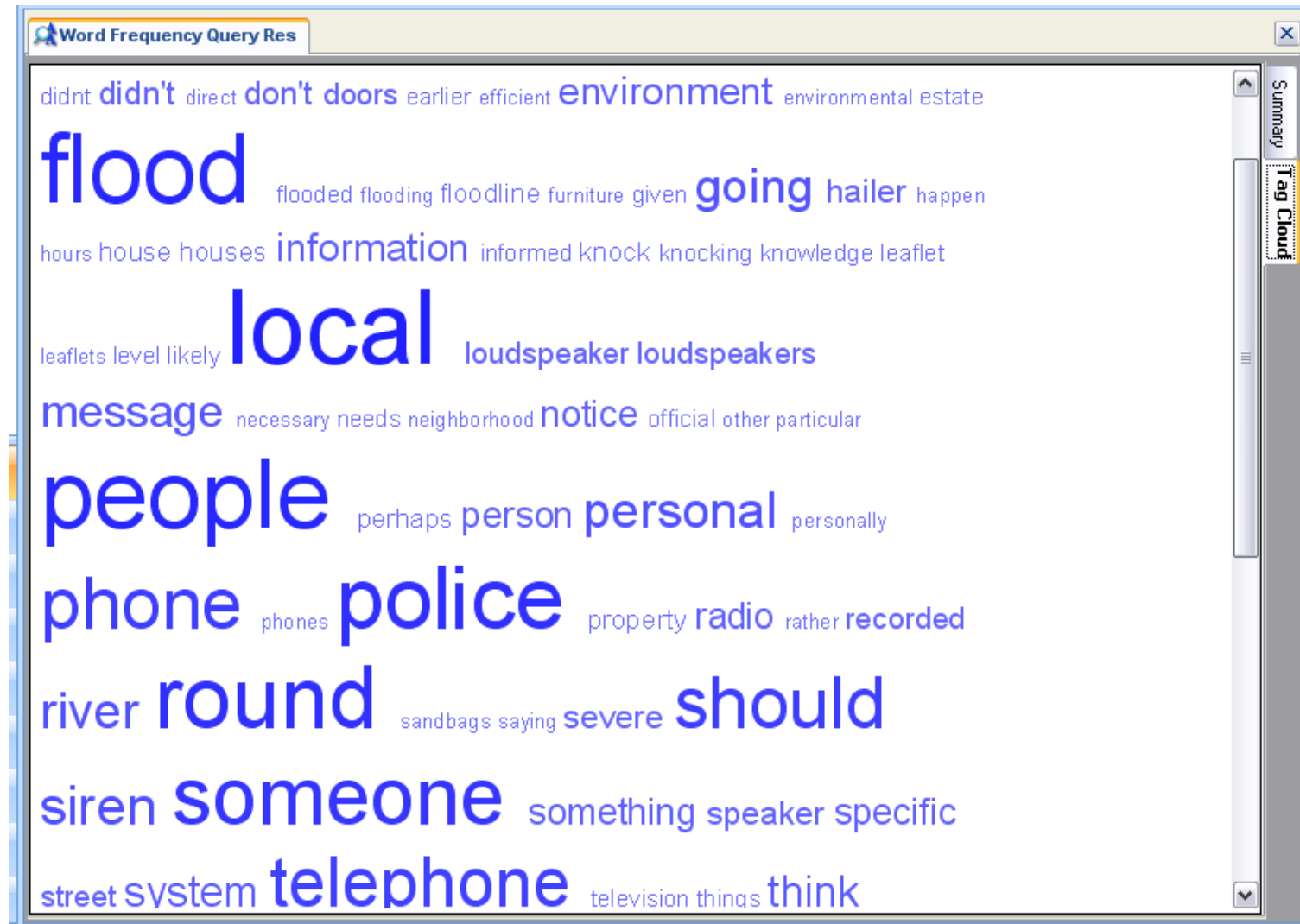
- Document System:** A tree view on the left showing a list of documents (R.97104 to R.96233) with their respective counts. R.96304 is highlighted.
- Code System:** A tree view below the document system showing a hierarchy of codes (EA, Z QUESTIONS, QADVI2, QBETT2, QBLO2, QCARS2, QFLO2, QLOC2, QMORE, QVAL2) with their counts. QADVI2 is highlighted.
- Text Browser:** A window on the right showing the text of document R.96304. The text is numbered 1 through 8. The second line is highlighted: "to take and protect the most important documents p turn off gas electricity p have a bag with a torch and first aid things like that".
- Retrieved Segments:** A window at the bottom right showing a list of segments extracted from the text. The second segment is highlighted, showing the same text as the text browser: "to take and protect the most important documents p turn off gas electricity p have a bag with a torch and first aid things like that".

The status bar at the bottom shows "1257" documents, "1" selected, "324" codes, "0" errors, and "OR-Combination" as the active filter.

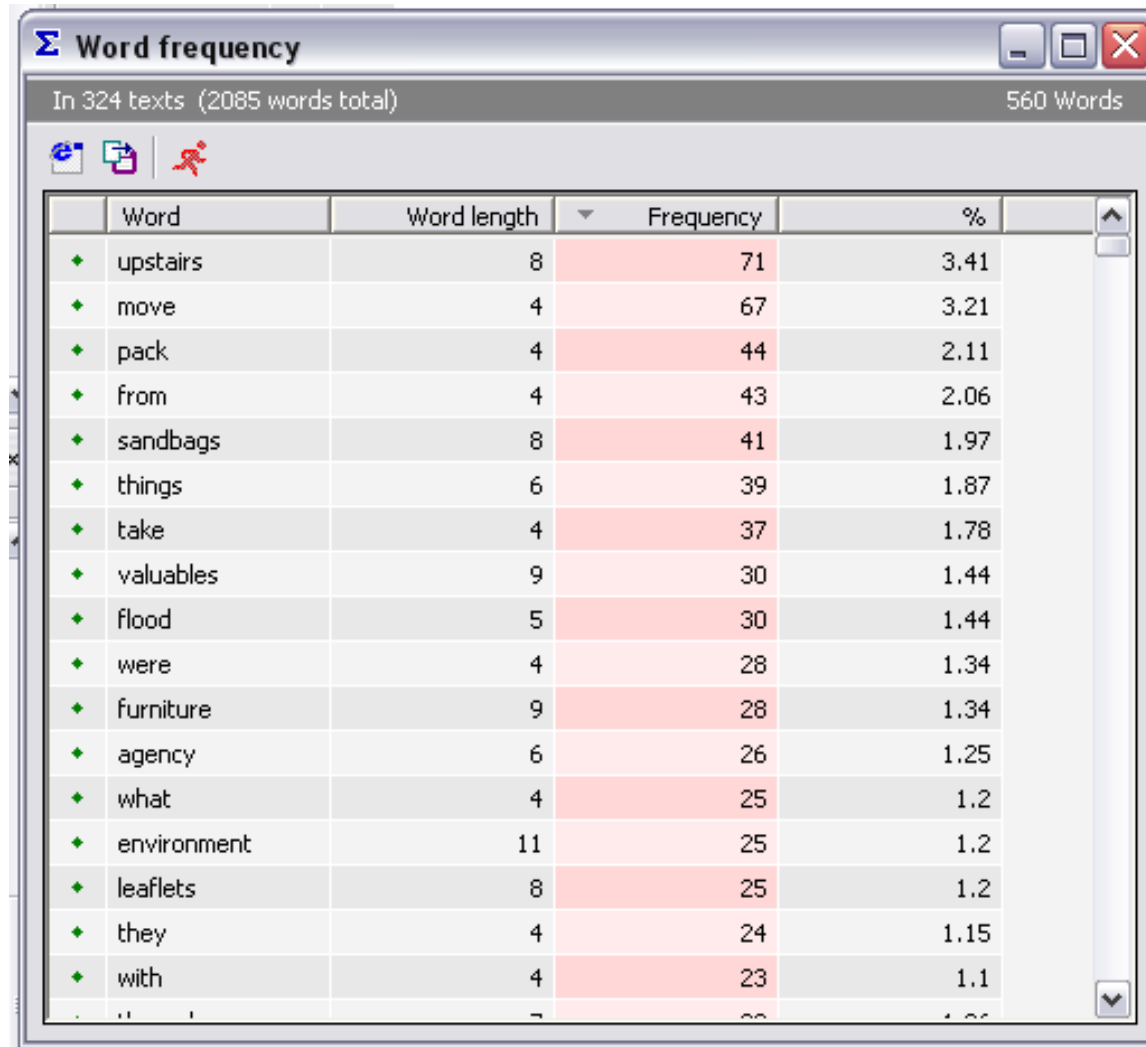
Developing Themes

- A range of possibilities from fully manual to fully automatic
- Range of data quantities and qualities should be considered
- Our own prejudices and preconceptions hold us back
- Inductive approach based on the data

Nvivo – Word Frequency Tag Cloud



MAXqda – Word Frequency Table



The screenshot shows a window titled "Word frequency" with a subtitle "In 324 texts (2085 words total)" and a count of "560 Words". The window contains a table with the following columns: Word, Word length, Frequency, and %. The table lists the following words and their frequencies:

Word	Word length	Frequency	%
upstairs	8	71	3.41
move	4	67	3.21
pack	4	44	2.11
from	4	43	2.06
sandbags	8	41	1.97
things	6	39	1.87
take	4	37	1.78
valuables	9	30	1.44
flood	5	30	1.44
were	4	28	1.34
furniture	9	28	1.34
agency	6	26	1.25
what	4	25	1.2
environment	11	25	1.2
leaflets	8	25	1.2
they	4	24	1.15
with	4	23	1.1

QDA Miner/Wordstat – Phrase Finder

WordStat v5.1.17 - BMRB_PE_V1.DBF

Dictionary | Options | Frequencies | Crosstab | Key-Word-In-Context | **Feature Extraction**

Phrase Finder | Vocabulary Finder

Min words: 2 | Max words: 5 | Min frequency: 2 | Sort by: Frequency

Remove phrases ending with excluded words Remove phrase in categorization dictionary

	REQUENC	NB CASES	% CASES	LENGTH
ENVIRONMENT AGENCY	23	23	1.8%	2
THINGS UPSTAIRS	15	15	1.2%	2
PLASTIC BAG	14	14	1.1%	2
TURN OFF	13	13	1.0%	2
MOVE VALUABLES	13	13	1.0%	2
WHAT TO DO	12	11	0.9%	3
VALUABLES UPSTAIRS	10	10	0.8%	2
FURNITURE UPSTAIRS	10	10	0.8%	2
FROM THE ENVIRONMENT	9	9	0.7%	3
SWITCH OFF	9	9	0.7%	2
FLOOD PACK	9	9	0.7%	2
FROM THE ENVIRONMENT AGENCY	8	8	0.6%	4
FROM ENVIRONMENT AGENCY	7	7	0.6%	3
OFF GAS	7	7	0.6%	2
UPSTAIRS AND	7	7	0.6%	2
IMPORTANT DOCUMENTS	7	7	0.6%	2
STUFF UPSTAIRS	7	7	0.6%	2
GET SANDBAGS	7	7	0.6%	2
GAS AND	7	7	0.6%	2
PACK FROM	7	7	0.6%	2
WERE SENT	6	6	0.5%	2
MOVE THINGS	6	6	0.5%	2
IN PLASTIC	6	6	0.5%	2

IS INCLUDED IN
 ENVIRONMENT AGENCY ABOUT (2 / 2)
 FROM ENVIRONMENT AGENCY (7 / 7)
 FROM THE ENVIRONMENT AGENCY (8 / 8)
 LETTER FROM THE ENVIRONMENT AGENCY (2 / 2)
 PACK FROM ENVIRONMENT AGENCY (2 / 2)
 THROUGH FROM THE ENVIRONMENT AGENCY (2 / 2)

OVERLAP BEGINNING OF
 AGENCY PACK (1 / 2)

OVERLAP END OF
 CAME THROUGH FROM THE ENVIRONMENT (2 / 2)
 FROM THE ENVIRONMENT (8 / 9)

293 of 6249 phrases in 0.5 seconds using 0.8Mb
 1257/1257 records

Edit | Close | Recount | Filter | Cancel | Help

Coding in MAXqda

Code System

Code System	Count
Code System	2045
EFFECTIVE	0
None	0
Common	4
Apathetic	11
Negative	11
Positive	5
WHO FROM	0
ADVICE	0
bagdocs	32
cars	7
cleanup	1
codes	6
danger	4
evacuate	32
leaflets	141
monitor	18
neighbours	5
petsnkids	22
raise	40
red	12
roads	1
sandbags	48
shed	1
stores	12
torch	18
upstairs	73
utilities	30
warm clothing	3
watch	1
wellingtons	3
QBETT2	228
QADVI2	324

Text Browser: BMRB Docs\#TEXT17933

- E mail
- pamphlet which i had requested when i moved in the service on teletext was bloody awful it would be good to have a look up by post code
- would like longer term advice like the door guards and how to lift the furniture
- information too out of date
-
-
-
-
- row with the council other neighbours said they didn't need any so we didn't get any

Retrieved Segments

- ADVICE
 - leaflets
- BMRB Docs
 - #TEXT17933
 - 2-2
 - ADVICE
 - leaflets
- BMRB Docs
 - #TEXT20702
 - 2-2
 - ADVICE
 - leaflets

Reporting and Checking Codes

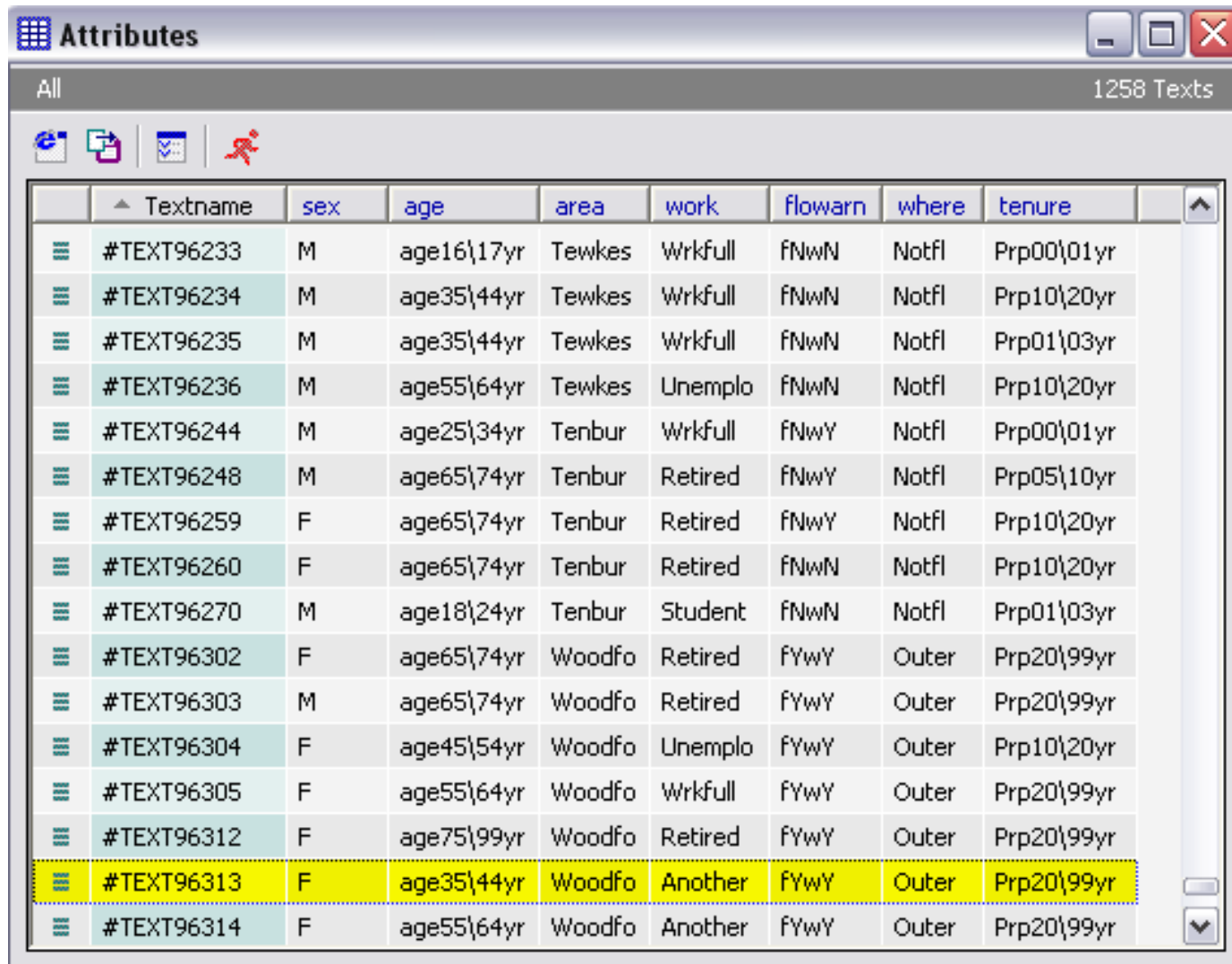
- “X% of respondents mentioned Y”
 - Reference coding - (“signposts”)
 - Substitution coding – (“exact”)
- So, check for errors
 - Code definition
 - Incorrect use
 - Omissions

- But also, look for difference.
- Make rarity a virtue!

- *“My personal experience was being told my family had been evacuated when they had not and not being allowed access to my own road when my family were trapped inside”*

(R:12284 – male, aged 35/44, working full time, house was flooded) – response to a question about better ways to warn people.

MAXqda – Attributes Table



The screenshot shows a window titled "Attributes" with a toolbar and a table of 15 rows. The table has columns for Textname, sex, age, area, work, flowarn, where, and tenure. The row for #TEXT96313 is highlighted in yellow.

	Textname	sex	age	area	work	flowarn	where	tenure
≡	#TEXT96233	M	age16\17yr	Tewkes	Wrkfull	fNwN	Notfl	Prp00\01yr
≡	#TEXT96234	M	age35\44yr	Tewkes	Wrkfull	fNwN	Notfl	Prp10\20yr
≡	#TEXT96235	M	age35\44yr	Tewkes	Wrkfull	fNwN	Notfl	Prp01\03yr
≡	#TEXT96236	M	age55\64yr	Tewkes	Unemplo	fNwN	Notfl	Prp10\20yr
≡	#TEXT96244	M	age25\34yr	Tenbur	Wrkfull	fNwY	Notfl	Prp00\01yr
≡	#TEXT96248	M	age65\74yr	Tenbur	Retired	fNwY	Notfl	Prp05\10yr
≡	#TEXT96259	F	age65\74yr	Tenbur	Retired	fNwY	Notfl	Prp10\20yr
≡	#TEXT96260	F	age65\74yr	Tenbur	Retired	fNwN	Notfl	Prp10\20yr
≡	#TEXT96270	M	age18\24yr	Tenbur	Student	fNwN	Notfl	Prp01\03yr
≡	#TEXT96302	F	age65\74yr	Woodfo	Retired	fYwY	Outer	Prp20\99yr
≡	#TEXT96303	M	age65\74yr	Woodfo	Retired	fYwY	Outer	Prp20\99yr
≡	#TEXT96304	F	age45\54yr	Woodfo	Unemplo	fYwY	Outer	Prp10\20yr
≡	#TEXT96305	F	age55\64yr	Woodfo	Wrkfull	fYwY	Outer	Prp20\99yr
≡	#TEXT96312	F	age75\99yr	Woodfo	Retired	fYwY	Outer	Prp20\99yr
≡	#TEXT96313	F	age35\44yr	Woodfo	Another	fYwY	Outer	Prp20\99yr
≡	#TEXT96314	F	age55\64yr	Woodfo	Another	fYwY	Outer	Prp20\99yr

Crosstabs in MAXqda

1 A warden the warden should be able to tell us what is about to happen and precautions to take
 0 by recorded message to move small children elderly pets and livestock to high ground p
 1
 0
 0 there was no more useful information supplied
 0
 5

Crosstabs

Code System	age = age25\34yr	age = age35\44yr	age = age45\54yr	age = age55\64yr	age = age65\74yr	age = age75\99yr
bagdocs	1	11	8		7	5
cars		1		1	3	2
cleanup		1				
codes	1		3	1	1	
danger		3	1			
evacuate	4	4	3	6	10	5
leaflets	22	25	34	30	17	12
monitor	3	6	4	3	2	
neighbours		2	2		1	
petsnkids	1	7	6	4		3
raise	1	10	7	6	6	8
red	1	3	2	4	1	1
roads					1	
sandbags	8	5	10	9	13	2
shed					1	
stores		3	5	2	1	1
torch	3	3	4	2	1	5
upstairs	12	14	12	11	15	9
utilities	2	5	11	6	4	2
warm clothing			1	1		1
watch			1			
wellingtons		1		1		

7
 1
 6
 4
 32
 141
 18

BMRB Docs
 #TEXT96319
 2-2
 ADVICE
 petsnkids

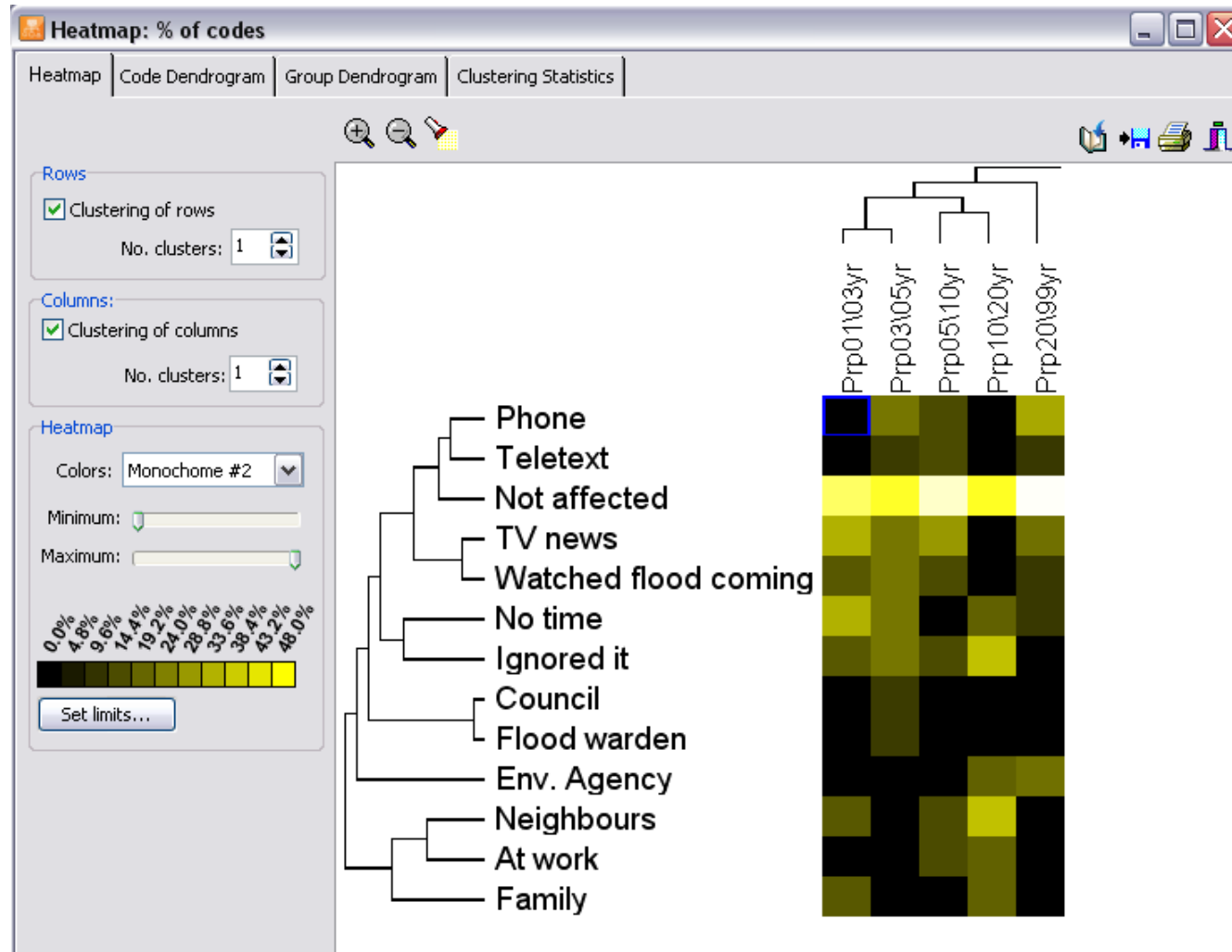
by recorded message to move small children elderly pets and livestock to high ground p

Nvivo – Matrix Coding Query

Cases Coded

	tenure = Prp00\...	tenure = Prp01\...	tenure = Prp03\...	tenure = Prp05\...	tenure = Prp10\...	tenure = Prp20\...
1 : Better Sour...	0	0	0	0	0	0
2 : Paper	1	2	1	4	1	3
3 : Siren	0	4	0	1	3	9
4 : Person	3	16	3	13	11	14
5 : Police	0	2	1	5	3	9
6 : Phone	5	7	4	11	10	10
7 : Loudspeaker	0	4	6	2	7	14
8 : Warden	0	7	1	1	2	5
9 : Notice	0	3	1	1	3	1
10 : TV	0	3	1	2	1	2
11 : Email	0	1	1	0	0	0
12 : Cascade	0	0	3	1	0	0
13 : Multiple	0	1	0	1	1	2
14 : Neighbours	0	0	0	1	3	1
15 : Radio	0	5	1	0	1	1
16 : local coun...	0	2	0	3	0	0
17 : Internet	0	1	0	2	1	0
18 : Status co...	0	1	1	0	1	3

QDA Miner – Coding by Variable



Data collection methods and CAQDAS programs

