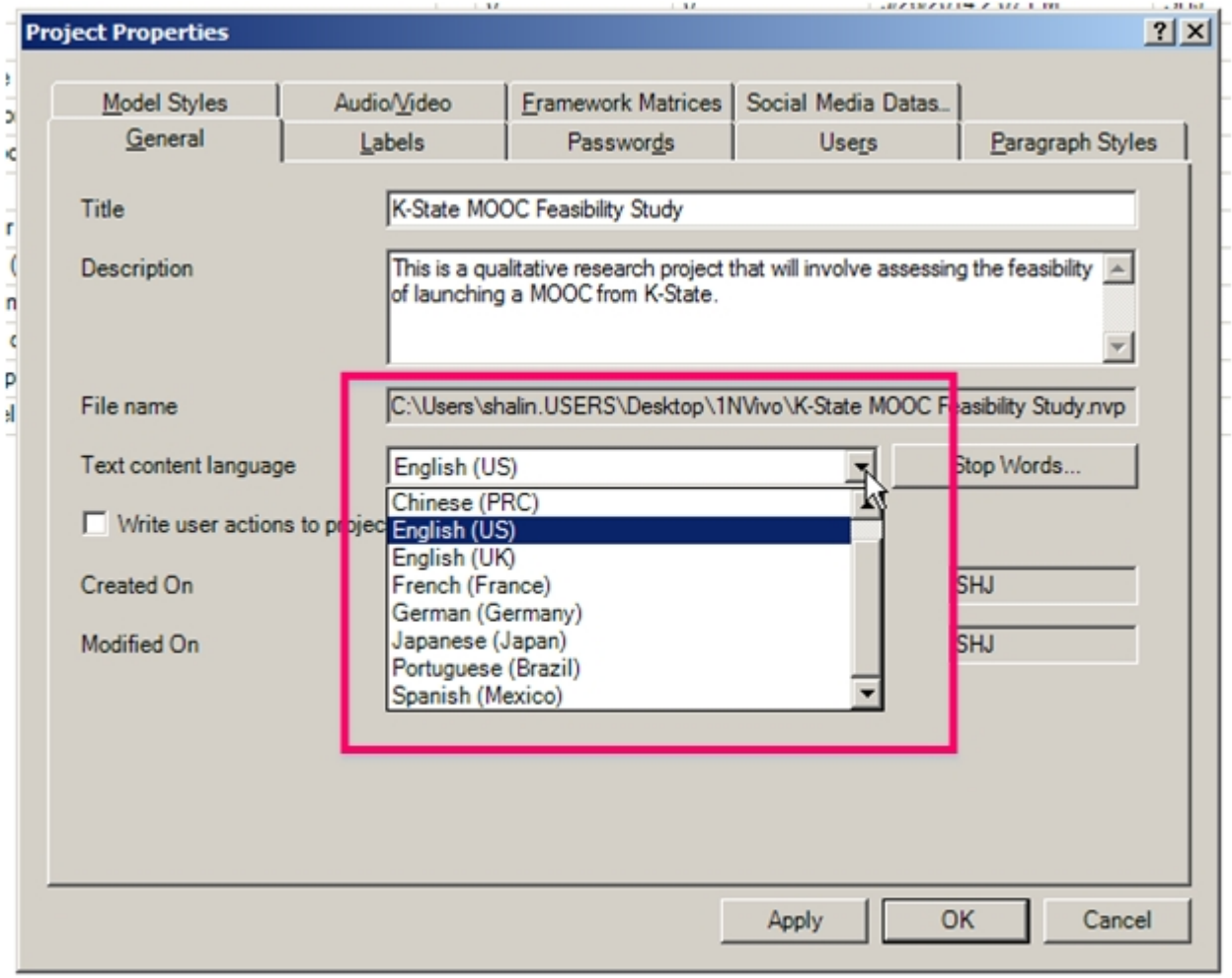
MATRIX QUERIES AND MATRIX DATA REPRESENTATIONS IN NVIVO 12 PLUS

NVivo Advanced
(Updated)

OVERVIEW

1. Matrices and their basic structures
2. Types of elements (variables) for matrix comparisons
3. Setting up matrix queries in NVivo 12 Plus
4. Specific matrix “use cases” in qualitative, quantitative, and mixed methods research
5. Wrap-up

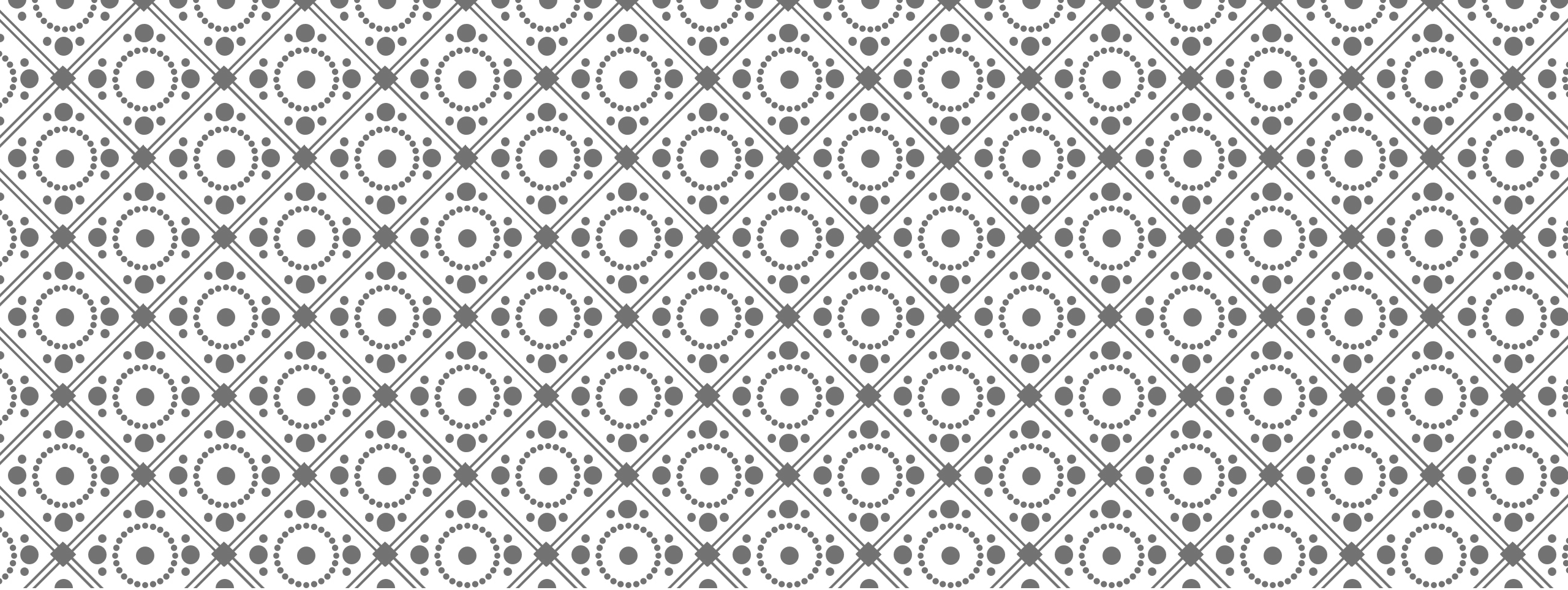
IF MULTILINGUAL…SELECTION OF A BASE LANGUAGE ("TEXT CONTENT LANGUAGE")



Go with default (determined by QSR International based on purchaser location in the world)

OR

NVivo ribbon -> File tab -> Info -> Project Properties -> General (sub) tab -> Text content language (dropdown menu)



1. MATRICES AND THEIR BASIC STRUCTURES

DEFINITION(S) AND PURPOSES

General Purposes

Matrices are used to explore and show data relationships and patterns

- In NVivo, any defined element may be used to populate the respective matrices
- NVivo uses (intensity) matrices to report out on sentiment analysis autocoding findings
- NVivo 12 Plus uses (intensity) matrices to report out on theme and subtheme autocoding findings

Structure

"a rectangular array of quantities or expressions in rows and columns that is treated as a single entity and manipulated according to particular rules" (in a mathematics sense; in a computer science / information technology sense) (per Google search engine)

a complex of lines intersecting at right angles (via rows and columns)

MATRICES ARE ABOUT RELATIONSHIPS

Types of Common Relationships found in Matrices:

- hierarchical such as general to specific, topic to subtopic,
- within the set of, part of a type, contained within, found within
- included with, co-occurring with,
- associated with (some relationship but not fully defined)
- appearing in close proximity with,
- similar to, related by likeness
- different from (orthogonally unrelated)

MATRICES ARE ABOUT RELATIONSHIPS (CONT.)

For example, some relationships described by matrices include:

- Which source documents (articles) are related to particular themes?
- Which themes and subthemes are related to which documents?
- Which terms from text sets are related to the four sentiment categories (very negative, moderately negative, moderately positive, and very positive)?
- What are similarities and dissimilarities between the coding of two coders (in a dyadic comparison in a coding comparison)?
- What are macro themes in a coding structure or codebook (through a matrix coding query)?

TYPES OF MATRICES

Matrices are referred to by their application (matrix type), which includes the types of data and the analytical uses of that data

- Confusion matrix / contingency table or cross-tabulation analysis / error matrix (predicted values vs. actual empirical values)
  - These are sometimes used to highlight the differences between Type I and Type II errors in basic signals detection
- Effects matrix
- Sentiment analysis intensity matrix (a temperature matrix, ~ to a color-saturation heatmap but in matrix format or with intensity indicated by number)
- Relational or network matrices (for relationships), and others

Matrices are generically referred to sometimes by the numbers of their elements in their rows and columns (as in a 5 x 7 matrix, or a 2 x 2 matrix)

TYPES OF MATRICES (CONT.)

Specific topical matrices are referred to by their main contents (one content type along its column headers and the other along its rows)

- For example: type-by-document matrices, document-by-theme matrices, and others

GENERAL FEATURES

Matrices do not have to be symmetrical in terms of the labels on Column A1 and Row 1A (in the next diagram)

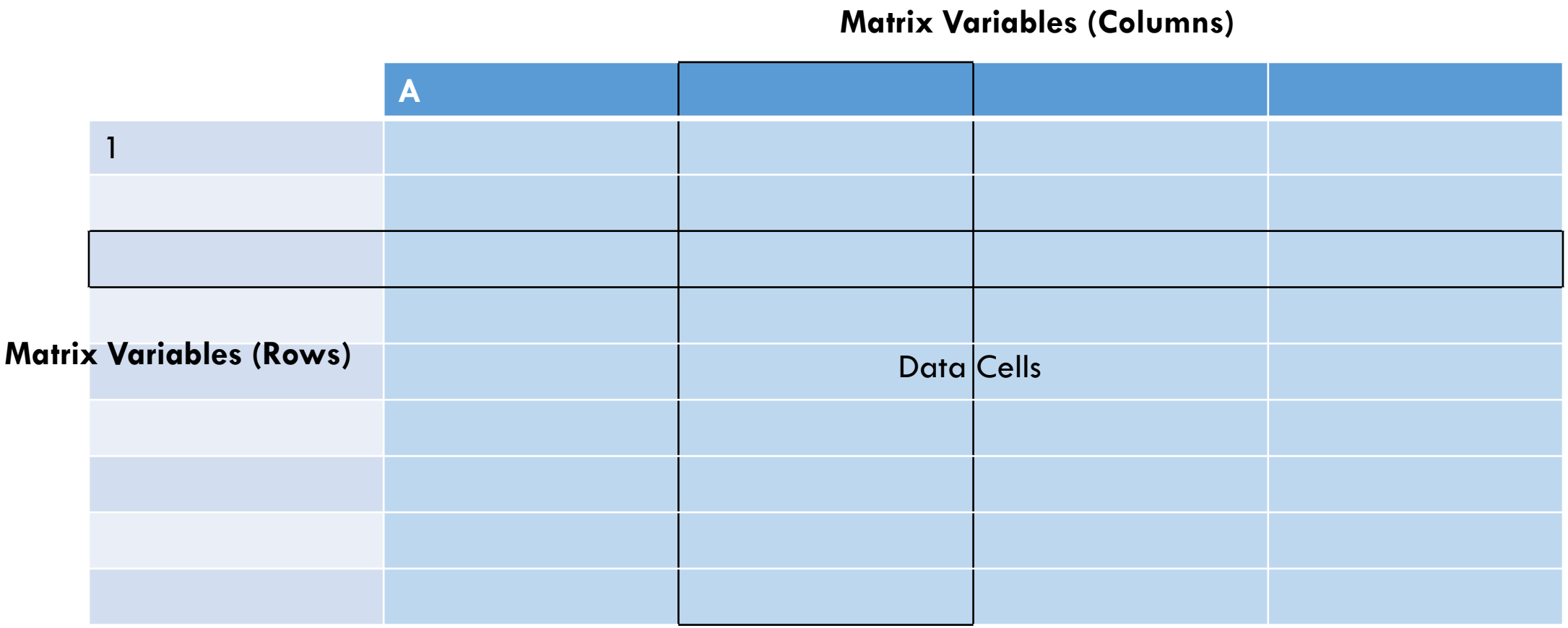
The numbers of entities (column and row headers) in the rows and columns do not have to match; they do not have to pair either (but may depending on the type of matrix)

- Data may be incomplete, and matrices still have informational value (they are robust even in the condition of missing data)

Tables tend to be more structured, with unique records on each row (running horizontally) and variables at the top of each column (running vertically)

Matrices may be automatically extracted (by computer); they may be manually created

BASIC STRUCTURE



MATRIX INDICATORS (W/ DEFINED ROW AND COLUMN LABELS/HEADERS)

Variables may be…

- Of a similar kind or type (in the matrix): all nodes / case nodes (individuals to individuals, or organizations to organizations) / codes; all interviews (in various groupings); all (cross-referenced) responses to questions, etc.
- Of mixed kinds or types (across rows and columns, not within the cells): themes and research documents; physical locations and interview subjects; themes (terms) and interviews; themes (concepts) and categorical outcomes; individuals and organizations; time periods and themes; sources in NVivo (sources, memos, codes, transcripts, interviews, and others)

In the data cells…

- Presence or non-presence of a relationship (1 or 0; a binary finding)
- Frequency of occurrence of relationship; "strength" of relationship (may be turned into a network graph); intensity
- Contents of matrix variable overlap in text (content) format; coded text

MATRIX CELLS

Cells come at the intersection of respective column headers and rows (individual records)

Matrices may be labeled “sparse” if there are more cells with 0s than with non-zeroes (whether in binary matrices or strength-of-relationship matrices)

. . . IN QUALITATIVE AND MIXED METHODS RESEARCH, MATRICES . . .

Are word- or text-based; may include a quantitative aspect (usually frequency counts as an indicator of relationship strength)

- Text may be "raw" (primary source data; transcripts) or highly processed (edited research articles)

Are based on variables (nodes, themes, interviewee / survey taker / focus group participant demographics and "characteristics" for grouping, and others)

May be used at various scales: the micro- (cell-level), meso- (relational, dyadic, triadic / motif…), and macro- (matrix-scale pattern)

May be designed (1) based on a targeted question, (2) based on the need to surface leads for further exploration (such as a "text summarization" application), (3) based on pure exploratory discovery

May contain single or multiple queries

2. TYPES OF ELEMENTS (VARIABLES) FOR MATRIX COMPARISONS

VARIABLES FOR MATRIX COMPARISONS IN NVIVO 12 PLUS

Any text (at the most atomistic level)

Any groups of text or multimedia represented by text descriptors (folders of contents)

Any codes (nodes, case nodes)

Any groups of nodes

Any "coded by" set (of codes / nodes)

- Coder-based comparisons

Any attributes or variables

- Such as indicated by classification sheets

Any categorical variables

Any relationships

Any models

Any model items

THE RESEARCH PROCESS

General Overview

Literature review

Research design

Research instrument prototyping and design (or acquisition) and pilot testing

Sampling

Research

Data collection

Data cleaning

Data analysis

Write-up and presentation

Possible Matrix Applications

Text summarization (themes and documents)

Relevant document identification (for close reading) in a literature review

Pattern identification in interviews, surveys, notes, and codes

Data visualization as relational network graphs (for analysis, for presentation)

… and others

SOME TYPES OF "ASKABLE" QUESTIONS WITH MATRICES

Are there instances of particular text in particular "searchable" documents (.PDF, .txt, .rtf, .doc, .docx, etc.)?

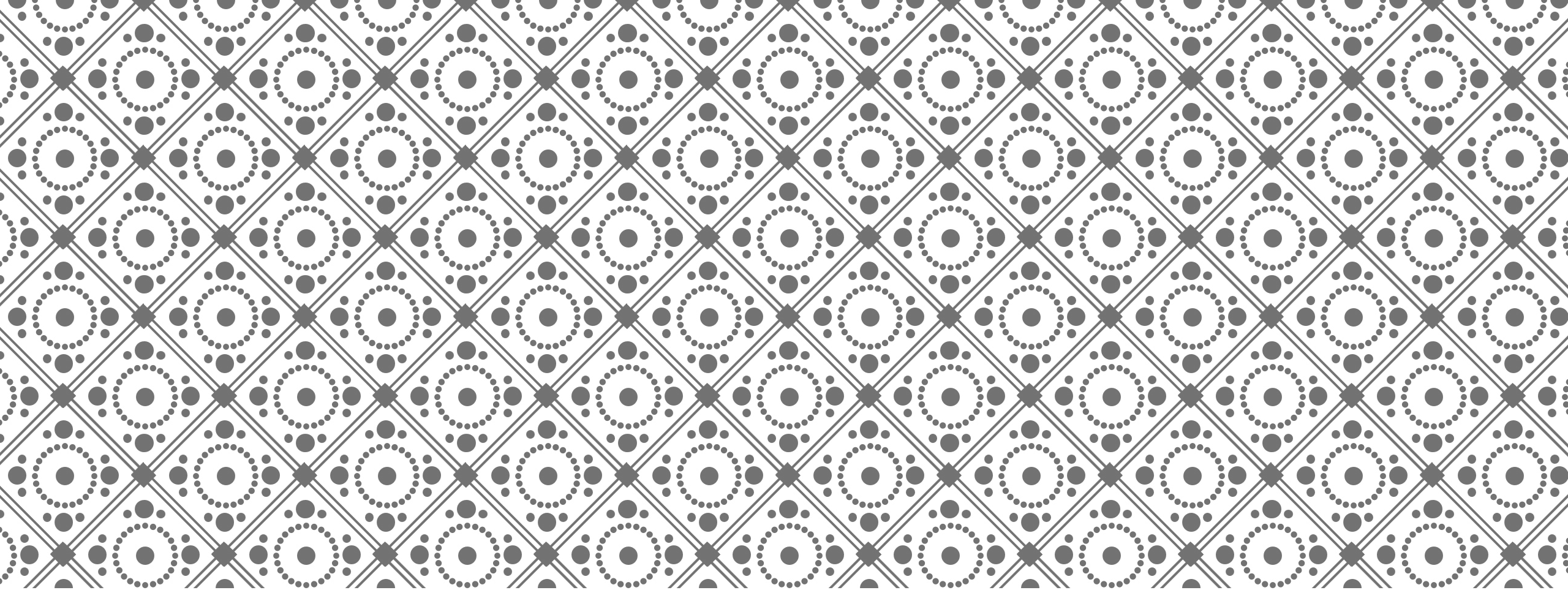
Are there locational or spatial patterns in (textual) data?

Are there temporal patterns in (textual) data?

Are there topical or theme patterns in (textual) data?

Are there similarities / differences between responses of individuals from different demographic or categorical or spatial or other groupings? (from interview, survey, focus group, or other similar types of data)

Are there relationships between concepts? Individual entities? Group entities?



3. SETTING UP MATRIX QUERIES IN NVIVO

DATA INGESTION IN PROPER FORMS

Sizes of Contents

All text ingested atomistically (the lowest indivisible "unit of analysis" or "record" or multi-media-based "object" such as an article or a memo)

- If a series of articles are all created as one text set, generally, the text set will be queried as one document (instead of a series of articles in a text corpus)

Accessible Machine-Readable Text

All scanned text as "searchable" or optical character recognition (OCR) text

All video transcribed into machine-readable text

All audio transcribed into machine-readable text

All imagery alt-texted into machine-readable text

DATA PREPARATION

General in NVivo

All relevant research materials included and coded; clear data labeling, consistent naming protocols

Various types of groupings (by folder, by node, by nickname, by classification variable, and others), without creating data redundancy (which skews text queries and text frequency counts and other types of analyses); may delete redundant text for data queries…or create new (sub) NVivo projects with select data for particular data queries

Goal: all data fully exploited in clear ways

Specific in NVivo

Combined master file of group coded projects, with multiple user coded contents (for runs of interrater reliability)

Relationships defined and linked

Case node source classifications applied

Models created

PATHS USED TO CONDUCT DATA QUERIES RESULTING IN DATA MATRICES

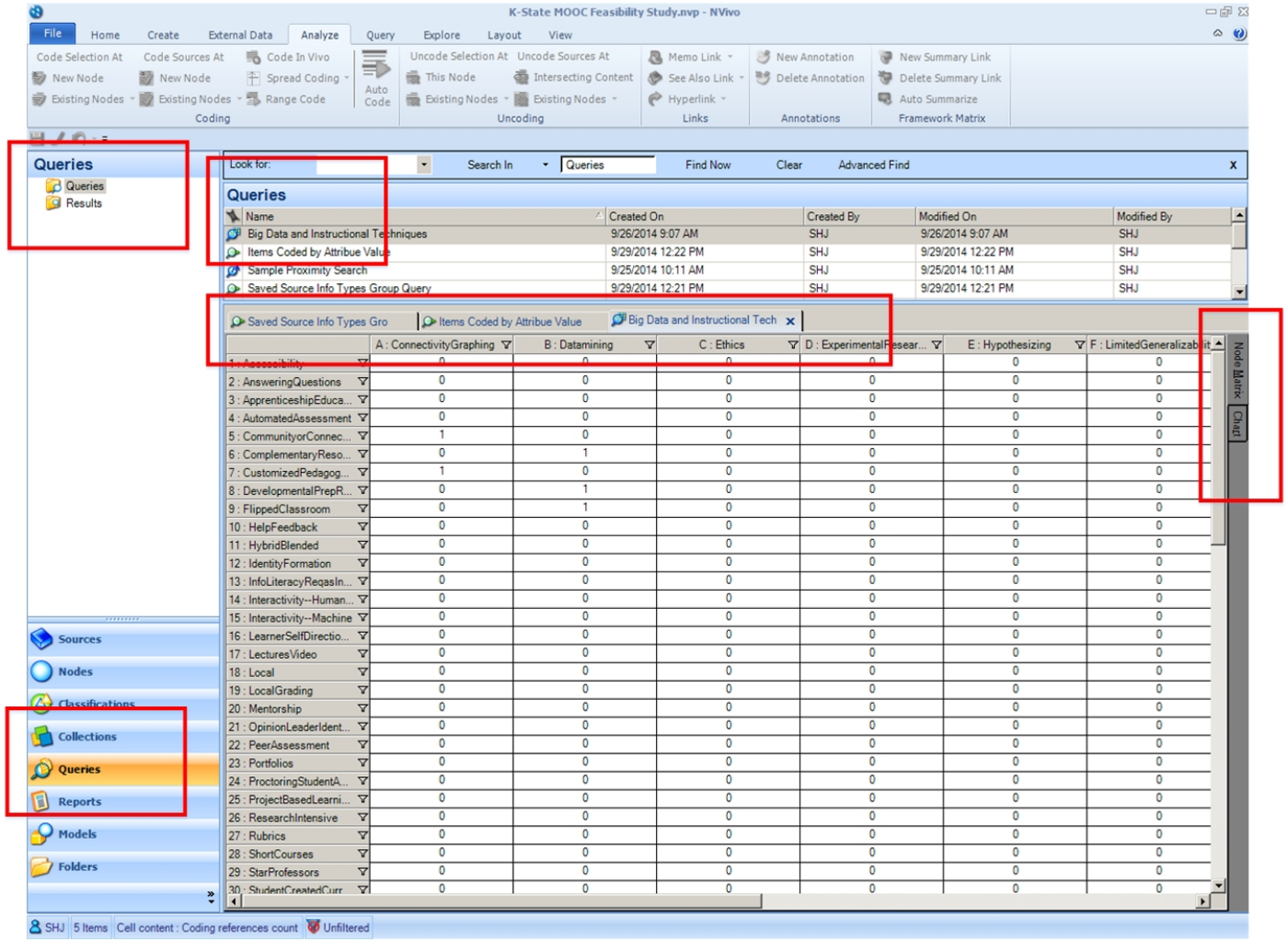
NVivo ribbon -> Query tab -> Matrix Coding

NVivo ribbon -> Query tab -> Coding Comparison

NVivo ribbon -> Query tab -> Group Query (models, relationships, attributes, coding at)

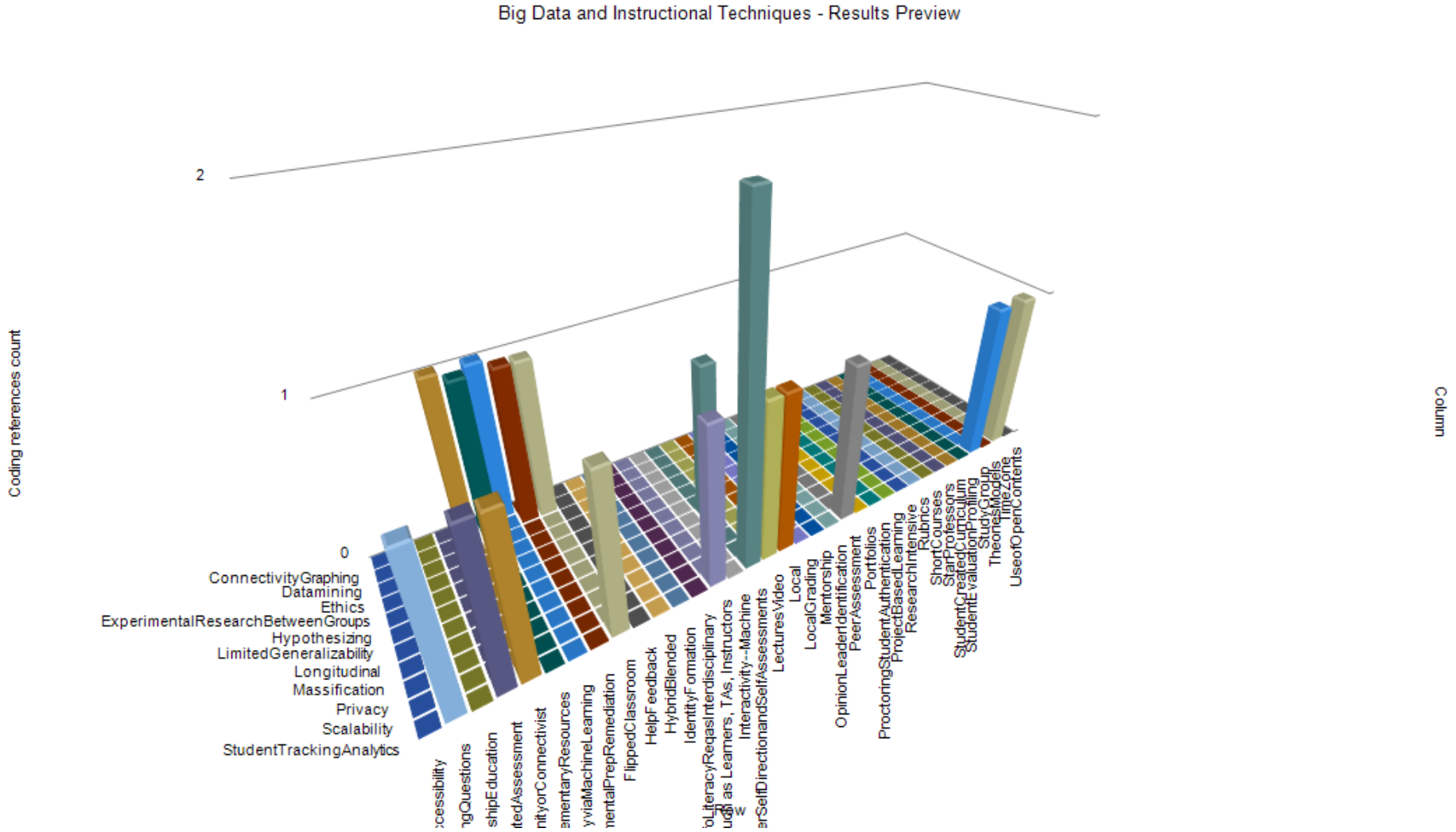
(…to live and interactive demos)

QUERIES FOLDER STORAGE



Matrix queries are stored in the Queries folder… (unless saved elsewhere by the researcher)

RELATED DATA VISUALIZATION: MATRIX "CHART"



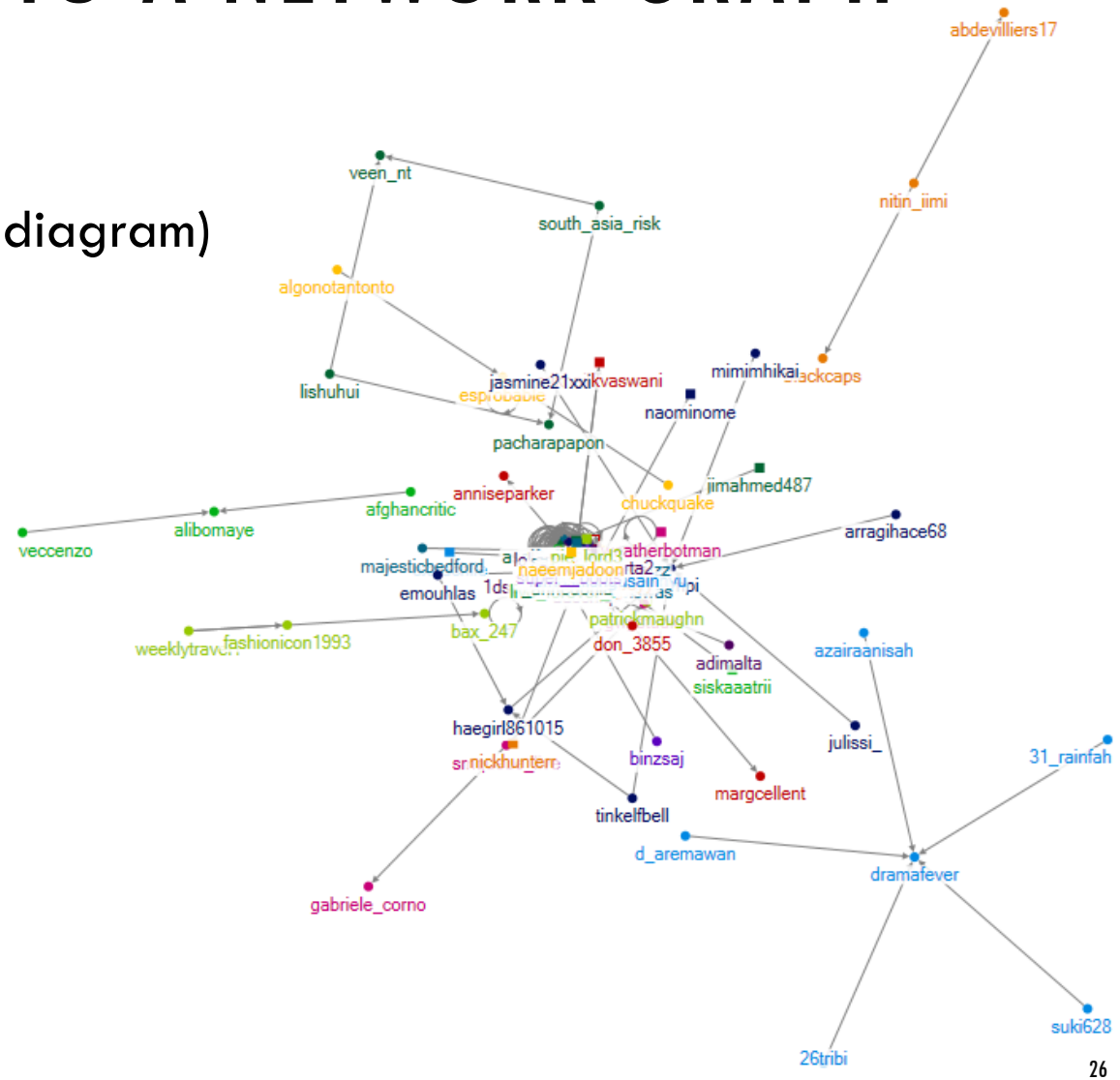
A RELATIONAL MATRIX TO A NETWORK GRAPH

(READ ACROSS)

	A	B	C	D	E	F	G	H	I
A	--								
B		--							
C			--						
D				--					
E					--				
F						--			
G							--		
H								--	
I									--

A RELATIONAL MATRIX TO A NETWORK GRAPH (CONT.)

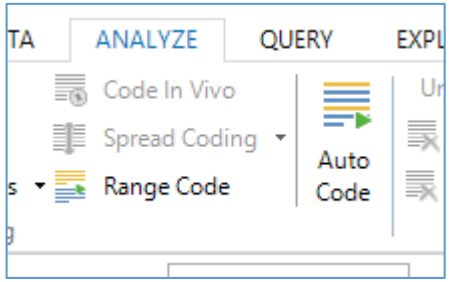
Node-link diagram (vertex-relationship diagram)



PATHS USED TO CONDUCT AUTO CODING RESULTING IN INTENSITY DATA MATRICES (IN NVIVO 12 PLUS)

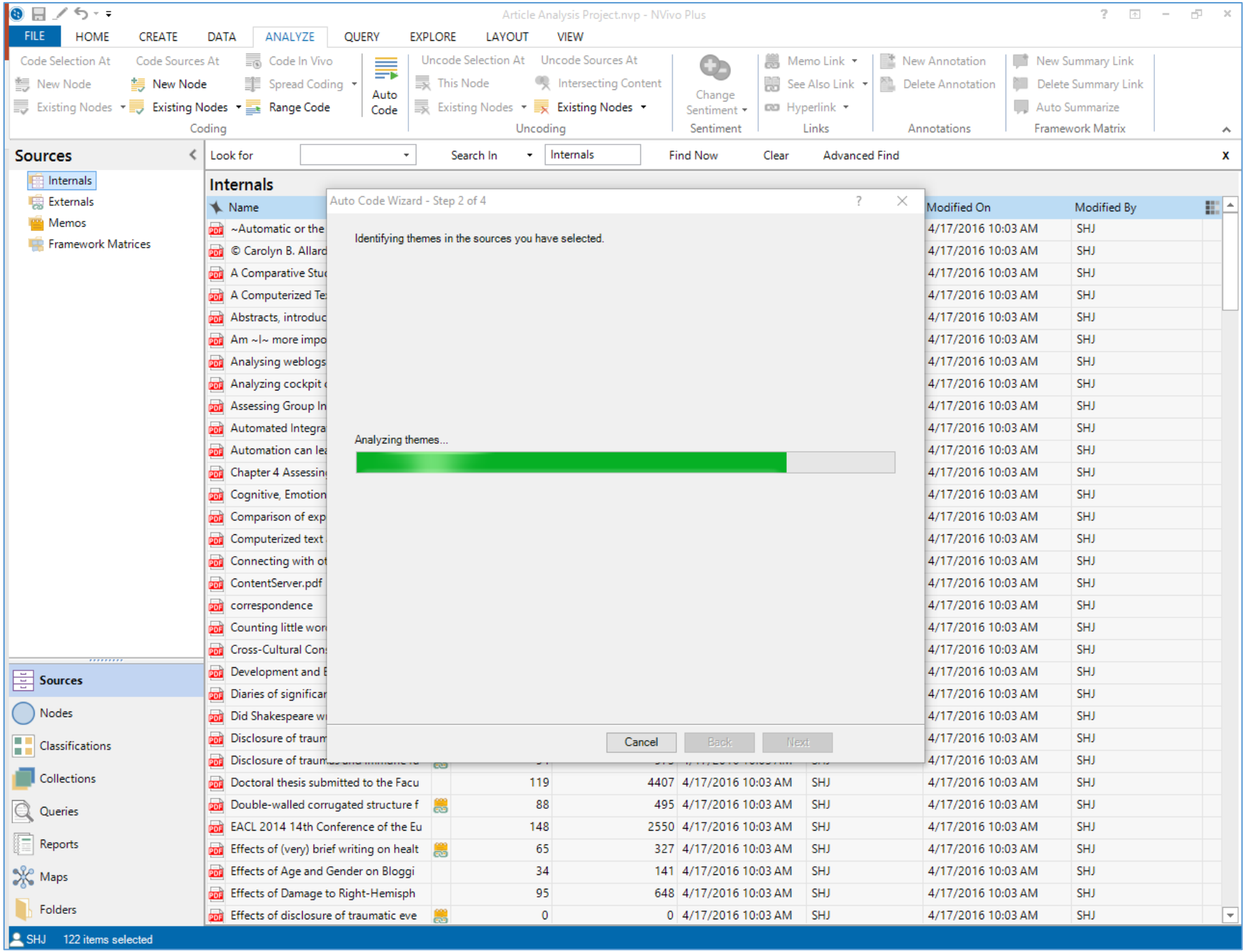
Theme and subtheme extraction / topic modeling

- Highlight source. (You can use CTRL + A to select all in a folder.)
- In ribbon, select Analyze tab. Click Auto Code Button.
- Select "Identify themes…"
- Proceed with the Auto Code Wizard…

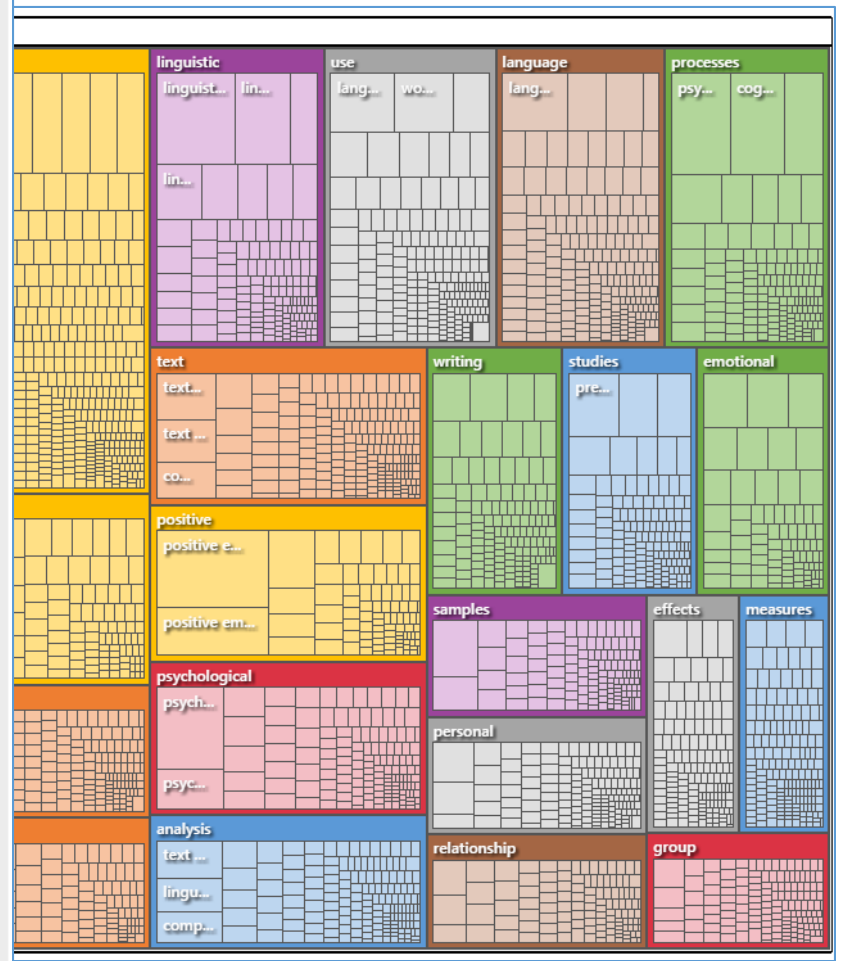


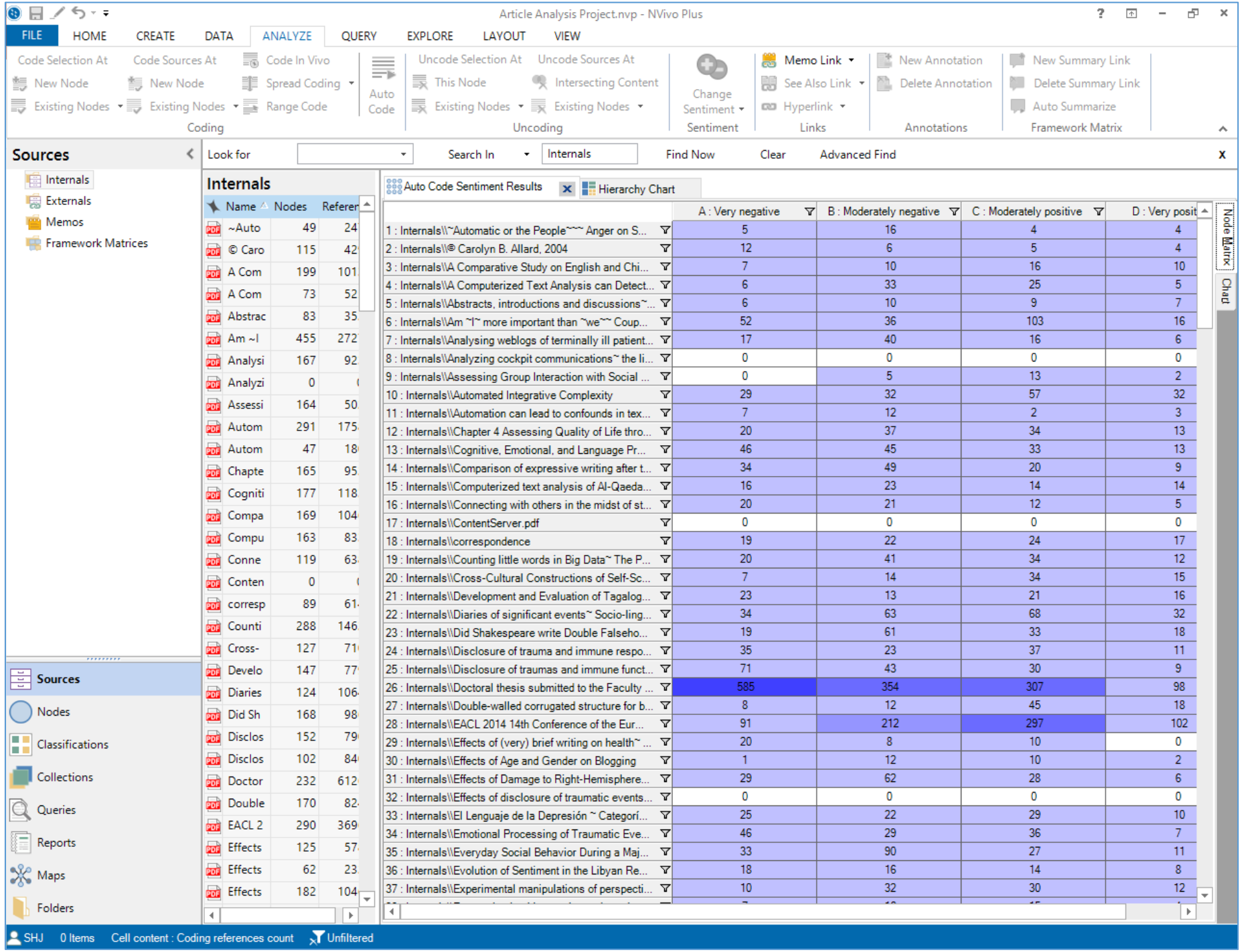
Sentiment extraction

- Highlight source. (You can use CTRL + A to select all in a folder.)
- In ribbon, select Analyze tab. Click Auto Code Button.
- Select "Identify sentiment…"
- Proceed with the Auto Code Wizard…


Article Analysis Project.nvp - NVivo Plus
FILE
HOME
CREATE
DATA
ANALYZE
QUERY
EXPLORE
LAYOUT
VIEW
Code Selection At
New Node
Existing Nodes
Code Sources At
New Node
Existing Nodes
Code In Vivo
Spread Coding
Range Code
Auto Code
Coding
Uncode Selection At
This Node
Existing Nodes
Uncode Sources At
Intersecting Content
Existing Nodes
Uncoding
Change Sentiment
Sentiment
Memo Link
See Also Link
Hyperlink
Links
New Annotation
Delete Annotation
Annotations
New Summary Link
Delete Summary Link
Auto Summarize
Framework Matrix
Sources
Internals
Externals
Memos
Framework Matrices
Look for
Search In
Internals
Find Now
Clear
Advanced Find
Internals
Name
Modified On
Modified By
Auto Code Wizard - Step 2 of 4
Identifying themes in the sources you have selected.
Analyzing themes...
Cancel
Back
Next
Sources
Nodes
Classifications
Collections
Queries
Reports
Maps
Folders
SHJ
122 items selected

	A : analysis	B : categories	C : effects	D : emotion
1 : Internals\\~Automatic or the People~~~ Anger on S...	6	0	0	0
2 : Internals\\© Carolyn B. Allard, 2004	0	0	0	6
3 : Internals\\A Comparative Study on English and Chi...	4	37	0	4
4 : Internals\\A Computerized Text Analysis can Detect...	4	0	1	3
5 : Internals\\Abstracts, introductions and discussions~...	1	0	1	0
6 : Internals\\Am ~I~ more important than ~we~~ Coup...	5	9	18	12
7 : Internals\\Analysing weblogs of terminally ill patient...	4	1	1	5
8 : Internals\\Analyzing cockpit communications~ the li...	0	0	0	0
9 : Internals\\Assessing Group Interaction with Social ...	8	3	0	1
10 : Internals\\Automated Integrative Complexity	13	1	4	0
11 : Internals\\Automation can lead to confounds in tex...	1	0	0	0
12 : Internals\\Chapter 4 Assessing Quality of Life thro...	5	3	0	3
13 : Internals\\Cognitive, Emotional, and Language Pr...	1	1	7	6
14 : Internals\\Comparison of expressive writing after t...	4	5	2	6
15 : Internals\\Computerized text analysis of Al-Qaeda...	8	4	1	7
16 : Internals\\Connecting with others in the midst of st...	3	7	0	5
17 : Internals\\ContentServer.pdf	0	0	0	0
18 : Internals\\correspondence	0	0	4	0
19 : Internals\\Counting little words in Big Data~ The P...	9	11	5	9
20 : Internals\\Cross-Cultural Constructions of Self-Sc...	0	3	0	0
21 : Internals\\Development and Evaluation of Tagalog...	6	1	0	1
22 : Internals\\Diaries of significant events~ Socio-ling...	4	1	2	0
23 : Internals\\Did Shakespeare write Double Falseho...	3	9	0	4
24 : Internals\\Disclosure of trauma and immune respo...	2	3	3	4
25 : Internals\\Disclosure of traumas and immune funct...	1	0	4	2
26 : Internals\\Doctoral thesis submitted to the Faculty ...	6	6	5	17
27 : Internals\\Double-walled corrugated structure for b...	7	3	2	3
28 : Internals\\EACL 2014 14th Conference of the Eur...	5	5	1	0
29 : Internals\\Effects of (very) brief writing on health~ ...	0	0	3	6
30 : Internals\\Effects of Age and Gender on Blogging	1	1	0	1
31 : Internals\\Effects of Damage to Right-Hemisphere...	3	4	6	15
32 : Internals\\Effects of disclosure of traumatic events...	0	0	0	0
33 : Internals\\El Lenguaje de la Depresión ~ Categorí...	3	4	2	6
34 : Internals\\Emotional Processing of Traumatic Eve...	4	3	2	9
35 : Internals\\Everyday Social Behavior During a Maj...	1	2	7	3
36 : Internals\\Evolution of Sentiment in the Libyan Re...	2	1	0	4
37 : Internals\\Experimental manipulations of perspecti...	2	0	6	0

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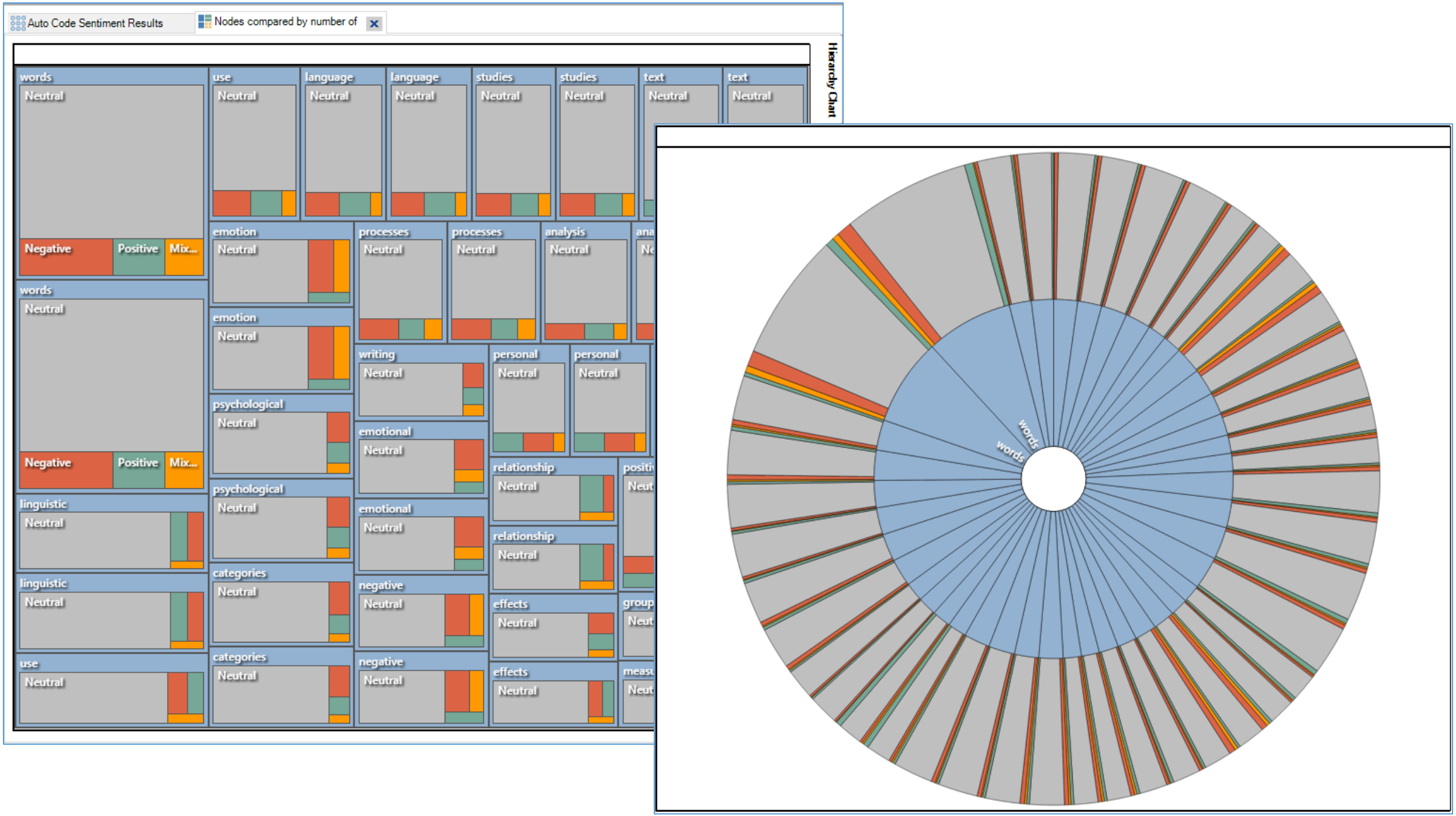
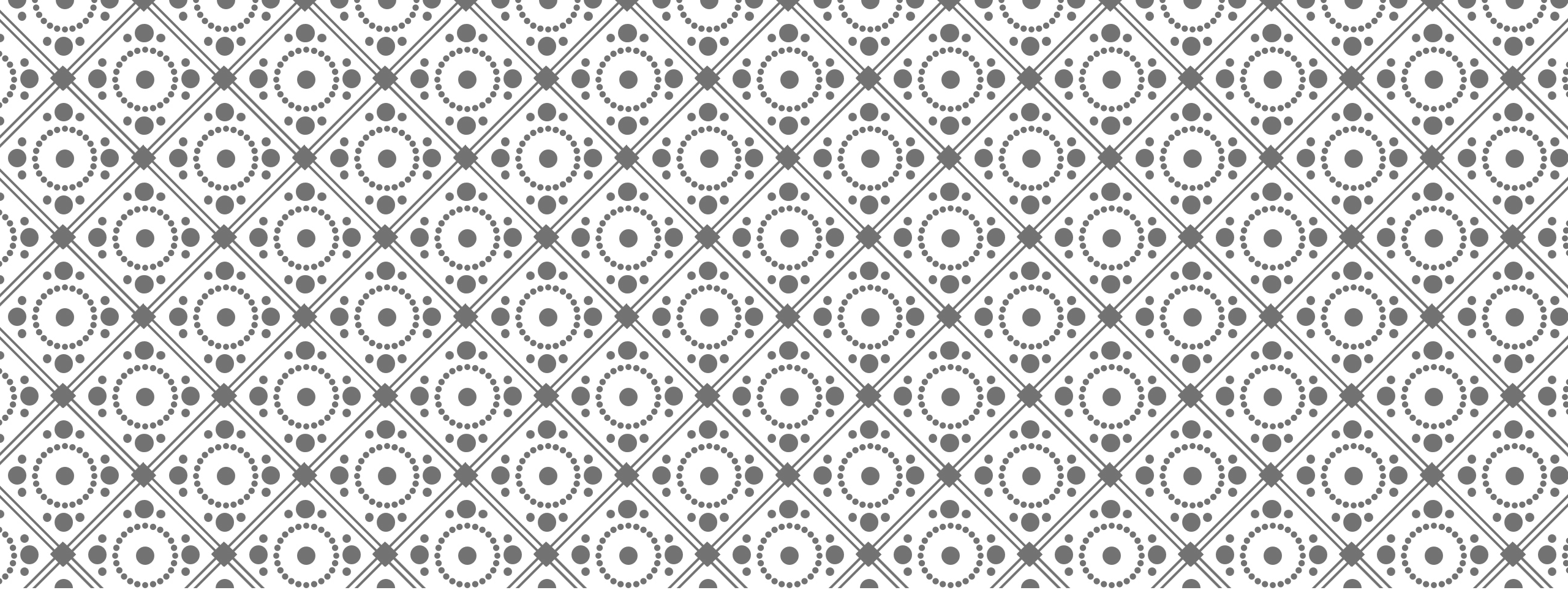
Existing Nodes
Code Sources At
New Node
Existing Nodes
Code In Vivo
Spread Coding
Range Code
Coding
Auto Code
Uncode Selection At
This Node
Existing Nodes
Uncode Sources At
Intersecting Content
Existing Nodes
Uncoding
Change Sentiment
Sentiment
Memo Link
See Also Link
Hyperlink
Links
New Annotation
Delete Annotation
Annotations
New Summary Link
Delete Summary Link
Auto Summarize
Framework Matrix
Sources
Internals
Externals
Memos
Framework Matrices
Look for
Search In
Internals
Find Now
Clear
Advanced Find
Internals
Name
Nodes
Auto Code Sentiment Results
Hierarchy Chart
A : Very negative
B : Moderately negative
C : Moderately positive
D : Very posit
1 : Internals\\~Automatic or the People~~~ Anger on S... 5 16 4 4
2 : Internals\\© Carolyn B. Allard, 2004 12 6 5 4
3 : Internals\\A Comparative Study on English and Chi... 7 10 16 10
4 : Internals\\A Computerized Text Analysis can Detect... 6 33 25 5
5 : Internals\\Abstracts, introductions and discussions~... 6 10 9 7
6 : Internals\\Am ~I~ more important than ~we~~ Coup... 52 36 103 16
7 : Internals\\Analysing weblogs of terminally ill patient... 17 40 16 6
8 : Internals\\Analyzing cockpit communications~ the li... 0 0 0 0
9 : Internals\\Assessing Group Interaction with Social ... 0 5 13 2
10 : Internals\\Automated Integrative Complexity 29 32 57 32
11 : Internals\\Automation can lead to confounds in tex... 7 12 2 3
12 : Internals\\Chapter 4 Assessing Quality of Life thro... 20 37 34 13
13 : Internals\\Cognitive, Emotional, and Language Pr... 46 45 33 13
14 : Internals\\Comparison of expressive writing after t... 34 49 20 9
15 : Internals\\Computerized text analysis of Al-Qaeda... 16 23 14 14
16 : Internals\\Connecting with others in the midst of st... 20 21 12 5
17 : Internals\\ContentServer.pdf 0 0 0 0
18 : Internals\\correspondence 19 22 24 17
19 : Internals\\Counting little words in Big Data~ The P... 20 41 34 12
20 : Internals\\Cross-Cultural Constructions of Self-Sc... 7 14 34 15
21 : Internals\\Development and Evaluation of Tagalog... 23 13 21 16
22 : Internals\\Diaries of significant events~ Socio-ling... 34 63 68 32
23 : Internals\\Did Shakespeare write Double Falseho... 19 61 33 18
24 : Internals\\Disclosure of trauma and immune respo... 35 23 37 11
25 : Internals\\Disclosure of traumas and immune funct... 71 43 30 9
26 : Internals\\Doctoral thesis submitted to the Faculty ... 585 354 307 98
27 : Internals\\Double-walled corrugated structure for b... 8 12 45 18
28 : Internals\\EACL 2014 14th Conference of the Eur... 91 212 297 102
29 : Internals\\Effects of (very) brief writing on health~ ... 20 8 10 0
30 : Internals\\Effects of Age and Gender on Blogging 1 12 10 2
31 : Internals\\Effects of Damage to Right-Hemisphere... 29 62 28 6
32 : Internals\\Effects of disclosure of traumatic events... 0 0 0 0
33 : Internals\\El Lenguaje de la Depresión ~ Categorí... 25 22 29 10
34 : Internals\\Emotional Processing of Traumatic Eve... 46 29 36 7
35 : Internals\\Everyday Social Behavior During a Maj... 33 90 27 11
36 : Internals\\Evolution of Sentiment in the Libyan Re... 18 16 14 8
37 : Internals\\Experimental manipulations of perspecti... 10 32 30 12
Node Matrix
Chart
Sources
Nodes
Classifications
Collections
Queries
Reports
Maps
Folders
SHJ
0 Items
Cell content : Coding references count
Unfiltered


Auto Code Sentiment Results
Nodes compared by number of
Hierarchy Chart
words
Neutral
Negative
Positive
Mix...
use
language
language
studies
studies
text
text
emotion
processes
processes
analysis
words
linguistic
linguistic
use
emotion
psychological
psychological
categories
categories
writing
emotional
emotional
negative
negative
personal
personal
relationship
relationship
effects
effects
words
words



4. SPECIFIC MATRIX "USE CASES"…

In Qualitative and Mixed Methods Research

MACHINE-READING RESEARCH ARTICLES (OR OTHER TEXTS) FOR THEMES AND SUB-THEMES

(TO SAVE ON HUMAN "CLOSE READING," ESP. OF RELATIVELY "BIG DATA" CORPUSES USING AUTOCODING)

	Theme or Concept or Phenomena or Individual (keyword or phrase)	Theme or Concept or Phenomena or Individual	Theme or Concept or Phenomena or Individual	Theme or Concept or Phenomena or Individual
Research article (or source) #1				
"				
"				
"				
"				
"				

COMPARING AND CONTRASTING RESEARCH SUBJECT RESPONSES BY CATEGORICAL GROUPINGS

	Sex	Age Group	Birthplace	Ethnicity	Income Level	Marital Status
Variable						

COMPARING AND CONTRASTING RESEARCH SUBJECT RESPONSES BY (CATEGORICAL) OUTCOMES

	On-time Graduation	Late Graduation	Withdrawal
Variable			
Variable			
Variable			
Variable			

EXPLORING POTENTIAL LOCATIONAL OR SPATIAL PATTERNS

	Location #1	Location #2	Location #3	Location #4
Interview Subject #1 / or Nodes / or … etc.				
#2				
#3				
…				

EXPLORING POTENTIAL TIME PATTERNS (LIKE CHANGES OVER TIME, LIKE PRE-POST EVENT TIME CHANGES)

	Time Period 1	Time Period 2	Time Period 3	Time Period 4
Variable				
Variable				
Variable				
…				

IDENTIFICATION OF OVERLAPS IN CODIFIED THEMES (MATRIX CODING QUERIES)

	Node	Node	Node…	
Node				
Node				
Node…				

OUTLIER CASE COMPARISONS

	Outlier Case A			
Outlier Case Z				

COMPARING SENTIMENTS, EMOTIONS, ATTITUDES, AND BELIEFS

	Sentiments	Emotions	Attitudes	Beliefs…
Interviewee #1				
…				

CROSS-QUERY RESPONSE ANALYSIS (COMPARISONS AND CONTRASTS)

	Question 1 Responses			
Question 2 Responses				

COMPARING CHANGES ACROSS TIME PERIODS

(TYPES OF TIME: DISCRETE, PERIODIC, CONTINUOUS; SHORT-TERM VS. LONGITUDINAL)

	Time Period #1	Time Period #2	…	
Variables of a Type				

INTER-RATER RELIABILITY (SIMILARITY/DIFFERENCE ANALYSIS)

	Coder A Coding			
Coder B Coding				

AUTOMATED SENTIMENT ANALYSIS

	Positive		Negative	
	Very Positive	Moderately Positive	Moderately Negative	Very Negative
Tweetstreams				
Interviews				
Facebook Postings				
Survey Responses Organized by Topic				
Newspaper Articles on a Specific Topic				
Ad Hoc #Hashtag Discussions				
Others…				

ALSO QUANT-BASED CROSS-TABULATION ANALYSES

(USED WITH NON-PARAMETRIC CATEGORICAL DATA)

Matrix Variables ("Banners" / Column Headers)

	A			
1				
	Data Cells with Counts			
	Need to Calculate:			
Matrix Variables ("Stubs" / Row Headers)	**(Observed Variables – Expected Variables)^2 / Expected Variables**			
	Need to calculate chi-squared			
	Need to calculate p (statistical significance level)			
	Need to calculate degrees of freedom (df) = (banners -1)(stubs -1)			

45

ALSO QUANT-BASED CROSS-TABULATION ANALYSES (CONT.)

(aka contingency tables)

Contrasting what is expected (if there is nothing acting on the variables) vs. what is observed

Results in associational observations (not causal ones), insufficient power to assert causation

Chi-square analysis based on:

- raw number counts and percentages: (actual observations - expected observations)^2 / expected observations
- Goodness-of-fit test (from pure randomness / null hypothesis to some form of non-randomness or patterning)
- Test of independence of variables (Of two categorical variables from one population: Is there any association between the two variables? Can the level or incidence of one be used as a possible predictor of the other variable?)

ALSO QUANT-BASED CROSS TABULATION ANALYSES (CONT.)

Degrees of freedom (df) = (number of banners – 1)*(number of stubs – 1)

- df consists of the mean of the chi square distribution
- df is used to calculate statistical significance of a chi-square statistic and the (in)validity of the null hypothesis

Minimum of 2x2 tables but may be much larger

p-value (probability of obtaining a particular observed result)

A value used to assess statistical significance ($p < .05$, $p < .01$, or other)

Will need to transfer table to another tool (Excel, Qualtrics) for the complete cross-tabulation analysis (by setting up a pivot table, calculating expected frequencies, calculating observed frequencies, frequency distributions, percentages of columns and of rows, etc.

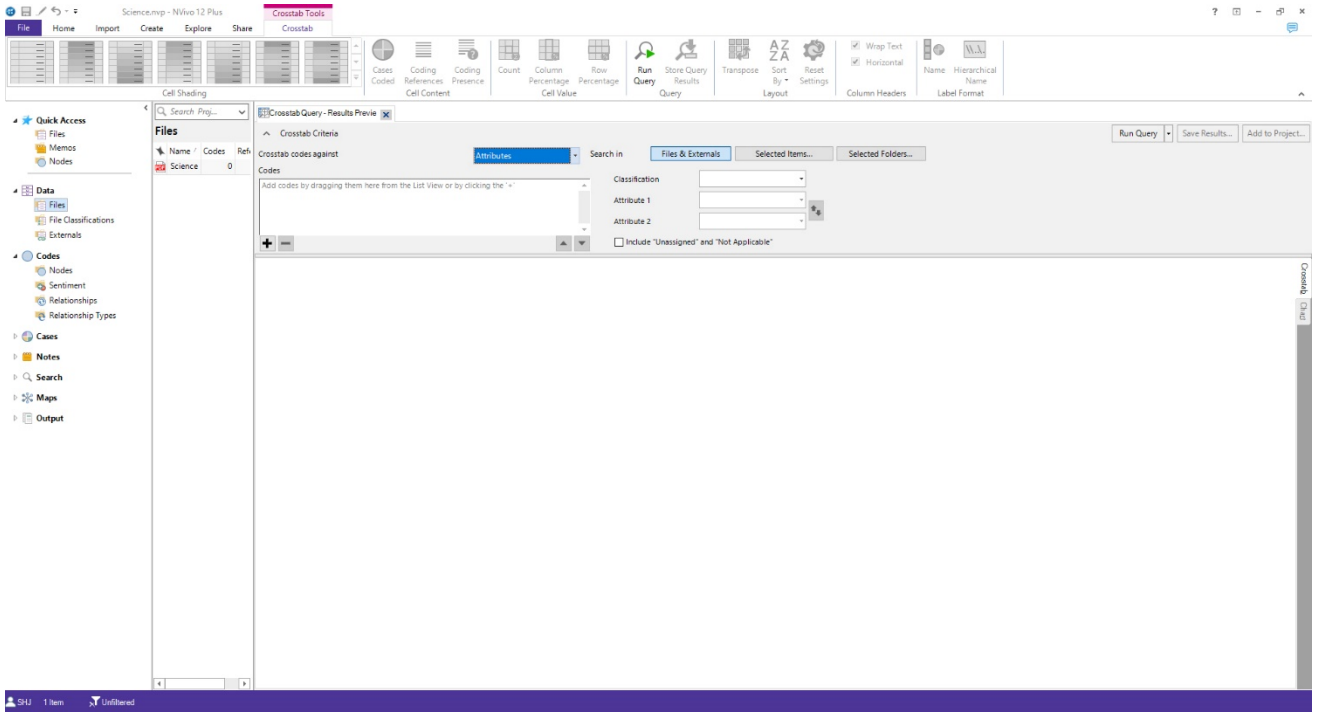
QUALITATIVE CROSS-TABULATION ANALYSIS IN NVIVO 12 PLUS

The newest version of NVivo enables a qualitative cross-tabulation analysis, which is built off of a matrix. Basically, users may cross-reference selected cases (individual persons or "egos," groups or "entities") or demographic attributes against various folders…or codes (themes / topics)… to identify relationships that may be otherwise latent.

The respective cells contain numbers.

No chi-squared analysis or statistical significance number is calculate.

The result is an intensity matrix based on number counts alone.



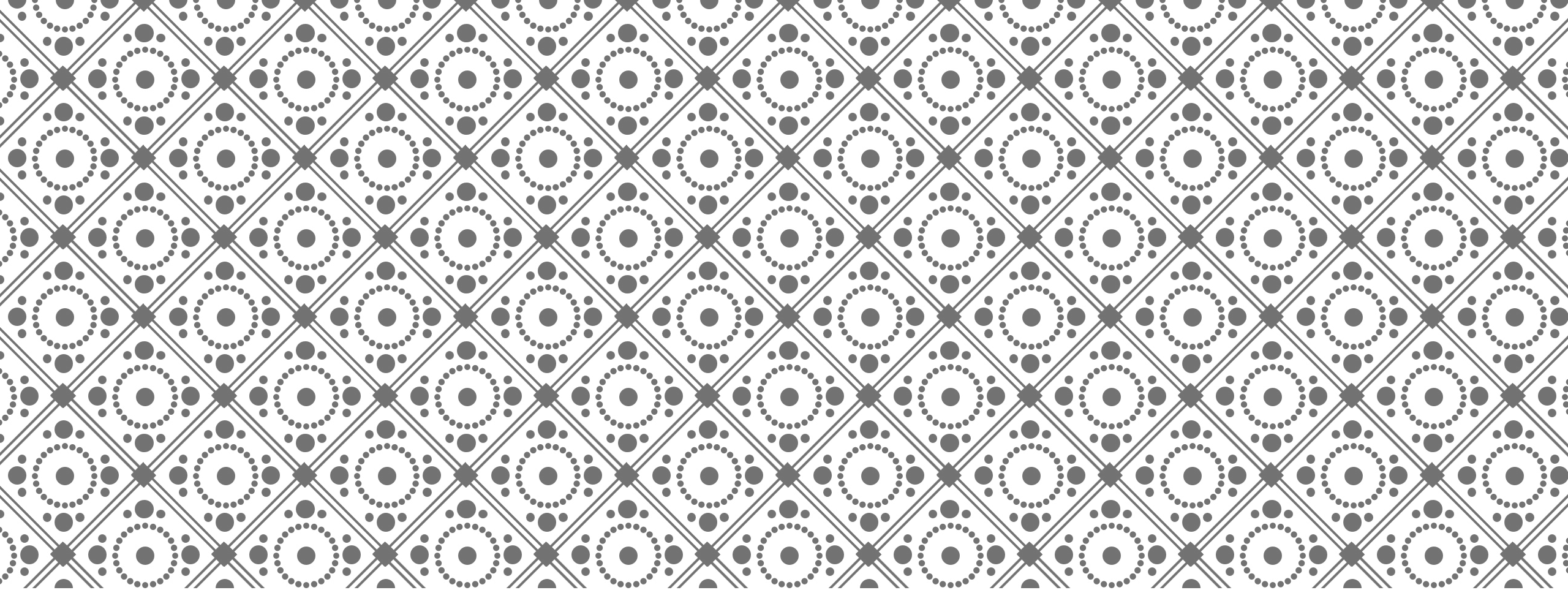
ADDING VALUE TO QUALITATIVE CROSS-TABULATION ANALYSES

Use case nodes (egos/individuals and entities/groups)

Use classification sheets to enable the grouping of egos and entities based on demographic and other (defined) dimensions / attributes / factors

Hypothesize *a priori* based on qualitative cross-tabulations

Hypothesize in a *post hoc* way based on cross-tabulations (but be sure to indicate these as such)



WRAP-UP

WHERE MATRICES COME FROM

Not all matrices come from matrix queries or matrix coding queries

Some forms of autocoding / machine learning (sentiment analysis, theme and sub-theme extraction) result in intensity matrices that are used to report out the findings

From the matrices, various data visualizations may be created, including bar charts, social network graphs (from Twitter®), and hierarchy charts (treemap and sunburst diagrams in NVivo 12 Plus)

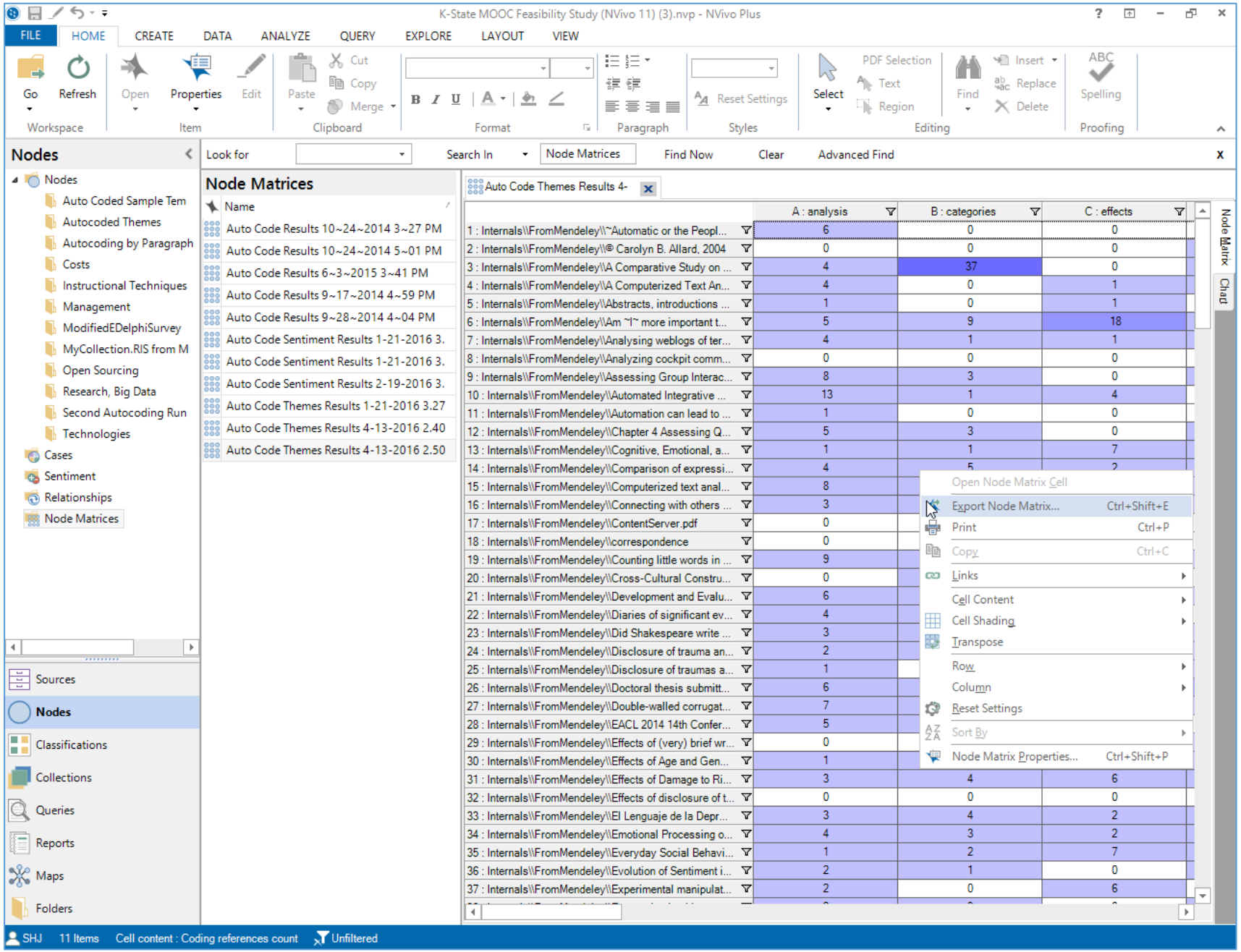
EXPORT OF MATRICES

Matrices export out as .txt, .xl, and .xlsx formats

Extracted data (highly portable) may be analyzed in other software tools and in other ways

~ to a data table, for some of the autocoded matrices:

- Column headers are variables
- Rows are records


K-State MOOC Feasibility Study (NVivo 11) (3).nvp - NVivo Plus
FILE
HOME
CREATE
DATA
ANALYZE
QUERY
EXPLORE
LAYOUT
VIEW
Go
Refresh
Open
Properties
Edit
Paste
Cut
Copy
Merge
Workspace
Item
Clipboard
Format
Paragraph
Reset Settings
Styles
Select
PDF Selection
Text
Region
Find
Insert
Replace
Delete
Editing
ABC
Spelling
Proofing
Nodes
Nodes
Auto Coded Sample Tem
Autocoded Themes
Autocoding by Paragraph
Costs
Instructional Techniques
Management
ModifiedEDelphiSurvey
MyCollection.RIS from M
Open Sourcing
Research, Big Data
Second Autocoding Run
Technologies
Cases
Sentiment
Relationships
Node Matrices
Look for
Search In
Node Matrices
Find Now
Clear
Advanced Find
Node Matrices
Name
Auto Code Results 10~24~2014 3~27 PM
Auto Code Results 10~24~2014 5~01 PM
Auto Code Results 6~3~2015 3~41 PM
Auto Code Results 9~17~2014 4~59 PM
Auto Code Results 9~28~2014 4~04 PM
Auto Code Sentiment Results 1-21-2016 3.
Auto Code Sentiment Results 1-21-2016 3.
Auto Code Sentiment Results 2-19-2016 3.
Auto Code Themes Results 1-21-2016 3.27
Auto Code Themes Results 4-13-2016 2.40
Auto Code Themes Results 4-13-2016 2.50
Auto Code Themes Results 4-
A : analysis
B : categories
C : effects
1 : Internals\\FromMendeley\\~Automatic or the Peopl... 6 0 0
2 : Internals\\FromMendeley\\© Carolyn B. Allard, 2004 0 0 0
3 : Internals\\FromMendeley\\A Comparative Study on ... 4 37 0
4 : Internals\\FromMendeley\\A Computerized Text An... 4 0 1
5 : Internals\\FromMendeley\\Abstracts, introductions ... 1 0 1
6 : Internals\\FromMendeley\\Am ~I~ more important t... 5 9 18
7 : Internals\\FromMendeley\\Analysing weblogs of ter... 4 1 1
8 : Internals\\FromMendeley\\Analyzing cockpit comm... 0 0 0
9 : Internals\\FromMendeley\\Assessing Group Interac... 8 3 0
10 : Internals\\FromMendeley\\Automated Integrative ... 13 1 4
11 : Internals\\FromMendeley\\Automation can lead to ... 1 0 0
12 : Internals\\FromMendeley\\Chapter 4 Assessing Q... 5 3 0
13 : Internals\\FromMendeley\\Cognitive, Emotional, a... 1 1 7
14 : Internals\\FromMendeley\\Comparison of expressi... 4
15 : Internals\\FromMendeley\\Computerized text anal... 8
16 : Internals\\FromMendeley\\Connecting with others ... 3
17 : Internals\\FromMendeley\\ContentServer.pdf 0
18 : Internals\\FromMendeley\\correspondence 0
19 : Internals\\FromMendeley\\Counting little words in ... 9
20 : Internals\\FromMendeley\\Cross-Cultural Constru... 0
21 : Internals\\FromMendeley\\Development and Evalu... 6
22 : Internals\\FromMendeley\\Diaries of significant ev... 4
23 : Internals\\FromMendeley\\Did Shakespeare write ... 3
24 : Internals\\FromMendeley\\Disclosure of trauma an... 2
25 : Internals\\FromMendeley\\Disclosure of traumas a... 1
26 : Internals\\FromMendeley\\Doctoral thesis submitt... 6
27 : Internals\\FromMendeley\\Double-walled corrugat... 7
28 : Internals\\FromMendeley\\EACL 2014 14th Confer... 5
29 : Internals\\FromMendeley\\Effects of (very) brief wr... 0
30 : Internals\\FromMendeley\\Effects of Age and Gen... 1
31 : Internals\\FromMendeley\\Effects of Damage to Ri... 3 4 6
32 : Internals\\FromMendeley\\Effects of disclosure of t... 0 0 0
33 : Internals\\FromMendeley\\El Lenguaje de la Depr... 3 4 2
34 : Internals\\FromMendeley\\Emotional Processing o... 4 3 2
35 : Internals\\FromMendeley\\Everyday Social Behavi... 1 2 7
36 : Internals\\FromMendeley\\Evolution of Sentiment i... 2 1 0
37 : Internals\\FromMendeley\\Experimental manipulat... 2 0 6
Open Node Matrix Cell
Export Node Matrix... Ctrl+Shift+E
Print Ctrl+P
Copy Ctrl+C
Links
Cell Content
Cell Shading
Transpose
Row
Column
Reset Settings
Sort By
Node Matrix Properties... Ctrl+Shift+P
Node Matrix
Chart
Sources
Nodes
Classifications
Collections
Queries
Reports
Maps
Folders
SHJ
11 Items
Cell content : Coding references count
Unfiltered

ADDITIONAL QUESTIONS?

What are some other types of matrix queries possible based on your own research? How would you set up your matrix query, and why? (Is there a manual equivalency to a computerized matrix query? A computerized equivalency outside of NVivo? How would that work (in either case)?)

What can matrix queries tell you that you could not find out otherwise? (Or if the matrix query is not possible, what are some other ways to surface and discover the same information?)

How would you present matrix query findings in a presentation? A research paper? [When would you keep a matrix query's findings on background (just for your analysis)? When would you put a matrix query's findings on foreground (in publications and presentations for the public consumption)?]

ADDITIONAL QUESTIONS? (CONT.)

How would you use some matrix data visualizations with data created in autocoded / auto-created ways?

How would you represent the findings?

Besides bar charts, what are some other ways to represent matrix data?

- What about relational matrices expressed as network graphs? (a very common visualization)

CONCLUSION AND CONTACT INFORMATION

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The presenter has no formal tie to QSR International.

The student subscription version of NVivo 12 Plus (available for about $70 a year for a two-year subscription) enables matrix queries and matrix-based visualizations. It is a full performance version of the software.