

The
Coding
Manual for
Qualitative
Researchers

»»» 5E «««

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For

Norman K. Denzin,

who opened the door and invited me in ...

Brief Contents

<i>Detailed Contents</i>	ix
<i>List of Figures</i>	xix
<i>Acknowledgements</i>	xxiii
<i>About the Author</i>	xxv
<i>Preface to the Fifth Edition</i>	xxvii
<i>Online Resources</i>	xxix
Part I Coding Foundations	1
1 An Introduction to Codes and Coding	3
2 Fundamental Coding Methods and Techniques	27
3 Writing Analytic Memos About Narrative and Visual Data	65
Part II First Cycle Coding Methods	97
4 Selecting First Cycle Coding Methods	99
5 Grammatical Coding Methods	125
6 Elemental Coding Methods	145
7 Affective Coding Methods	183
8 Literary and Language Coding Methods	211
9 Exploratory Coding Methods	245
10 Procedural Coding Methods	263
11 Methods of Themeing the Data	293
Part III Second Cycle Coding Methods	315
12 Transitioning From First to Second Cycle Coding Methods	317
13 Second Cycle Grounded Theory Coding Methods	343
14 Second Cycle Cumulative Coding Methods	365
15 After First and Second Cycle Coding Methods	387
<i>Appendix A: A Glossary of Coding Methods</i>	409
<i>Appendix B: A Glossary of Analytic Recommendations</i>	419
<i>Appendix C: Forms for Additional Coding Methods</i>	425
<i>References</i>	429
<i>Index</i>	455

Detailed Contents

<i>List of Figures</i>	xix
<i>Acknowledgements</i>	xxiii
<i>About the Author</i>	xxv
<i>Preface to the Fifth Edition</i>	xxvii
<i>Online Resources</i>	xxix

Part I Coding Foundations 1

1 An Introduction to Codes and Coding 3

Chapter Summary	3
Purposes of the Manual	4
What Is a Code?	5
Coding examples	6
Coding for patterns	8
Coding lenses, filters, and angles	10
Coding as a heuristic	12
Codifying and Categorizing	13
From codes to categories	13
Recoding and recategorizing	15
From codes and categories to theory	18
The differences between codes and themes	21
Necessary Personal Attributes for Coding	22
Critiques Against Coding	23

2 Fundamental Coding Methods and Techniques 27

Chapter Summary	27
Coding as Craft	28
What Gets Coded?	28
The coded researcher	28
Amounts of data to code	29
Preliminary Coding Techniques	30
Data layout	30
Pre-coding	32
Preliminary jottings	33
Questions to consider as you code	34
Coding contrasting data	35
The Numbers of Codes	35

“Lumping” and “splitting” the data	36
Code proliferation	37
The quantities of qualities	40
“Quantitizing” the qualitative	41
Deductive and/or Inductive Coding	43
The Codebook or Code List	44
Manual and CAQDAS Coding	48
Coding manually	48
Coding electronically	50
Data formatting for CAQDAS	53
Coding capabilities with CAQDAS	53
Searches and queries with CAQDAS	55
Solo and Team Coding	57
Coding solo	57
Coding collaboratively	57
Multiple coders	59
On AI and ChatGPT	60
On Translated Data and Coding	62
On Method	63
3 Writing Analytic Memos About Narrative and Visual Data	65
Chapter Summary	65
The Purposes of Analytic Memo Writing	66
What Is an Analytic Memo?	66
Examples of Analytic Memos	67
Additional analytic memo topics and prompts	79
Reflection and refraction	80
Coding and Categorizing Analytic Memos	81
Analytic memos generate codes, categories, themes, and concepts	81
Grounded Theory and Its Coding Canon	82
Analyzing Visual Data	82
Photographs	84
Documents and artifacts	89
Live and video-recorded action	91
Recommended guidance	95
Part II First Cycle Coding Methods	97
4 Selecting First Cycle Coding Methods	99
Chapter Summary	99
The Coding Cycles	100
Selecting the Appropriate Coding Method(s)	100
Various perspectives on coding decisions	102

Research question alignment	103
Paradigmatic, conceptual, and methodological considerations	104
Coding and a priori goals	104
Coding in mixed methods studies	106
Exploratory coding	107
Descriptive Coding as a common default	107
“Generic” coding methods	109
New and hybrid coding schemes	110
General criteria for coding decisions	111
On overwhelming fear	113
A First and Second Cycle Coding Example	113
Overview of First Cycle Methods	121
The Coding Methods Profiles	122
Sources	122
Description	122
Applications	122
Example	123
Analysis	124
Notes	124
5 Grammatical Coding Methods	125
Chapter Summary	125
Attribute Coding	126
Sources	126
Description	126
Applications	126
Examples	126
Analysis	127
Notes	129
Magnitude Coding	129
Sources	129
Description	129
Applications	129
Examples	130
Analysis	134
Notes	137
Subcoding	137
Sources	137
Description	137
Applications	137
Example	138
Analysis	138
Notes	140

Simultaneous Coding	140
Source	140
Description	140
Applications	140
Examples	141
Analysis	142
Notes	143

6	Elemental Coding Methods	145
----------	---------------------------------	------------

Chapter Summary	145
Structural Coding	146
Sources	146
Description	146
Applications	146
Example	146
Analysis	148
Notes	149
Descriptive Coding	149
Sources	149
Description	149
Applications	150
Example	150
Notes	153
In Vivo Coding	153
Sources	153
Description	153
Applications	154
Example	154
Analysis	155
Process Coding	160
Sources	160
Description	160
Applications	161
Example	161
Notes	165
Initial Coding	165
Sources	165
Description	166
Applications	166
Example	166
Analysis	168
Notes	170
Icon Coding	170

Sources	170
Description	170
Applications	170
Example	171
Analysis	172
Notes	175
Concept Coding	177
Sources	177
Description	177
Applications	178
Example	178
Analysis	179
Notes	182
7 Affective Coding Methods	183
Chapter Summary	183
Emotion Coding	184
Sources	184
Description	184
Applications	184
Example	185
Analysis	186
Notes	192
Values Coding	192
Sources	192
Description	192
Applications	194
Example	194
Analysis	195
Notes	200
Versus Coding	200
Sources	200
Description	200
Applications	201
Example	201
Analysis	202
Notes	205
Evaluation Coding	205
Sources	205
Description	206
Applications	206
Example	206
Analysis	208
Notes	210

8 Literary and Language Coding Methods	211
Chapter Summary	211
Dramaturgical Coding	212
Sources	212
Description	212
Applications	212
Example	213
Analysis	216
Notes	220
Motif Coding	221
Sources	221
Description	221
Applications	221
Example	222
Notes	225
Narrative Coding	225
Sources	225
Description	225
Applications	226
Example	226
Notes	231
Metaphor Coding	232
Sources	232
Description	232
Applications	232
Example	233
Analysis	234
Notes	237
Verbal Exchange Coding	238
Source	238
Description	238
Applications	239
Example	239
Analysis	241
Notes	244
9 Exploratory Coding Methods	245
Chapter Summary	245
Holistic Coding	246
Source	246
Description	246
Applications	246
Example	246

Analysis	247
Notes	248
Provisional Coding	248
Sources	248
Description	249
Applications	249
Example	249
Analysis	250
Notes	252
Hypothesis Coding	252
Sources	252
Description	252
Applications	252
Example	253
Analysis	254
Notes	255
Eclectic Coding	256
Sources	256
Description	256
Applications	256
Example	256
Analysis	257
Notes	261
10 Procedural Coding Methods	263
Chapter Summary	263
Protocol Coding	264
Sources	264
Description	264
Applications	264
Example	264
Analysis	265
Notes	266
OCM (Outline of Cultural Materials) Coding	267
Sources	267
Description	267
Applications	268
Example	268
Analysis	269
Notes	270
Domain and Taxonomic Coding	270
Sources	270
Description	270

Applications	272
Example	272
Analysis	274
Notes	276
Causation Coding	276
Sources	276
Description	276
Applications	278
Example	280
Analysis	282
Notes	290
11 Methods of Themeing the Data	293
Chapter Summary	293
Themes in Qualitative Data Analysis	294
Themeing the Data: Categorically	296
Sources	296
Description	296
Applications	296
Example	297
Analysis	299
Notes	305
Themeing the Data: Phenomenologically	305
Sources	305
Description	305
Applications	306
Example	306
Analysis	308
Notes	312
Metaethnography, Metasummary, and Metasynthesis	312
Part III Second Cycle Coding Methods	315
12 Transitioning from First to Second Cycle Coding Methods	317
Chapter Summary	317
Post-coding Transitions	318
Code Mapping and Landscaping	319
Code Mapping	319
Code Landscaping	325
Operational Model Diagramming	330
Additional Transition Methods	333
Coding the Codes	333
Code Charting	334
Pie-chart coding	335

Tabletop Categories	336
From Codes to Themes	337
“Shop Talking” Through the Study	337
ChatGPT-4 Follow-Up	338
Transitioning to Second Cycle Coding Methods	340
13 Second Cycle Grounded Theory Coding Methods	343
Chapter Summary	343
On Grounded Theory	344
Focused Coding	346
Source	346
Description	346
Applications	346
Example	346
Analysis	349
Notes	351
Axial Coding	351
Sources	351
Description	351
Applications	352
Example	352
Analysis	352
Notes	357
Theoretical Coding	357
Sources	357
Description	357
Applications	358
Example	359
Analysis	360
Notes	363
14 Second Cycle Cumulative Coding Methods	365
Chapter Summary	365
Pattern Coding	366
Source	366
Description	366
Applications	366
Example	366
Analysis	369
Notes	370
Elaborative Coding	370
Source	370
Description	370
Applications	371

Example	371
Analysis	372
Notes	375
Longitudinal Coding	375
Sources	375
Description	375
Applications	379
Example	379
Analysis	381
Notes	385
15 After First and Second Cycle Coding Methods	387
Chapter Summary	387
Post-coding and Pre-writing Transitions	388
Focusing Strategies	388
The “Top 10” List	389
The Study’s “Trinity”	389
Codeweaving	390
The “touch test”	390
Findings “at a Glance”	391
From Coding to Theorizing	392
Elements of a Theory	392
Categories to Concepts	393
Category Relationships	396
Analytic Memos as Sources for Theory	397
Formatting Matters	398
Rich Text Emphasis	398
Headings and Subheadings	398
Writing About Coding	399
Ordering and Reordering	402
Analytic Storylining	402
One Thing at a Time	403
Begin with the Conclusion	404
Assistance from Others	404
Peer and Online Support	404
Searching for “Buried Treasure”	405
Closure	405
<i>Appendix A: A Glossary of Coding Methods</i>	409
<i>Appendix B: A Glossary of Analytic Recommendations</i>	419
<i>Appendix C: Forms for Additional Coding Methods</i>	425
<i>References</i>	429
<i>Index</i>	455

List of Figures

1.1	A streamlined codes-to-theory model for qualitative inquiry	18
1.2	From data to themes (Source: Naeem et al., 2023, p. 3)	20
2.1	An ATLAS.ti code frequency screenshot (courtesy of Ivana Radivojevic, atlasti.com)	36
2.2	Individual In Vivo Codes on separate slips of paper (photo by the study's researcher, anonymity requested)	38
2.3	A sample codebook (Source: Saldaña & Omasta, 2018, pp. 228–9)	46
2.4	A Microsoft Word field notes document with codes in a right-margin text box (courtesy of Teresa Minarsich)	49
2.5	A Microsoft Excel spreadsheet with mixed methods data and codes in its cells	50
2.6	An ATLAS.ti word cloud (courtesy of Ivana Radivojevic, atlasti.com)	52
2.7	A QDA Miner coding co-occurrences 3D map (courtesy of Normand Péladeau, Provalis Research, provalisresearch.com)	52
2.8	A screenshot from Quirkos software (courtesy of Daniel Turner, quirkos.com; original in color)	54
2.9	A Dedoose Code Co-occurrence matrix (courtesy of Sara E. Grummert, dedoose.com)	55
2.10	NVivo 14 coded interview comparison (courtesy of Pattie Hall and Silvana di Gregorio, used with permission from Lumivero, lumivero.com/products/nvivo/)	56
2.11	Category comparison after Values Coding	61
2.12	Thematic analysis comparison	62
3.1	An analytic memo sketch	74
3.2	An elemental model for developing “classic” grounded theory	83
3.3	NVivo 14 image coding by region (courtesy of Pattie Hall and Silvana di Gregorio, used with permission from Lumivero, lumivero.com/products/nvivo/)	85
3.4	webQDA image coding by region (courtesy of António Pedro Costa, webqda.net)	85
3.5	Downtown suburban renovation (original in color; photo by Eliana Watson)	86
3.6	A university student in a library (original in black and white; photo by Eliana Watson)	87

3.7	A mask representing a service member's frustrations and existential reflections with military experiences (original in color) (Source: Walker et al. (2017). The masks were made by military service members during art therapy treatment at the National Intrepid Center of Excellence, Walter Reed National Military Medical Center, Bethesda, MD)	91
3.8	A screenshot from Transana software (courtesy of David K. Woods, transana.com)	94
3.9	A screenshot from INTERACT software (courtesy of Reinhard Grassl, Mangold International, mangold-international.com)	94
4.1	First cycle and second cycle coding methods (see Appendix A for descriptions)	101
4.2	An In Vivo coded excerpt (Source: Terkel, 1972, p. xxxi)	114
4.3	The interrelationship between three Focused Codes	120
4.4	An arts-based model of interrelationship	120
6.1	An illustrated process for spreading rumors	163
6.2	Emoji coding with Quirkos software (courtesy of Daniel Turner, quirkos.com)	176
6.3	Circular Plot Type: Mina (Source: Maldonado et al., 2023, p. 9)	176
7.1	An emotional arc for a participant's account	187
7.2	An integrated system of values, attitudes, and beliefs	193
7.3	A fourth-grade teacher's values, attitudes, and beliefs	196
7.4	An ATLAS.ti Sankey flow diagram of a values system (courtesy of Ivana Radivojevic, atlasti.com)	198
8.1	Social media see-saw: positive and negative affect influences (Source: Weinstein, 2018, p. 3617)	236
10.1	Excerpts from a taxonomic tree diagram of the ways children oppress others	275
10.2	A causation model of speech classes as LifeForce Preparation	286
10.3	A gear graphic template for Causation Coding triplets	286
11.1	A thematic map	301
11.2	An arts-based thematic representation (Source: www.freepik.com/free-photo/close-up-elderly-man-holding-asthma-inhaler_10851281.htm#)	313
12.1	Codes, subcodes, and numeric frequencies in Delve (courtesy of LaiYee Ho, Delve qualitative analysis software, www.delvetool.com)	325
12.2	A word cloud graphic of an interview transcript (created with tagcrowd.com)	326

12.3	Code landscaping of a major category and its subcategories and sub-subcategories	327
12.4	A MAXQDA code matrix browser (courtesy of Maren Heise, VERBI Software/MAXQDA, maxqda.com)	329
12.5	A QDA Miner heatmap (courtesy of Normand Péladeau, Provalis Research, provalisresearch.com)	329
12.6	An operational model diagram of an urban teacher's cultural shock and survival processes	331
12.7	A QDA Miner correspondence plot (courtesy of Normand Péladeau, Provalis Research, provalisresearch.com)	332
12.8	An ATLAS.ti network diagram (courtesy of Ivana Radivojevic, atlasti.com)	333
12.9	A data and codes summary table	335
12.10	A pie-chart representation of a teacher's cultural shock and adaptation	336
12.11	An arrangement of tabletop categories	336
12.12	A ChatGPT-4o thematic illustration of Sam's interview (original in color)	339
12.13	A streamlined codes-to-theory model for qualitative inquiry	341
13.1	An elemental model for developing "classic" grounded theory	345
13.2	A tree diagram from categories and subcategories	349
13.3	Two Axial Codes and their related categories	353
13.4	A simple properties and dimensions table derived from Axial Coding	356
13.5	A diagram for a central/core category and its major processes	360
13.6	A flowchart matrix of Focused Codes to a grounded theory	361
14.1	Codes assembled to determine their Pattern Codes	368
14.2	A longitudinal qualitative data summary matrix (Source: Saldaña, 2003, courtesy of Rowman and Littlefield Publishing Group/AltaMira Press)	377
14.3	A sample handwritten longitudinal matrix with qualitative data	382
15.1	A trinity of concepts as a Venn diagram (based on Soklaridis, 2009)	390
15.2	NVivo 14 concept map (courtesy of Pattie Hall and Silvana di Gregorio, used with permission from Lumivero, lumivero.com/products/nvivo/)	395
15.3	Coding process diagram (Source: Kelly, Harbin, & Schwartz, 2023, p. 5)	402

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About the Author

Johnny Saldaña is Professor Emeritus from Arizona State University's (ASU) School of Film, Dance, and Theatre in the Herberger Institute for Design and the Arts, where he taught from 1981 to 2014. He received his BFA in Drama and English Education in 1976, and MFA in Drama Education in 1979 from the University of Texas at Austin.

He is the author of *Longitudinal Qualitative Research: Analyzing Change through Time* (AltaMira Press, 2003); *Fundamentals of Qualitative Research* (Oxford University Press, 2011); *Ethnotheatre: Research from Page to Stage* (Left Coast Press, 2011); *Thinking Qualitatively: Methods of Mind* (Sage Publications, 2015); *Developing Theory Through Qualitative Inquiry* (Sage Publications, 2025); a commissioned title for Routledge's World Library of Educationalists Series, *Writing Qualitatively: The Selected Works of Johnny Saldaña* (Routledge, 2018); co-author with the late Matthew B. Miles and A. Michael Huberman for *Qualitative Data Analysis: A Methods Sourcebook* (4th ed., Sage Publications, 2020); co-author with Matt Omasta for *Qualitative Research: Analyzing Life* (2nd ed., Sage Publications, 2022); and the editor of *Ethnodrama: An Anthology of Reality Theatre* (AltaMira Press, 2005). Previous editions of *The Coding Manual for Qualitative Researchers* have been translated into Korean, Turkish, and Chinese-Simplified.

Saldaña's methods works have been cited and referenced in more than 50,000 research studies conducted in over 135 countries in disciplines such as K-12 and higher education, medicine and health care, technology and social media, business and economics, government and social services, the fine arts, the social sciences, human development, and communication. He has published a wide range of research articles in journals such as *Research in Drama Education*, *The Qualitative Report*, *Multicultural Perspectives*, *Youth Theatre Journal*, *Journal of Curriculum and Pedagogy*, *Teaching Theatre*, *Research Studies in Music Education*, *Cultural Studies ↔ Critical Methodologies*, the *International Journal of Qualitative Methods*, the *International Review of Qualitative Research*, and *Qualitative Inquiry*, and has contributed several chapters to research methods handbooks.

His research in qualitative inquiry, data analysis, and performance ethnography has received awards from the American Alliance for Theatre & Education, the National Communication Association—Ethnography Division, the American Educational Research Association's (AERA) Arts-Based Educational Research Special Interest Group (SIG), the AERA Qualitative Research SIG, New York University's Program in Educational Theatre, the Children's Theatre Foundation of America, and the ASU Herberger Institute for Design and the Arts.

Preface to the Fifth Edition

This may or may not be the last edition published of *The Coding Manual for Qualitative Researchers*. At the time of this writing (fall 2024), Artificial Intelligence (AI), ChatGPT, and comparable platforms have entered the analytic landscape, providing researchers with new heuristics for data entry and initial analyses. My own experiments with ChatGPT-4 (now in versions 4o and 4o1) showed me that the program can summarize and synthesize original qualitative data inputs quickly with surprisingly descriptive detail. And when I prompted the app to provide me with the data's patterns and themes, I found the displayed results quite credible and somewhat comparable to my own human-generated analyses.

But like virtually all digital programs for qualitative data analysis, ChatGPT-4 can only go so far at this stage in its development. Missing from the program's analyses are background contexts, detailed literature reviews, interpretive insights, higher-level abstractions, creative vocabulary use, evaluative judgment, cultural nuance, ethnic/racial literacy, critical capacities, reflexive introspection, experiential intuition, data privacy/security, theory development, and astute emotional intelligence. Qualitative researchers experimenting with AI generally assert that these programs can assist and augment, but not replace, the human researcher.

As several methods profiles in this manual will later explain, ChatGPT-4 can be "taught" to code data with specific, carefully phrased prompts. And if you ask what the program already knows about a particular analytic method or methodology such as grounded theory or longitudinal analysis, more often than not, it will possess that knowledge before you input your data. Nevertheless, the purpose and utility of coding as an analytic approach must be questioned when AI programs need not apply such measures to quickly generate categories and themes—two primary outcomes of coding qualitative data. So, in the AI era, is coding still relevant or even necessary?

It would be foolish if not irresponsible to accept ChatGPT-4's data analyses at face value without the researcher's critical scrutiny of the program's results. Even the program itself includes a permanently pinned message at the bottom of its home page: "ChatGPT can make mistakes. Consider checking important information." To me, a trustworthy qualitative researcher knows the legacies of their discipline's analytic methods, which include the varieties of codes and coding. Such knowledge informs the investigator's epistemological pathways with their generated data and serves the analyst's nuanced review of a digital research assistant's work. To readers and audiences, we are accountable not only for our findings but for how we found them in the first place. AI structures its answers through quantitative algorithms. But humans structure their answers through a myriad of qualitative heuristics and methods as occasions necessitate.

And sometimes those occasions require an In Vivo Code, an Emotion Code, a Dramaturgical Code, a Causation Code, a Theoretical Code, and so on.

Digital technology's evolutionary future is unpredictable, and so is its integration with qualitative data analysis. Rather than shy away from the unknown, researchers need to explore and experiment with AI's possibilities as well as its limitations. I have enhanced the discussions in this edition's coding methods profiles with recommendations for ChatGPT-4 applications. Use these heuristics as supplements, not substitutes, for your own analytic work and deep reflection.

In the fifth edition of this manual, a new first cycle coding method, Icon Coding, joins the 35 others in the collection. Analytic software screenshots and academic references have been updated. Several new figures have been added throughout the manual. Revised examples and analyses are provided for analytic memos, photograph and video analysis, metaethnography, Magnitude Coding, Structural Coding, Emotion Coding, Dramaturgical Coding, and Pattern Coding. The online resources now include a digital photograph and social media data in addition to interview transcripts, participant observation fieldnotes, and document data for analytic exercises.

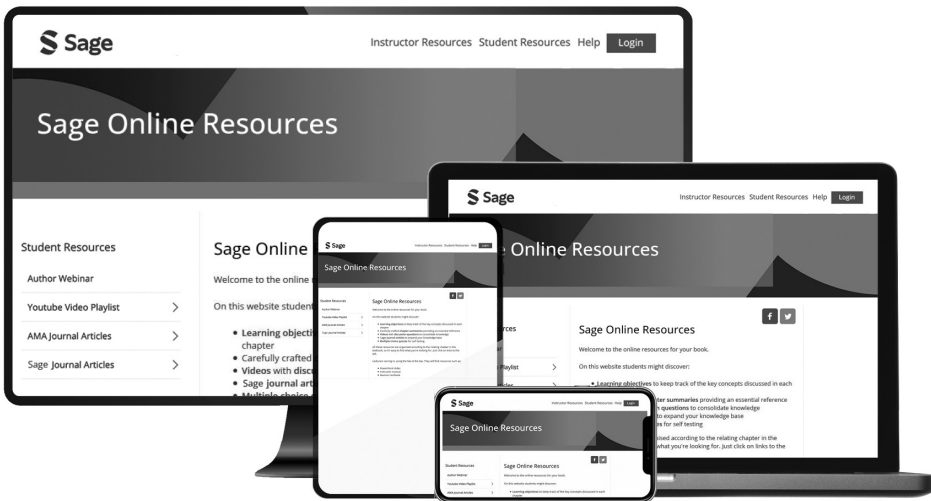
I stress at the beginning and ending of this book that coding is just *one* way, not *the* way to analyze qualitative data. Even if you prefer other analytic approaches such as assertion development, content analysis, or theory-based holistic interpretation, this manual offers guidance for non-coded analytic reflection, along with resources and references for learning more about the field's diverse data analysis methods.

Graduate students and their professors have told me how much they appreciate the manual's extensive citations, clarity, and mentorship tone for their professional development and projects. Yet I must also extend my own thanks and gratitude to the legacy of scholars whose publications provide rich sources for several of the ideas collected in this book. I give credit where credit is due by quoting, citing, and referencing their works through fair use guidelines.

My primary role as author of this manual is to serve as a contemporary archivist of the vast literature on qualitative methods, and to selectively display and explain relevant material about codes, coding, and qualitative data analysis. But the amounts of books and e-resources on the subject has increased exponentially over the past few decades, and I cannot possibly survey everything in the area. I must rely on you to bring your specific disciplinary knowledge base and your rich personal experiences to supplement the material included in this resource. I hope that this expanded fifth edition of *The Coding Manual for Qualitative Researchers* and its companion website offer readers even more pragmatic guidance for qualitative data analysis.

Johnny Saldaña,
Professor Emeritus

Online Resources



The fifth edition of *The Coding Manual for Qualitative Researchers* is supported by a wealth of online resources to aid your study, which are available at <https://study.sagepub.com/saldanacoding5e>

For students

Exercises and Activities to be done by yourself, or with others, help attune you to basic principles of coding, pattern development, categorization and qualitative data analysis.

Sample Data, Code Lists and Transcripts give you the opportunity to practice using qualitative coding and themeing techniques with real data.

CAQDAS Weblinks, along with the author's annotations and recommendations, enable you to make an informed choice about using software packages for qualitative data management and analysis.

“The primary purpose of qualitative coding is to organize and categorize the data, facilitating the extraction of meaningful insights and interpretations.” (ChatGPT-4)

3

Writing Analytic Memos About Narrative and Visual Data

Chapter Summary

This chapter first reviews the purposes and goals of analytic memo writing, then discusses 15 recommended topics for reflection during data collection and analysis. A section is included on the related processes of grounded theory methodology, followed by suggestions for the analysis of visual data.

The Purposes of Analytic Memo Writing

Analytic memo writing documents reflections on: your coding processes and code choices; how the process of inquiry is taking shape; and the emergent patterns, categories and subcategories, themes, and concepts in your data—all possibly leading toward theory. Codes written in the margins of your hard-copy data (termed “marginalia”), or associated with data and listed in a CAQDAS file, are nothing more than labels until they are analyzed. Your private and personal written musings before, during, and about the entire enterprise are a question-raising, puzzle-piecing, connection-making, strategy-building, problem-solving, answer-generating, rising-above-the-data heuristic. Robert E. Stake (1995) muses, “Good research is not about good methods as much as it is about good thinking” (p. 19). And Valerie Janesick (2016) wisely observes that, in addition to systematic analysis, “the qualitative researcher should expect to uncover some information through informed hunches, intuition, and serendipitous occurrences that, in turn, will lead to a richer and more powerful explanation of the setting, context, and participants in any given study” (p. 147).

What Is an Analytic Memo?

Analytic memos are somewhat comparable to researcher journal entries or blogs—a place to “dump your brain” about the participants, phenomenon, or process under investigation by thinking and thus writing and thus thinking even more about them: “memos are ‘notes to self’ about anything to do with the project” (Clarke, Friese, & Washburn, 2018, p. 106). They are “roughly equivalent to a lab notebook in experimental research” (Vogt et al., 2014, p. 394).

Coding and analytic memo writing are concurrent qualitative data analytic activities, for there is “a reciprocal relationship between the development of a coding system and the evolution of understanding a phenomenon” (Weston et al., 2001, p. 397). Think of a code not just as a significant word or phrase you applied to a datum, but as a symbolic prompt or trigger for written reflection on the deeper and complex meanings it evokes. The objective is researcher reflexivity on the data corpus, “thinking critically about what you are doing and why, confronting and often challenging your own assumptions, and recognizing the extent to which your thoughts, actions and decisions shape how you research and what you see” (Mason, 2002, p. 5). The writing thus helps you work *toward* a solution, *away from* a problem, or a combination of both. “Memos are about creating an intellectual workplace for the researcher” (Thornberg & Charmaz, 2014, p. 163).

Let me clarify that I use *analytic* memo as my term of choice because, to me, all memos are analytic regardless of content. Some methodologists recommend that you label, classify, and keep separate different types of memos according to their primary purpose: a coding memo, theoretical memo, research question memo, task memo, etc. But I have found it difficult in my own work to write freely and analytically within the

bounded parameters of an artificial memo category as a framing device. Kathy Charmaz advised in her grounded theory workshops, “Let your memos read like letters to a close friend. There’s no need for stodgy, academic prose.” I simply write what goes through my mind, *then* determine what type of memo I wrote to title it, and thus later determine its place in the data corpus.

Memos are data; as such they, too, can be coded, categorized, and searched with CAQDAS programs. Dating each memo helps keep track of the evolution of your study. Giving each memo a descriptive title and evocative subtitle enables you to classify it and later retrieve it through a CAQDAS search. Depending on the depth and breadth of your writing, memos can even be woven as substantive portions into the final written report.

Also important to note here is the difference between analytic memos and field notes. Field notes, as I distinguish them, are the researcher’s written documentation of participant observation, which may include the observer’s personal and subjective responses to and interpretations of social action encountered. Field notes may contain valuable observer’s comments and insights that address the recommended categories for analytic memo reflection described later (Bogdan & Biklen, 2007). Thus personal field notes are potential sites in which rich analysis may occur. Huffman (2024) muses, “I think of memos as the breadcrumb trail of insight I leave for myself as I travel through the forest” (p. 126). I recommend extracting these memolike passages from the corpus and keeping them in a separate file devoted exclusively to analytic reflection.

Virtually every qualitative research methodologist agrees: whenever *anything* related to and significant about the coding or analysis of data comes to mind, stop whatever you are doing and write a memo about it immediately. The goal is not just to summarize the data but to reflect and expound on them. Future directions, unanswered questions, frustrations with the analysis, insightful connections, and anything about the researched and the researcher are acceptable content for memos. Ethnographer Amanda Coffey (2018) notes that analysis “involves an ongoing dialogue with and between data and ideas” (p. 25).

Most CAQDAS programs enable the researcher to instantly insert and link an analytic memo (or comment or annotation) to a specific datum or code. But sometimes “ah-ha” moments of insight occur at unexpected and inopportune times—in the shower, while driving, eating lunch, etc. So, keep a small paper notepad and something to write with, or a digital audio recorder or other handheld device, nearby at all times for brief jottings or reminders in lieu of computer access. Paulus et al. (2014) recommend the cloud-based note-taking system Evernote as a digital tool for quickly documenting then later retrieving your reflections (pp. 21–2). Do not rely on “mental notes to self.”

Examples of Analytic Memos

Despite the open-ended nature of analytic memo writing in qualitative inquiry, there are some general and recommended prompts for reflection. Below is a social media

announcement from Betty (pseudonym), a woman in her early 70s, about the passing of her 67-year-old brother, Michael (pseudonym) from COVID-19. The siblings lived in different US states. The text is verbatim as she posted it with all misspellings, rich text, icons, and so on, kept intact. The codes applied to the data are first-impression Eclectic Codes (see Chapter 9) to address the study of how families dealt with the loss of a family member from pandemic-related causes. Examples of analytic memo content generated by the excerpt follow.

Code example 3.1

¹ My brother, MICHAEL HAS PASSED AWAY as of Monday 7/06/20 around 5:30 AM EST. ² He received word last evening he had tested positive for the virus, COVID-19. He passed quickly. MICHAEL 10/29/52- 7/06/20 MICHAEL WAS 67.

¹ DECEASED'S NAME AND PRIMARY NEWS CAPPED

² INTRO INFO ARE HEADLINES

³ In Feb., he had to give up his apt. 2 beloved pets, to enter in assisted living, after having several trips to the hospital & rehab between Jan-Feb. ⁴ Almost immediately he became bedridden, His feet would not carry him to walk on his own. A few weeks ago, his feet wouldn't move.

³ BACKSTORY

⁴ FORESHADOWING

⁵ This past week we talked. He said he was having sinus issues & coughing. 2 days later, he was feeling worse. He was tested for Covid-19, and had to wait for results. I spoke briefly w him yesterday afternoon. ⁶ sounded the same but had labored breathing, very low blood pressure & oxygen, wasn't eating much. ⁷ A few hours later, I received the call that his vitals were dropping drastically. That his breathing was much more labored, more difficult. ⁸ Covid-19 test was just received as POSITIVE ... and that he would pass before morning. ⁹ Shocked! ¹⁰ I called him last evening, we spoke briefly again ... he still sounded like himself but more labored breathing. We told each other our ¹¹ ♥ love & I bid him goodbye.

⁵ LONG DISTANCE TENSION

⁶ WORSENING CONDITION

⁷ THE TURNING POINT

⁸ "POSITIVE" (IN CAPS)

⁹ "SHOCKED!"

¹⁰ THE FINAL GOODBYE

¹¹ LOVE ICON

Michael never said anything about dying. ... ¹² He had to know, but talked peacefully. It was ¹³ very difficult to say goodbye. I called after 1am to check on him, as an aid was with him always yesterday. They said he was sleeping but much more labored. It would ¹⁴ not be much longer. The facility called me this morning about 5:30am our time. He had passed away. Michael is now ¹⁵ finally at peace with his Lord & ¹⁶ + Savior. ♥ + ☹️😞🙏 I will know more later. Thank you all for ¹⁷ prayers!🙏

¹² "HE HAD TO KNOW"

¹³ "VERY DIFFICULT TO SAY GOODBYE"

¹⁴ "NOT BE MUCH LONGER"

¹⁵ "FINALLY AT PEACE"

¹⁶ RELIGIOUS ICON STORY

¹⁷ "PRAYERS!"

Extensive memo writing, as illustrated below, over just one small passage of coded data, such as that above, is most unlikely. The example is kept deliberately brief to show how the same piece of data can be approached from multiple lenses, filters, and angles for analytic memo writing. Analytic memos can reflect on the following 15 prompts (in no particular order of importance):

1 *Reflect on and write a descriptive summary of the data.*

Summarizing extended passages of data is an analytic act, for it condenses (not reduces) the corpus into manageable vignettes for review. Summaries can stay at the descriptive level but might also extend into “first-impression” reflections and other analytic observations, to date. A summarizing analytic memo could be applied to larger units of data such as a complete interview transcript or a day’s set of field notes. ChatGPT-4’s descriptive summary of a data set can be included as the memo entry. For illustrative purposes, a summative analytic memo based solely on the data excerpt above might read:

16 July

SUMMARY: MICHAEL’S OBIT

Betty posts an announcement on her Facebook page about her brother’s death on July 6, 2020 from COVID-19. She begins with Michael’s deteriorating health six months earlier and his transition to assisted living. She describes several phone call exchanges between her and Michael and his assisted living facility’s staff and notes his worsening condition with each call. The COVID-19 test results were unknown until the day of his death. Betty states how difficult it was to say goodbye to her brother, even though he never mentioned dying during their last phone call. She receives notice of Michael’s death from the assisted living staff, and relates that he is “finally at peace with his Lord & Savior.” Betty thanks her Facebook followers for their prayers.

Since Betty and Michael lived on opposite sides of the country, the phone was the only available medium for them to connect during his final days. I heard on the national news that this was, sadly, how many family members had to say goodbye to loved ones who were quarantined in hospitals with COVID-19.

2 *Reflect on and write about how you personally relate to the participants and/or the phenomenon.*

Establish connections between yourself and the social world you are studying. Sympathize and empathize with the participants’ actions to understand their perspectives and worldviews. In what ways are you similar to them? Examine your own emotions, relationship, and values, attitudes, and beliefs about the phenomenon you are exploring. An analytic memo, based on the data excerpt above, might read:

16 July

PERSONAL RELATIONSHIP TO THE STUDY: SAYING GOODBYE

My best friend from high school is now going through chemo and radiation for stage 3 cancer. He, too, is in assisted living in a different state, and phone calls and text messages are our only forms of communication. His health, though, is not as rapidly debilitating as Michael's COVID-19. But I'm still trying to put on a brave face for my friend, to give him uplifting text messages with memories of the fun times in our past. He sounds very tired and worn down when I speak with him, which hurts, but I don't say anything to bring down the mood. It's hard to stay positive for others in situations like this. I wonder what I'll say to him when I'm faced with that final phone call.

Betty, too, noted the labored breathing as she spoke to Michael over the phone—I sense helplessness, an inability to come forward physically to do anything, fear of the inevitable outcome.

3 ***Reflect on and write about the participants' actions, reactions, and interactions.***

Saldaña and Omasta (2022) describe that

Action is what a person does (e.g., thinking, speaking, and moving). *Reaction* is response to an action—to someone else's or one's own action or to given circumstances. *Interaction* is the collective back-and-forth sequences of action and reaction. These three terms and concepts constitute the cyclical process of humans engaged with social life. (p. 10)

At times we place too much focus on what people *do* to the neglect of how they *react*. Reactions and interactions tell us much about a person's value system and his or her social and emotional intelligences. Analytic memos can reflect on the quality of the individual in group relationships that researchers observe in participants. A memo can also ruminate on significant moments we hear or see that suggest how a participant perceives their place in the cultural milieu. An analytic memo, based on the data excerpt above, might read:

16 July

REACTION AND INTERACTION: FROM THE HEART

Betty capitalized Michael's name, passing, and birth/death dates in the first stanza of the announcement, as if to shout in agony the news to her Facebook friends. His death from COVID-19 came with just a few days' notice ("Shocked!"), and the tone of her post has a poignancy about it. She gives her readers selected details about Michael's worsening condition—perhaps too much information for us, but perhaps necessary for her to understand why the death occurred, to make sense of the tragedy.

She ends her announcement with religious closure ("finally at peace with his Lord & Savior") and a series of icons that seem to narratively recount her feelings, exemplified by the last five in vivo

codes: "HE HAD TO KNOW," "VERY DIFFICULT TO SAY GOODBYE," "NOT BE MUCH LONGER," "FINALLY AT PEACE," "PRAYERS!" The social media post has occasional abbreviations, minor errors, and so on, but this is an announcement on the day of his passing, so no one can really blame her for improper form. It is an announcement from the heart with a slight tone of disbelief.

4 ***Reflect on and write about the participants' routines, rituals, rules, roles, and relationships.***

These five interrelated facets of social life are just some of the key concepts related to the analysis of social action, collectively labeled "the five Rs" (Saldaña, 2015; Saldaña & Omasta, 2022). Briefly explained:

- *Routines* are those repetitive and sometimes mundane matters humans do for the business of daily working and living
- *Rituals* are significant actions and events interpreted to hold special meaning for the participant
- *Rules*, broadly, refer to socialized behavior and the parameters of conduct that empower or restrict human action
- *Roles* (parent, student, favored son, victim, etc.) refer to the personas we assume or attribute to others and the characteristic qualities that compose one's identity and perceived status
- *Relationships* refer to the forms of reactions and interactions of people in their roles as they undertake their routines and rituals through frames of rules.

This prompt for analytic reflection encompasses many complex aspects of what it means to be human in the social world, and each one of the five merits its own memo. But it is also beneficial to interrelate two or more of them to hone in on the dynamics of participant action, reaction, and interaction. An analytic memo might read:

16 July

THE FIVE R'S: THE RITUAL OF OBITUARY

It is most often an immediate family member who announces to others the passing of a relative. Betty and Michael were the only children of their deceased parents, so it most likely fell on her to make the announcement to her Facebook friends (and there may also be relatives in her friends list—I'll have to check this out later). When losing a loved one, the ritual of obituary is usually made. This, however, was not a formally written version, but a spontaneous outpour through the immediacy that social media now provides. In the not too distant past, the announcement of a death was often made through a series of individual phone calls to relatives and loved ones and/or printed in a newspaper days later. Now, digital technology has become an almost instantaneous collective medium/forum for that ritual.

There's an intimacy to the obituary notice—it is not a dispassionate announcement but a sad story with an arc of declining health. Betty has strong feelings for her brother, and both

held strong religious convictions which might have made the death easier for both of them to endure.

5 *Reflect on and write about what you find intriguing, surprising, or disturbing.*

Sunstein and Chiseri-Strater (2012) developed this prompt for student fieldworkers. It is particularly appropriate as a forum for researchers to reflect honestly on unexpected encounters with social life that arrest and disrupt their personal sensibilities. This is both a reflexive and confessional exercise in explaining *why* some aspect of the data intrigues, surprises, or disturbs. An analytic memo might read:

16 July

INTRIGUING: ICONS AND EMOJI

Icons and emoji are nothing new in social media, but in an obituary announcement their presence adds a poignant sweetness and takes some of the edge off bad news. The final string, ♥+ 😊😭🙏 retells Betty's story of love, death, sadness, grief, and prayer. I'm curious why Betty inserted them; they were totally unnecessary since the words told the story. And these icons don't appear on their own, the user has to search for and insert them. The theory goes that words sometime obfuscate what it is we're trying to say, so images can convey the message instead. Betty is a storyteller, based on the beginning narrative codes (HEADLINES, BACKSTORY, FORESHADOWING). The final string of icons is like a coda, an afterthought, a story-within-a-story. Perhaps there was more Betty needed to say at the end, but she could only articulate her thoughts and feelings through icons and emoji.

6 *Reflect on and write about your code choices and their operational definitions.*

Define your major codes and rationalize your specific choices for the data. This is an internal "reality check" of your thinking processes, and reflection may generate other possible codes or more refined coding methods. Glaser (1978) reminds us that, through "writing memos on codes, the analyst draws and fills out analytic properties of the descriptive data" (p. 84). Methodologist Paul Mihas observes that while a code condenses a datum's meaning, an analytic memo unpacks and expands on that meaning.

Code management systems in most CAQDAS programs permit you to enter a more concise definition for each code you generate, while CAQDAS memo systems provide more space to reflect and expand on the codes' meanings. An analytic memo might read:

16 July

IN VIVO CODES: "POSITIVE", ETC.

The news of a loved one getting and dying from COVID-19 is most likely a gut-punch. Finding out someone is "POSITIVE" (before there were any guaranteed medical treatments) is like

learning they've got cancer. Betty placed the word in caps to emphasize the diagnostic tragedy. It was reminiscent of the 1980s when you learned someone had HIV/AIDS—more caps.

The final stanza has the cadence of resigned "letting go": "HE HAD TO KNOW", "VERY DIFFICULT TO SAY GOODBYE", "NOT BE MUCH LONGER", "FINALLY AT PEACE". Betty not only announces her brother's death but takes her readers through the final moments of it, perhaps in as peaceful a way as it may have occurred.

7 *Reflect on and write about evolving patterns, categories, themes, concepts, assertions, and propositions.*

Remember that individual codes eventually become part of a broader scheme of classification. Reflection on how the codes tentatively get placed into categories and/or subcategories, suggest a theme, evoke a higher-level concept, or stimulate an assertion or proposition, may begin to create a sense of order to your analysis thus far. Charmaz (2014, p. 170) advises that insight into patterns and the variability of data can emerge when the researcher emphasizes *comparison*—comparing people and their accounts or experiences, comparing codes, comparing categories, comparing the data to the existing literature, and so on. ChatGPT-4's data analysis with this analytic memo prompt can generate pattern-based findings for human reflection and additional analysis. An analytic memo might read:

16 July

ASSERTIONS: MEMORIES THROUGH MEMORIES

There's a clear storyline in Betty's post. It's not a litany of surviving family members, Michael's biography, etc., but a tragic retelling of his health-oriented turning points. Narratives help us make sense of what's going on, and experiencing the death of a loved one is most certainly a time when we're trying to grasp the meaning and magnitude of the event and come to an understanding of it all. Perhaps Betty needed to tell the story, not to inform her readers of what happened, but to bring some sensemaking to her own loss.

When a loved one passes, we honor their memory *through* memory. We retell stories, describe images, repeat what they once said, all in an attempt to document a life that was once lived and to recall our personal connections to the person who passed. We relive the memories as a natural reaction to loss, for memories are all that remain of the person's life essence. When we see or hold an artifact that the deceased once owned, it triggers more memories of who they were, for, as the theory goes, what we own is who we are.

8 *Reflect on and write about the possible networks and processes (links, connections, overlaps, flows) among the codes, patterns, categories, themes, concepts, assertions, and propositions.*

One of the most critical outcomes of qualitative data analysis is to interpret how the individual components of the study weave together. The actual integration of key words from coding into the analytic memo narrative—a technique I call *codeweaving*—is a

practical way to ensure that you are thinking how the puzzle pieces or mosaic tiles fit together. First-draft diagrams of network relationships between and among concepts are also possible as analytic memo content (see Chapter 12 for an extended example). Networking and process diagrams make you think of possible hierarchies, chronological flows, and influences and affects (i.e., cause and effect). ChatGPT-4's data analysis with this analytic memo prompt can generate network- and process-based findings for human reflection and additional analysis. An analytic memo might read:

16 July

NETWORKS AND PROCESSES: CODEWEAVING ATTEMPTS

A codeweaving attempt with this data excerpt to compose an assertion is: THE FINAL GOODBYE is "VERY DIFFICULT," especially when the person dying and the survivor have "TO KNOW" that it will "NOT BE MUCH LONGER" for THE TURNING POINT. "LOVE" and "PRAYERS" (for those who believe) bring comfort for the living and, hopefully, the deceased to feel "FINALLY AT PEACE". After sketching around with selected codes (see Figure 3.1), I instinctively drew a downward trajectory—but this is from Betty's perspective. If I had consciously attempted to map Michael's trajectory, I wonder if I would have drawn it upward—the rise toward heaven, according to his beliefs.

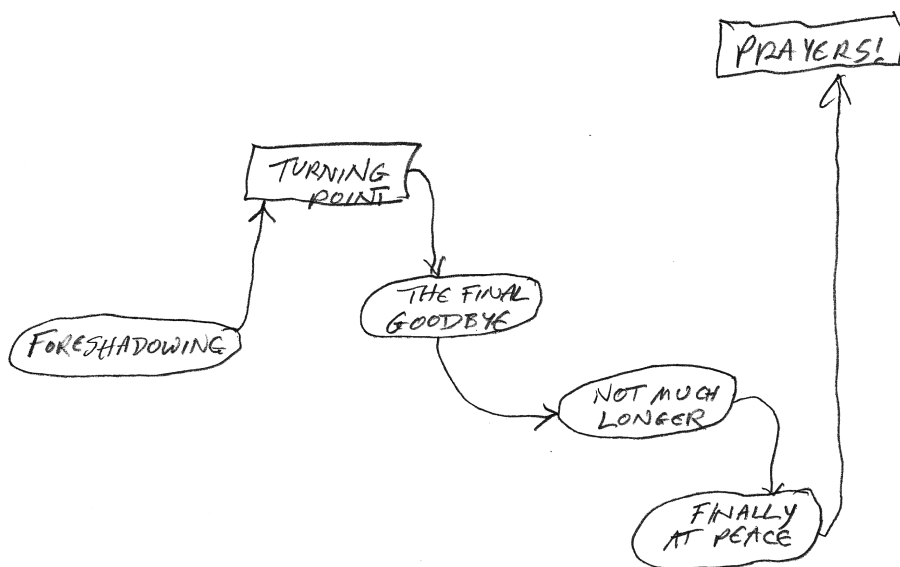


Figure 3.1 An analytic memo sketch

9 *Reflect on and write about an evolving or related existing theory.*

Transcend the local and particular of your study and reflect on how your observations may apply to other populations, to the bigger picture, to the generalizable, even to the

universal. Explore possible metaphors and symbols at work in your data that suggest transferability. Speculate on how your theory in progress predicts human action and explains why those actions occur. Integrate existing literature and theories into or compare them to your own particular study's data. An analytic memo might read:

16 July

THEORY: INEVITABILITY

The first theory that came to mind was Kübler-Ross's classic cyclical stages of grief: denial, anger, bargaining, depression, acceptance. I can't read Betty's mind from this social media post or infer her true feelings at the time. Most overt in this text are the depression and acceptance stages. A later social media post did have an angry tone to it, directed toward the assisted living facility for "letting this happen" to Michael.

INEVITABILITY comes to my mind as a possible core category for how families dealt with the loss of a family member from pandemic-related causes. The shock (rather than denial) comes when a family learns a member has COVID-19. From the 2020 news reports of hospitalizations and death rates, the public seemed to know that getting the virus was likened to an automatic death sentence. There's a substantial amount of literature on loss and grief, so it's time to check that out.

10 ***Reflect on and write about any problems with the study.***

Opportunities to reflect on fieldwork or analytic "glitches" by writing about them may generate solutions to your dilemmas. The act also raises provocative questions for continued reflection (or *refraction*—musings on complex and ambiguous "blurry moments" (O'Connor, 2007, p. 4)), to expand on the complexity of the social worlds you are observing, or to vent any personal frustrations you may be feeling about the study. Problems can also refer to any contradictions, inconsistencies, noticeable absences, or irreconcilable unity in the data. An analytic memo might read:

16 July

PROBLEM: THE LIMITS OF SOCIAL MEDIA ANALYSIS

The self-standing passage I'm analyzing is all I've got to work with. Yes, I can read Betty's Facebook posts before and after this one, but it's a lot tougher to infer from text alone with no opportunities for participant follow-up. With my interview transcripts and participant observation fieldnotes, I was there, I was witness to what I saw and heard and thus can analyze them with more confidence. But with social media text alone that I didn't generate, the inference-to-the-best-explanation powers are on full blast.

The icons help, somewhat. They tell me about the choices Betty made, what's important to her as symbolic representations of emotions and values. When words fail, images can support. But images can also serve as adornment. The icons, strictly speaking, are totally

unnecessary for communication of the news. But they seem necessary as visual punctuation, hanging ornaments onto the obituary as ritualistic offerings.

11 ***Reflect on and write about any personal or ethical dilemmas with the study.***

Ethical issues of varying magnitude arise in virtually every study with human participants. Most of these dilemmas are usually unforeseen, based on what participants unexpectedly bring to interviews or what the researcher observes in the field that counters their value, attitude, and belief systems. Reflection keeps you attuned to these matters and may help you brainstorm possible solutions. An analytic memo might read:

16 July

ETHICS: FOLLOW-UP AFTER LOSS

How long do I wait before contacting Betty (if I can) about her obituary post? I'm certainly sorry for her loss, but what's the researcher's place in all this? I feel so awkward trying to follow up with her about Michael's passing, all in an attempt to "learn more" about her grief for research purposes. Will my inferences alone suffice for analysis? What is the most tactful way of approaching her?

I notice that I've just asked a lot of questions with no concrete answers—so typical of ethical dilemmas. There's no recipe to follow for matters like these. Perhaps I should just try to let the social media post "speak for itself," and wait an acceptable amount of time before approaching Betty for more detail.

12 ***Reflect on and write about future directions for the study.***

Each qualitative research project is unique and cumulative in nature. The more you interview participants and observe them in natural social settings, the more ideas you generate for possible future research action. As data collection and analysis progress, you may discover missing elements or a need for additional data. You may even reconceptualize your entire initial approach and find inspiration from a new insight about the phenomenon or process under investigation. An analytic memo might read:

16 July

FUTURE DIRECTIONS: ADDITIONAL STORIES

Unfortunately, there are so many stories just like Betty's. A Facebook friend of mine asked her friends to post if anyone knew someone who had died of COVID-19. The number of posts was quite revealing, and some people offered mini-stories of their loss of loved ones. The stories are everywhere: social media, on TV news, conversations with others. I'm certainly not at a loss for data (and that sounds so cold-hearted).

The tragedy of loss from COVID-19 is not so much DENIAL as it is DISBELIEF—as Betty exclaimed, “Shocked!” We’re used to death from natural causes and tragic accidents, but death from a pandemic—an aggressive virus of unknown origin—makes little sense in the 21st century. As I continue to generate a body of COVID-19-related stories, I’m going to see if DISBELIEF is a primary theme.

13 *Reflect on and write about a synthesis of the analytic memos generated thus far (metamemos).*

Corbin and Strauss (2015) note that beginning memo writing tends to start off simply and descriptively, while later writings become more substantive and abstract. Though this may happen of its own accord, the researcher will also have to consciously achieve it. Periodically review the stock of analytic memos developed thus far to compose “metamemos” that tactically summarize, integrate, and revise what has been observed and developed to date. Methodologist Ray Maietta colloquially labels these *What I know so far* memos. This method also provides the researcher with a “reality check” of the study and analysis in progress. One tactic is to prompt ChatGPT-4 to summarize and synthesize a cumulative body of your memos. An analytic memo might read:

16 July

METAMEMO: FRAGILITY, VULNERABILITY, RESILIENCY

In a piece I did on health care ethnodramas, I wrote that the major themes of those narratives tend to focus on humans’ “fragility, vulnerability, and resiliency.” As I review my previous memos, I feel that Michael went through the fragility and vulnerability stages, but had no opportunity for resiliency due to the virus’s severity. But Betty’s mention of his “peace” may be interpreted somewhat as resiliency to his knowledge of dying. Betty also seems to have gone through all three stages, which I didn’t originally apply to caregivers and family members in my earlier research, but now seems most applicable.

Betty’s fragility came from her sense of helplessness; her vulnerability through her deeply personal obit posting; and her resiliency through her faith. Previous memos, understandably, focused on emotional experiences and, in retrospect, the three stages of fragility, vulnerability, and resiliency seem like broad *categories* of emotional states rather than actual emotions themselves.

14 *Reflect on and write about tentative answers to your study’s research questions.*

Focusing on a priori (determined beforehand) articulated research questions, purposes, and goals as analysis progresses will keep you on track with the project. Start by writing the actual question itself then elaborate on answers in progress. An analytic memo might read:

16 July

RESEARCH QUESTION: ANTICIPATORY GRIEF

The central research question for this study is: How did families deal with the loss of a family member from pandemic-related causes? I just came across a concept in my literature review called “anticipatory grief”—that stage of internal reflection and tension as a caregiver (primarily) experiences the debilitation and declining health of a loved one. Writing about one’s grief through narrative can be a healing process, and perhaps that’s what Betty was trying to do by her extended obit on Facebook. Art therapy is another healing form, and perhaps that’s what subliminally motivated the icons. This posting was a form of catharsis.

So, how did Betty deal with the loss of Michael from pandemic-related causes? She dealt with it through social media storytelling. She dealt with it through her religious faith. She dealt with the closure through *physical estrangement* since she could not be present with Michael as he passed away—even if she had lived in the same geographic area as him. COVID-19 separates in so many ways. I infer that she was fragile and vulnerable before Michael passed, and resilient afterward—but not everyone who suffers a family member’s loss through COVID-19 may exhibit immediate resilience.

15 ***Reflect on and write passage drafts for the final report of the study.***

Extended analytic memos can become substantive think pieces suitable for integration into the final report of your study. As you “write out loud,” you may find yourself composing passages that can easily be edited and inserted directly into the finished text. Or you might use analytic memo writing as a way to ponder the organization, structure, and contents of the forthcoming final report. Develop memos that harmonize with your methodology and its goals.

For example, if your study seeks a grounded theory, compose final report memos that address the central/core category and its properties and dimensions. If the study is phenomenological, focus on the essences and essentials of the phenomenon. Also address the particular disciplinary interests of your potential readers—those in education, for example, may be more interested in the policies and outcomes of high-stakes testing than those in the discipline of communication. An analytic memo might read:

16 July

FINAL REPORT: NARRATIVES OF LOSS

As I reflect on the most appropriate way to document this research, narrative vignettes throughout the report will most definitely make an impact. Here’s a first draft excerpt adapted from and extended on Betty’s social media post:

Betty was shocked when she learned that her brother Michael tested positive for COVID-19 the day before he died. They lived thousands of miles apart, and the only way Betty could keep in touch with her brother was through the assisted living staff keeping vigil over him during his final

hours. Their last phone call in the late evening was brief due to his labored breathing and rapidly dropping vitals, but peaceful, as if Michael knew he would soon pass away. Betty shared how difficult the moment was: “We told each other our love, and I bid him goodbye.”

At 5:30 a.m., she received a call from an aide that Michael had passed away quickly. Betty posted the news on Facebook for her family and friends, concluding that Michael was “finally at peace with his Lord and Savior.” And since there was most likely nothing else she could put into words, she ended her sad news with emoji: ❤️+ 😞😭🙏

Selected CAQDAS manuals recommend that memos can be viewed by multiple research team members to share information and exchange emergent ideas about the study as analysis progresses. Richards (2021) recommends that any CAQDAS explorations of code searches, queries, and so on merit researcher documentation and reflection through memoing.

To recap, analytic memos are opportunities for you to reflect on and write about:

- 1 a descriptive summary of the data
- 2 how you personally relate to the participants and/or the phenomenon
- 3 the participants’ actions, reactions, and interactions
- 4 the participants’ routines, rituals, rules, roles, and relationships
- 5 what you find intriguing, surprising, or disturbing
- 6 your code choices and their operational definitions
- 7 evolving patterns, categories, themes, concepts, assertions, and propositions
- 8 the possible networks and processes (links, connections, overlaps, flows) among the codes, patterns, categories, themes, concepts, assertions, and propositions
- 9 an evolving or related existent theory
- 10 any problems with the study
- 11 any personal or ethical dilemmas with the study
- 12 future directions for the study
- 13 a synthesis of the analytic memos generated thus far (metamemos)
- 14 tentative answers to your study’s research questions
- 15 passage drafts for the final report of the study.

Additional Analytic Memo Topics and Prompts

The 15 recommended prompts listed above are certainly not the only ones that can stimulate your writing. A memo prompted by your unique conceptual framework, a paradigmatic concern, a ChatGPT-4 response, or an abstract concept suggested by the study are additional worthwhile topics for reflection. Birks and Mills (2023) offer prompts for grounded theory studies such as “your philosophical position in relation to your research” and “reflections on the research process” (p. 78).

If your study’s methodology is feminist research, discourse analysis, or critical ethnography, for example, writing about social dynamics, power issues, inequity, and other

facets of values-laden investigation are most necessary to meet the project's inquiry goals. Example prompts include:

- What tactic is being used to gain an advantage over others here?
- What are the marginalizing interactions here?
- What are the resistance strategies of those who are disempowered? (Hadley, 2019, p. 581)

Creamer (2022) advises that analytic memos for studies that combine grounded theory with mixed methods should directly address how the quantitative and qualitative components integrate.

Analytic memo writing can also adopt a more holistic approach through methods developed by other researchers. The ResearchTalk consulting team (Ray Maietta, Paul Mihás, Kevin Swarthout, Alison Hamilton, and Jeff Petruzelli) has developed innovative memo topics for researcher reflection—in fact, memoing most often *precedes* coding, not the other way around:

- A *document reflection memo* examines the entire interview transcript through a blend of summary and researcher interpretations of and commentary about the case. One of its purposes is to look for narrative trajectories or threads of meaning, a “vertical” reading of the participant’s story. “What does this one transcript teach me about the research question?”
- A *key quotation memo* closely examines an excerpt from the transcript that is particularly rich, a paragraph-length passage that motivates researcher reflection on its language, action, and significant meaning it holds for the participant. “Why does this particular text segment capture my attention? How does this single quotation help me better understand the participant’s lifeworld?”
- A *comparison memo* works “horizontally” by reflecting on similarities and differences between transcripts from multiple participants and between the researcher’s analytic memos. It dimensionalizes the data through the examination of contrast and variability of responses. “Is there an identifiable pattern across document reflection memos? Do certain participants cluster together based on similar accounts and perspectives?” (Mihás, 2022b)

Just as you will be encouraged later in this manual to develop your own unique coding system, so too should you feel free to develop your own analytic memo-writing repertoire of topics, prompts, and forms—including poetry. Creative thinking requires both focus and freedom.

Reflection and Refraction

An intriguing way to conceptualize the contemplation of qualitative data is as *refraction* (O’Connor, 2007), a perspective that acknowledges mirrored reality and the researcher’s lens as “a concave or at other times a convex lens. ... It does not imitate what looks into the mirror but deliberately highlights some things and obscures others ... in terms of

what might be revealed and what might remain hidden” (p. 8). Writing *about* the problematic, the ambiguous, and the complex is no guarantee that crystal clarity will evolve, but the approach serves as a heuristic that may lead to deeper awareness of the multifaceted social world, and as an initiating tactic to refocus the blurry.

Ultimately, analytic memo writing is the transitional process from coding to the more formal write-up of the study (see Chapter 15). Your reflections and refractions on the prompts listed above collectively generate potential material for formulating a set of core ideas for presentation. Substantive analytic memos may also contribute to the quality of your analysis by rigorous reflection on the data. Stern (2007) proposes, “If data are the building blocks of the developing theory, memos are the mortar” (p. 119).

Coding and Categorizing Analytic Memos

Analytic memos themselves from the study can be coded and categorized according to their content. Gibson and Hartman (2014) emphasize that the *sorting* of memos is not just an organizational but an important analytic act that outlines the constituent elements of your write-up. The descriptive titles in the examples above enable you to group related memos by reflections on networks; emergent patterns; ethics; metamemos; etc. The subtitles function as subcodes or themes and enable you to subcategorize the contents into more study-specific groupings—for example, analytic memos about specific participants, specific code groups, specific theories in progress, etc. CAQDAS programs provide these classification functions for organized review and reflection.

Analytic Memos Generate Codes, Categories, Themes, and Concepts

One principle I stress throughout selected profiles in later chapters is that, even after you have coded a portion of your data and categorized the codes into various lists, *analytic memo writing serves as an additional code-, category-, theme-, and concept-generating method*, in addition to narrative outcomes such as assertions, propositions, and theories. By memo writing about the specific codes you have applied to your data, you may discover even better ones. By memo writing about your puzzlement and loss for a specific code for a particular datum, the perfect one may emerge. By memo writing about how some codes seem to cluster and interrelate, a category, theme, or concept for them may be identified. Codes, categories, and other analytic summaries of meaning are found not just in the margins or headings of interview transcripts and field notes—they are also embedded *within* analytic memos. Corbin and Strauss (2015) provide meticulous and in-depth examples of this procedure in their fourth edition of *Basics of Qualitative Research*.

The cyclical collection, coding, and analytic memo writing of data are not distinct linear processes but “should blur and intertwine continually, from the beginning of an investigation to its end” (Glaser & Strauss, 1967, p. 43). This is one of the major principles developed by grounded theory’s premiere writers, Barney G. Glaser and Anselm L. Strauss,

and elaborated in later writings by Juliet Corbin, Kathy Charmaz, Adele E. Clarke, and Janice Morse. Bryant and Charmaz's (2007, 2019) edited volumes, *The SAGE Handbook of Grounded Theory* and *The SAGE Handbook of Current Developments in Grounded Theory*, are perhaps the most authoritative collections of extended essays on the methodology.

Grounded Theory and Its Coding Canon

Briefly, grounded theory, developed in the 1960s, is generally regarded as one of the first methodologically systematic approaches to qualitative inquiry. The process usually involves meticulous analytic attention by applying specific types of codes to data through a series of cumulative coding cycles that ultimately lead to the development of a theory—a theory “grounded” or rooted in the original data themselves.

In this coding manual, six particular methods are considered part of grounded theory's coding canon (though they can all be used in other non-grounded theory studies): In Vivo, Process, Initial, Focused, Axial, and Theoretical Coding. (In earlier publications, Initial Coding was referred to as “open” coding, and a stage before Theoretical Coding was referred to as “selective” coding.)

Each of these six coding methods is profiled in later chapters, but the thing to note here is the coding processes' ongoing interrelationship with analytic memo writing, and the memos' reorganization and integration into the final report of the study. Gordon-Finlayson (2019) emphasizes that “coding is simply a structure on which reflection (via memo-writing) happens. *It is memo-writing that is the engine of grounded theory, not coding*” (p. 296, emphasis in original). Glaser and Holton (2004) further clarify that “Memos present hypotheses about connections between categories and/or their properties and begin to integrate these connections with clusters of other categories to generate the theory” (n.p.).

Figure 3.2 presents a very elemental model of developing “classic” grounded theory for reference. Note how analytic memo writing is a linked component of the major stages leading toward the development of theory.

I minimize the number of analytic memo examples in the coding profiles that follow because I myself find reading extensive ones in research methods textbooks too case-specific and somewhat fatiguing. If you wish to see how a trail of analytic memos progresses from first through second cycles of coding with the same data excerpt, see the profiles for Initial, Focused, Axial, and Theoretical Coding. For a dedicated overview of this manual's grounded theory coding methods, see Sigauke and Swansi (2020).

Analyzing Visual Data

A slippery issue for some is the analysis of visual data such as photographs, documents, print materials (magazines, brochures, etc.), Internet websites, video/film, children's drawings, television broadcasts, social media memes, and other items in addition to the

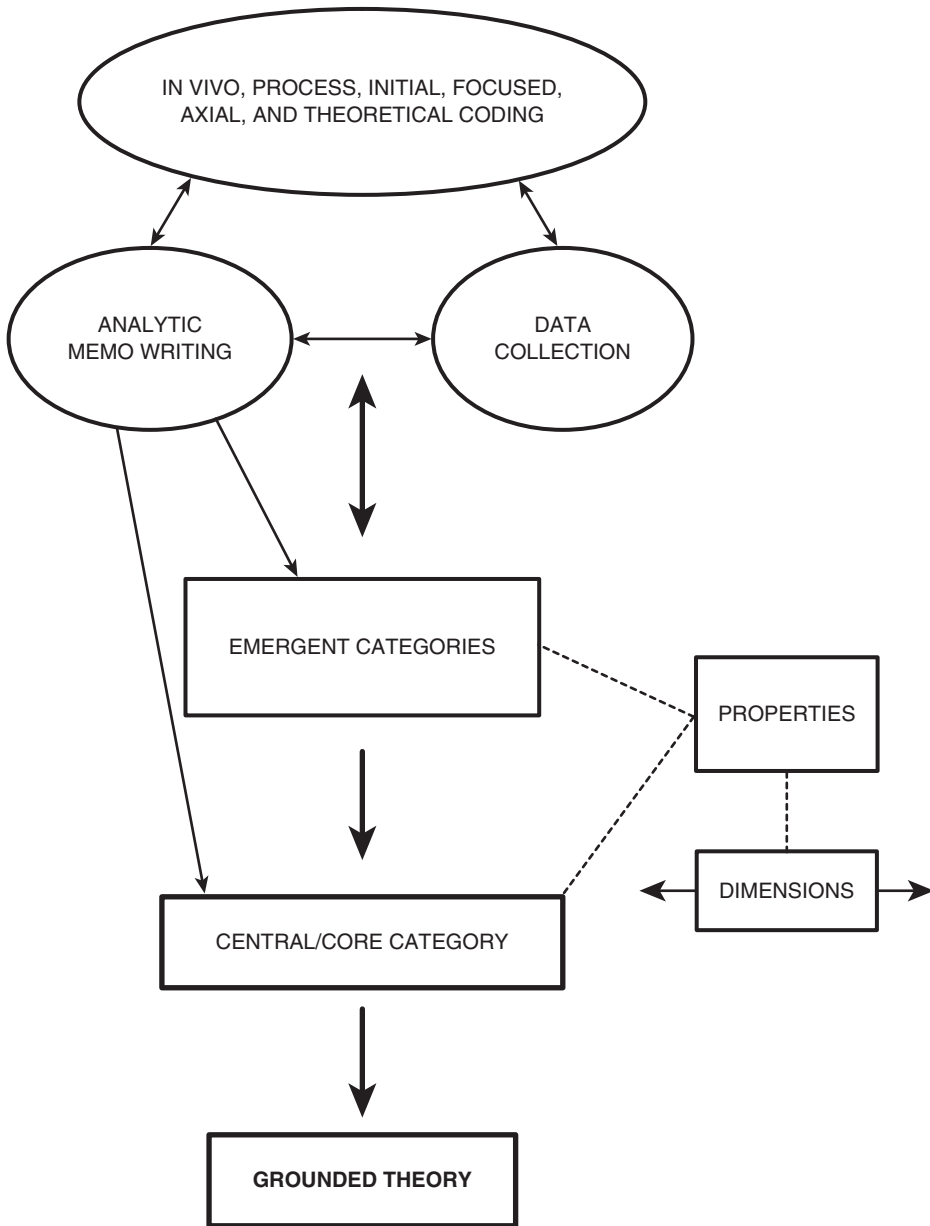


Figure 3.2 An elemental model for developing “classic” grounded theory

physical environments and artifacts of fieldwork (room decor, architecture, participant dress and accessories, etc.). Banks (2018) offers that traditional content analysis of visual materials serves as a precursor to more evocative interpretations by the researcher. But despite some pre-existing coding frameworks for visual representation such as semiotic analysis (e.g., Gibson & Brown, 2009; Grbich, 2013; Ledin & Machin, 2018), and the rapidly developing automated visual content analysis software, I feel the best approach

to analyzing visual data is a holistic and exploratory lens guided by intuitive inquiry and strategic questions. Spencer (2023) notes that “the brain can process visual material much quicker than text (estimates of 60,000 times quicker)” (p. 232). Thus, different analytic heuristics seem more appropriate.

Rather than one-word or short-phrase codes (which are still possible if desired for approaches such as qualitative content analysis), the researcher’s careful scrutiny of and reflection on images, documented through field notes and analytic memos, generate language-based data that *accompany* the visual data. Ironically, we must use words to articulate our “take” on pictures and imagery. So, any descriptors and interpretations we use for documenting the images of social life should employ rich, dynamic words. Gee (2011) proposes that the methods we use for discourse analysis of written texts are just as valid for analyzing visual materials (p. 188).

Below I address briefly some recommended analytic approaches to just a few types of visual materials. See Recommended Guidance below for additional sources.

Photographs

If you do choose to code visual data for particular reasons, I recommend a strategic selection from Grammatical, Elemental, and Affective Methods (see Chapters 5–7) when conducting such genres of research as traditional ethnography or content analysis, which generally prescribe systematic counting, indexing, and categorizing of elements. The types of codes you apply should relate in some way to the research questions driving the study and analysis. Descriptive Coding and Subcoding, for example, catalogue a detailed inventory of contents, while Emotion Coding focuses on the mood and tone of images or the emotions suggested by human participants included in the photo. Depending on the content, visual design elements as primary codes tagged with related subcodes are also appropriate, such as:

Code: LINE; Sample Subcodes: DIAGONAL, CURVED, ERRATIC

Code: TEXTURE; Sample Subcodes: ROUGH, METALLIC, VELVETY

Code: COLOR; Sample Subcodes: ROYAL PURPLE, FADED BROWNS, FOREBODING SHADES

Code: COMPOSITION; Sample Subcodes: CROWDED, BALANCED, MINIMALIST

Digital photographs can be cut and pasted directly into field note texts as part of the data record and for immediate analytic reference. Some CAQDAS programs such as NVivo and webQDA enable you to select an area of a digital photograph and assign a particular code to the region (see Figures 3.3 and 3.4).

Brown (2023) advocates that, for analysis, “I regard the single photograph as the visual equivalent to the sentence in language” (p. 276). I myself prefer to analyze photographs and other visual data in *reverse* of how I analyze narrative texts. I begin not with codes but with jottings and analytic memos that document my initial impressions and holistic interpretations of the images, since arts-based researcher Richard Siegesmund

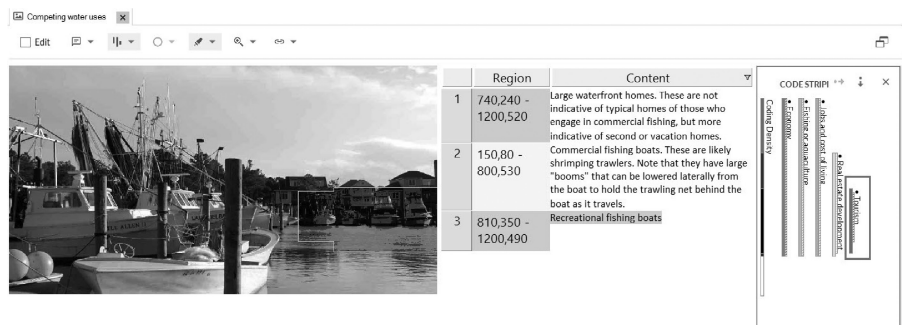


Figure 3.3 NVivo 14 image coding by region (courtesy of Pattie Hall and Silvana di Gregorio, used with permission from Lumivero, lumivero.com/products/nvivo/)

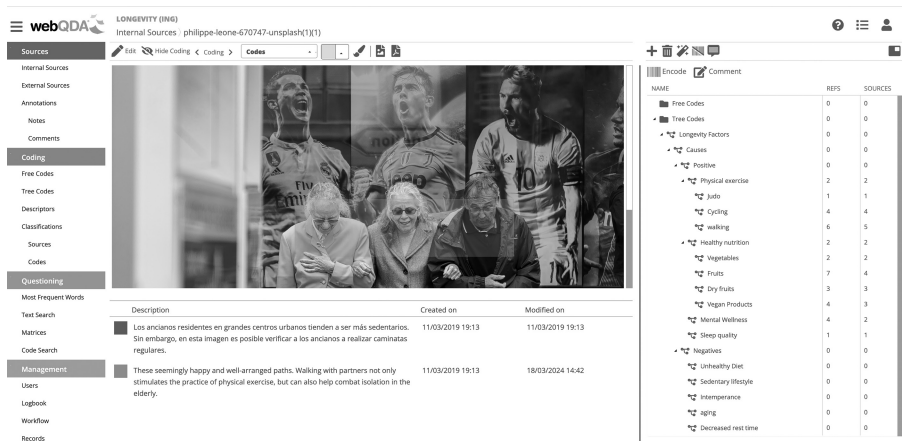


Figure 3.4 webQDA image coding by region (courtesy of Antônio Pedro Costa, webqda.net)

asserts that “images have their own agency.” Afterward, I assess the credibility of my visual reading through supporting details from the photograph—evidence that affirms (or disconfirms) my personal assertions. Codes within the memo derive *from* the interpretations of the visual *as* the analytic text is composed. I also caption the photo to capture the essence of the image, as I interpret it—a form of Themeing the Data (see Chapter 11).

Figure 3.5 is an exterior photograph taken at street level of an area of downtown suburban renovation in Seattle, Washington. My initial jottings (free writing about first impressions and open interpretations) include the following:

Old meets new. History is being demolished to make room for the new and trendy.



Figure 3.5 Downtown suburban renovation (original in color; photo by Eliana Watson)

A more formal analytic memo expands on the jotting and the image's "scenic choreography" itself. Note the use of design elements, in caps, as codes:

4 November

"TRADITION IS A THING OF THE PAST"

The natural COLOR of a rich blue cloudless Seattle sky CONTRASTS with steel construction machinery and debris. An old, boarded-up brick building sits between two modern structures near the waterfront. The Highway 99 jazz club is now closed (according to its website). A multilevel parking structure supports some (doubtless expensive) residential apartments above it. Another historic building sits to the right of it, and an adjacent local market on the far right of the photo appears to be the only surviving business in this area.

The CONTRAST between the cold cement surface of the parking garage against the warmth of the old brick buildings is most striking. The MOVEMENT of DIAGONAL LINES between the crane and the tallest red brick building almost looks as if they are in conflict and at a standoff with each other: modern versus old, evolution versus tradition, erosion versus accretion, reconstruction carnage versus enduring stability. The small local market, rather

than the large jazz club, still survives at the moment this photo was taken (summer 2019). But I feel its days are numbered, sadly. Big business, industry, real estate developers—most will not preserve the past, but instead will raze it to raise money.

My caption for this photo: Tradition Tear-down.

Human participants in photographs call for an analysis of facial expressions, body language, dress, spatial relationships with others and the environment, and other known contexts (e.g., the action before and after the photo was taken, the participants' biographies, the photographer's identity). Figure 3.6 shows a university student in his campus's library. The first-impression jottings are:

It's a university student in a library looking at a book. So what? Actually, a lot. Much is running through my mind about the inferences and implications of the photo.



Figure 3.6 A university student in a library (original in black and white; photo by Eliana Watson)

The analytic memo now expands the jottings and focuses on the participant action and inferences by the researcher. Again, note the use of codes or key words in caps:

29 March

Contexts: The photo shows a freshman male of color of Malaysian descent enrolled in a major U.S. university in his campus's library. The time of day is unknown, but it is about two weeks after his university's spring break. He is dressed in casual attire with a fairly full backpack strapped on him. He stands in the LOC (Library of Congress) E184.A1 section—race and ethnicity in America, presumably perusing a book from that section. The photo was taken by a commissioned photographer.

Interpretations: The theory goes that "The college years are a time of IDENTITY exploration and formation" (Taylor & Nichter, 2022, p. 14). The new knowledge and experiences that come with higher education can shape a student's world view, values system, and SENSE OF SELF. This young man OF COLOR in the RACE AND ETHNICITY IN AMERICA bookshelves may be learning about his legacy and STATUS, though it is unknown if this curiosity is for himself or part of a required class assignment.

The photo suggests (but does not confirm) a sense of INDEPENDENT ISOLATION. There are no other people around him. It is as if he is in a PRIVATE, REFLEXIVE state, reading a passage in a book that may have struck him. I can imagine him taking the book to a nearby seat or table at the library to examine it further.

At a time when NEOLIBERALISM, censorship, and budgetary constraints invade the college/university system, there is still the possibility for young people to chart their own course, to learn WHAT *THEY* WANT TO LEARN. The higher education library, as a repository of the world's knowledge, provides him ACCESS to information and stories previously unknown about his ancestors' and country's HISTORY and SOCIOLOGY.

This isn't just a picture of some random dude at a library. It's a photo that suggests OPPORTUNITY and EQUITY. It's a photo that suggests there's more to life and EDUCATION than social media scrolling on a mobile phone. A BOOK in one's hand can be a treasured artifact—it is tactile embodiment of new AWARENESS about the world. An ethnic *consejos* (advice, counsel) given by parents to their children is: "EDUCATION is the only thing nobody can take away from you." This young person OF COLOR will further develop his IDENTITY the more he learns about the social world and thus HIMSELF.

Photo Caption: Who am I/becoming?

Repeated viewings and analytic memo writing about visual data documented in field notes or maintained in a repository are more appropriate approaches to qualitative inquiry because they permit detailed yet selective attention to the elements, nuances, and complexities of visual imagery, and a broader interpretation of the compositional totality of the work. Matt Sillars (in Braun & Clarke, 2022, pp. 252–4) places a photograph in the center of a blank page and draws lines from elements in the photo to the page connecting them with handwritten codes. Even the seemingly obvious gets a code

(e.g., SKY, HOUSE) so that nothing is taken for granted and thus potentially overlooked. Clark (2011, p. 142) ruminates that participant-developed visual artifacts such as photos, drawings, collages, and other artistic products should not be considered nouns (i.e., things analyzed by a researcher *after* their production) but as verbs—processes co-examined with participants *during* the artistic product's creation, followed by participants' reflections on the interpretations and meanings of their own work.

Just as no two people most likely interpret a passage of text the same way, no two people will most likely interpret a visual image the same way. Each of us brings our background experiences, values system, and disciplinary expertise to the processing of the visual, and thus our personal reactions, reflections, and refractions. From a community-based, participatory action research perspective, photovoice facilitator Laura Lorenz recommends that multiple photographs taken by a group of participants be analyzed by the collective to formulate their own categories and themes with an attunement to the metaphors and symbols in their work. Chat GPT-4 has the capability of analyzing visual materials, but at this point the platform seems limited to content analysis rather than interpretive reads and requires human prompting. The platform stated, "I can't analyze photographs or images in the traditional sense of identifying specific objects, people, or text within them. However, I can generate, modify, or provide descriptions for images based on text prompts you give me. If you describe an image or its content, I can offer information, context, or a narrative related to your description."

Documents and Artifacts

Documents are "social products" that must be examined critically because they reflect the interests and perspectives of their authors (Hammersley & Atkinson, 2019, p. 125) and carry "values and ideologies, either intended or not" (Hitchcock & Hughes, 1995, p. 231). Official documents in particular "make claims to power, legitimacy, and reality" (Lindlof & Taylor, 2019, p. 299) and should be analyzed not just for the information they provide but also for the cultural representations they suggest and the embedded action they imply (Holliday, 2016, p. 78).

When I analyze hard-copy materials such as teacher-prepared handouts with my research methods students, I propose to them, "Tell me something about the person who created this document, based on what you infer from the document's appearance and content." I have knowledge of who created the material, but my students do not. I assess from their responses whether they can tell me such things as the writer's gender ("What leads you to believe that the person who created this document is male/female?"), level of education ("What do the vocabulary and narrative style tell you about the individual and its intended readership?"), values system ("What do you infer is important to him or her?"), and ways of working ("What do such things as the layout, organization, color choices, and font/type styles tell you about this person's work ethic?"). Students are remarkably perceptive when it comes to reading the document's "clues" to closely profile the personality of its creator.

If you subscribe to the theory that the products we create embody who we are, then the environments we establish for ourselves may also embody who we are. Personal settings such as a work area, office, and home contain material items or artifacts that the user/owner has collected, created, inherited, and/or purchased. Each artifact has a history of how it got there and a reason or meaning for its presence. Byrne, Cave, and Raymer (2022) analyzed university departmental office spaces based on the theory that “artifacts are themselves visible products of how culture is manifested” and are “visible products or palpable representations of structures and processes, which act as symbolic reflections of the espoused beliefs or values of the organization” (pp. 799, 800).

Spaces have a macro “look” and “feel” to them based on the collective assembly of micro details of specific items, organization, maintenance, cleanliness, lighting, color, and other design elements. When I walk into a new space, the primary analytic task that runs through my mind is, “Tell me something about the person or people working/living here.” Certainly we can learn much more about a space’s occupants and artifacts by having participants give us a guided tour accompanied with questions and answers about significant items that attract our visual attention. If we have permission to digitally photograph parts of the setting, the visual documentation later permits more reflection and meaning-making through analytic memoing. We need not conduct an extensive written inventory of each and every single item in a space, but the guiding principle I apply to my own visual analysis is, “What is the first and general impression I get about this environment, and what details within it lead me to that impression?”

Walker, Kaimal, Gonzaga, Myers-Coffman, and DeGraba (2017) analyzed active-duty military service members’ visual representations of post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI) in masks created by the participants. Both the artworks’ visual features (e.g., color, line) and clinical notes (e.g., participant symptoms, rationale for design choices) about the mask makers were coded and compared. The masks, as ritualistic artifacts and visual products, represented an evocative extension of a service member’s role identity through the artwork’s sentiment, process, and symbolism. Physical and psychological injuries were symbolized, for example, through “lips sealed, stitched, or locked” as “the inability to express oneself” (p. 5).

The research team collaboratively analyzed the masks from art therapy and clinical perspectives and observed that the visual imagery provided a graphic representation of some of the unseen struggles, challenges, and lived experiences of active-duty military service members with PTSD, TBI, and comorbid psychological disorders (p. 10). The mask in Figure 3.7 represents an exterior of honor and passion when serving in the military (i.e., a glittering US flag and Bronze Star Medal he earned for heroic actions in combat). The mask opens up to reveal a bloody skull which symbolizes war and the underlying injuries and exposure to death/evil.



Figure 3.7 A mask representing a service member’s frustrations and existential reflections with military experiences (original in color) (Source: Walker et al. (2017). The masks were made by military service members during art therapy treatment at the National Intrepid Center of Excellence, Walter Reed National Military Medical Center, Bethesda, MD)

Clarke, Friese, and Washburn’s (2018) situational analysis stresses the need to examine the material elements of our social world found in artifacts and documented in our field notes. They also prescribe that for initial visual discourse/materials analysis, interpreting and analytic memo writing are critical. It is thus the memos themselves—the researcher’s narratives—that are coded (if necessary) for further analysis.

Live and video-recorded action

Often in fieldwork we document real-time or video-recorded social life through textual narratives. As an example, below is a set of observational field notes about researcher Trace Taylor’s (thetracetaylor.com) video blog of her February 2021 illness at home with

a severe case of COVID-19. Rather than coding this documented set of visual and verbal data in a transcription's margin, an analytic memo about this video focuses on her lived experiences:

1 August

LIVED EXPERIENCE: DOCUMENTING COVID-19

Ms. Taylor shares in her video blog she was 58 years old when she contracted COVID-19, despite her precautions. She also mentions that she contracted polio as a child and went through several operations on her legs. The video documentation of her experience begins: "February 4, 2021, 1 day after my 58th birthday, 4th day of my COVID infection."

When Taylor first appears on video, she is seated, has noticeably dark circles under her eyes, and appears fatigued. Her voice, however, is strong. She wants to show her viewers "what a big deal this is" by getting out of her chair and walking across the room to get a bottle of Pedialyte. She cautions us, "Be prepared, this is not going to be pretty, so just hang in there."

The warning she gives us seems more for herself. When she first rises, she shouts in pain, mutters "Oh, God," and pants heavily. She takes a few seconds to get her bearings standing then says to herself, "OK." With every step she utters in pain and exclaims, "Oh, my God!" Panting as she walks, her face grimaces; she asks her viewers, "Are you with me?" As she struggles to walk slowly, she voices out loud, "Almost there. Almost there." Taylor tells us she cannot remain standing in one position for too long because it will hurt. The day's entry ends and her video blog continues with her documented experiences through February 16, 2021.

This is an extremely difficult video clip to watch. The pain she endures is searing to me, the hard panting from simple movements almost scares me, for I too have been in that situation myself in an emergency room from surgical complications. RAW is the only way I can code and describe this video—it is shakily filmed with a handheld device (a smartphone, I assume) with no formalized aesthetics other than brute naturalism, which makes it even more arresting. The bravery of this woman—to show us what it's like to have COVID-19 and the devastating effects it can have on a body. The researcher in her documented her illness journey because I sensed she felt it was important to do so—not only for others but also for herself.

The still image of a digital photo permits nuanced visual analysis, but Walsh, Bakin, Lee, Chung, and Chung (2007) and Nassauer and Legewie (2022) note that digital video data of action can be coded multiple times for in-depth detail by replaying the file at slower or faster speeds while focusing on different aspects with each "pass." Heath et al. (2010), however, advise against coding and categorization of video and instead support an analytic inductive approach that favors "the ways in which social action and interaction involve the interplay of talk, visible and material conduct" (p. 9). Short video fragments are micro-analyzed through a combination of conversation analysis transcription (running vertically

down a page) with descriptive documentation of the visual record (running horizontally across a page) such as facial expressions, gestures, whole body movements, spatial relationships, physical contact, and manipulation of objects/artifacts.

Parameswaran, Ozawa-Kirk, and Latendresse (2020) offer a method they label “live coding,” the simultaneous manual coding of data while listening to or watching an audio or video recording. Audio recordings provide opportunities for coding paralinguistic features such as the participant’s tone of voice, rate of speech, and other vocal dynamics such as volume and pitch. Video recordings enable the coding of audio features plus non-verbal movements such as head nods of agreement, and other subtextual reactions through facial or body language. Particularly rich or significant quotes that support the developing themes are transcribed for codebook documentation. The coders observed that seeing and hearing the participants’ nonverbals provided additional depth to the analysis that was missing from coding transcripts alone. Ellingson (2017) and Onwuegbuzie and Abrams (2021) offer non-verbal communication elements to observe, which could also serve as categories for more specific codes:

Kinesics: body language, posture, gesture, movement, etc.

Proxemics: space people leave between one another

Vocalics, Paralinguistics: voice, vocal tone, fluency, etc.

Haptics: touch, body contact

Chronemics: use of time, rate of speech

Olfaction, Gustation: reactions to smell and taste

Appearance: clothing, accessories, grooming, etc.

Territoriality: configuration and decor of a physical environment associated with a person or organization

Other: physical interactions with objects, in space, etc.

Dyadic video analysis better guarantees the confirmability and trustworthiness of findings and potentially leads to stronger outcomes. One of my studies examined a video of children in participatory play with adults. I watched the video with a research assistant and both of us took individual written notes about what we observed, comparable to field note taking. We stopped the 60-minute video every 10 minutes to discuss and compare our observations thus far to note any similarities and our individual capture of things the other may have missed. If necessary, we reversed the video to confirm an analytic insight or to clarify a disagreement about our findings. Our reflections in between each 10-minute segment enabled us to “shop talk” and come to consensus about how the children interacted with adults. The exchange and development of ideas was a richer one than either of us could have generated on our own.

Coding systems for a video/film, if used, could include not just the content but the filmmaking techniques employed to assess its artistic impact (e.g., HANDHELD, ZOOM, HARD

CUT, DISSOLVE, VOICE-OVER). Walsh et al. (2007) and Silver and Lewins (2014) profile several software programs that can code digital video, but they also note each one's limitations such as cost, currency, and user-friendliness. Several CAQDAS programs (e.g., Transana, INTERACT, webQDA) can access or store digital video and photographs for coding in addition to text. Though Friese (2014) recommends coding the video file directly rather than coding a transcription of it to stay close to the digital data (p. 103), Figures 3.8 and 3.9 illustrate CAQDAS screenshots from Transana and INTERACT software respectively, which demonstrate the processes of video and transcript analysis.

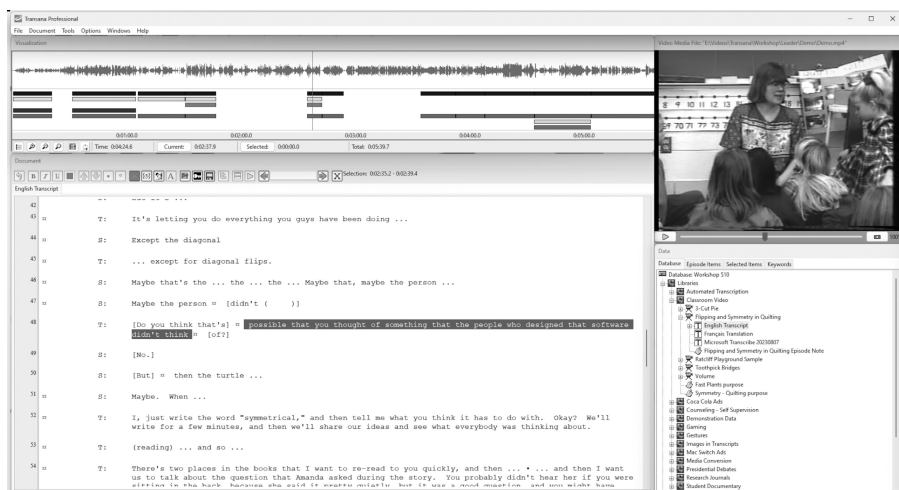


Figure 3.8 A screenshot from Transana software (courtesy of David K. Woods, transana.com)

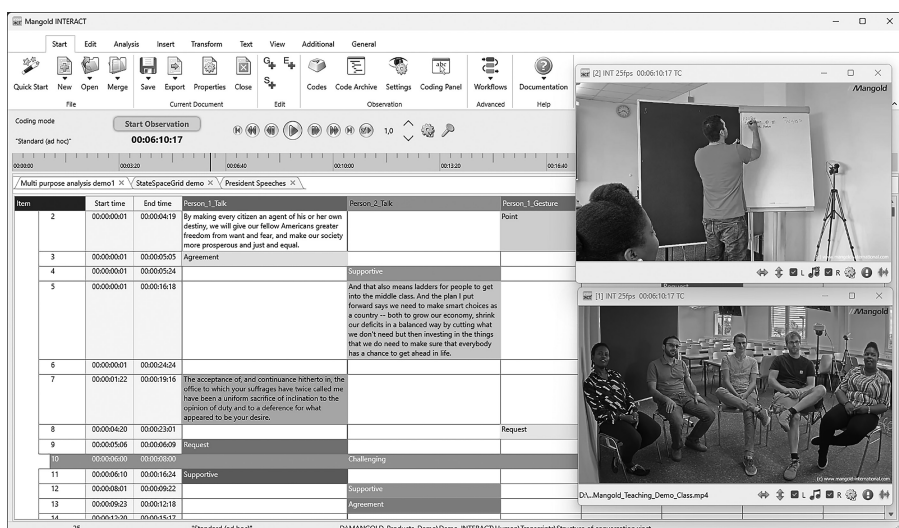


Figure 3.9 A screenshot from INTERACT software (courtesy of Reinhard Grassl, Mangold International, mangold-international.com)

Overall, a researcher's video analysis is comparable to a video camera's and player's functions. Your eyes can zoom in and out to capture the big picture as well as the small details. When necessary, you can freeze the frame, play a portion in slow motion, or loop a section to replay continuously in order to scrutinize the details and nuances of action. Your written analysis of video is like the translation subtitles or DVD soundtrack commentary accompanying the original footage. For more on video as method, see Harris (2016).

Recommended Guidance

Available texts provide qualitative researchers with more detailed approaches to the analysis of visual media and materials. Clarke et al.'s (2018) "Mapping Visual Discourse Materials" chapter in their text *Situational Analysis* presents a thorough list of questions to consider from the perspectives of aesthetic accomplishment ("How does the variation in color direct your attention within the image?") to contextual and critical readings ("What work is the image doing in the world? What is implicitly and explicitly normalized?") (pp. 282–3).

Thomson (2008) and Freeman and Mathison (2009, pp. 156–63) provide excellent guidelines and questions for the analysis of children's drawings and participant-produced photographs and media ("How does the image relate to bigger ideas, values, events, cultural constructions?"). Hammersley and Atkinson (2019) provide rich guidance for analyzing indoor environments from an ethnographic perspective. Berger (2014b) superbly reviews how everyday objects and artifacts can be analyzed from sociological, psychological, anthropological, and other perspectives to interpret the meanings and values of our personal possessions and material culture.

Björkvall (2017), Freedman and Siegesmund (2024), Grbich (2013), Hansen and Machin (2013), and Ledin and Machin (2018) provide excellent overviews and summaries of analyzing visual and media materials. Altheide and Schneider (2013) provide rich data collection protocols for and conceptual approaches to media analyses of print and digital documents, while Coffey (2014) and Grant (2019) offer concise yet substantive overviews of document analysis. Kozinets (2020) sharply attunes readers to the visual and textual components of "netnography" or social media research. Berger (2014a) uses social science lenses and filters for media analyses of films, television programs, video games, print advertising, mobile phone communications, and so on. Heath et al. (2010) and Nassauer & Legewie (2022) offer valuable guidelines for all facets of working with and inductively analyzing video recordings. Though analysis is addressed minimally in Braun, Clarke, and Gray's (2017) *Collecting Qualitative Data*, the chapter collection provides excellent guidance for lesser used and newer forms of data such as instant/text messages, e-mail interviews, blogs, and online forums.

Chapter discussions can be found in Pauwels and Mannay's (2020) impressive assembly of contributors for *The SAGE Handbook of Visual Research Methods*, while Knowles and Cole's (2008) *Handbook of the Arts in Qualitative Research* provides additional readings in photography, video, zines, and other popular visual forms. Even general introductory textbooks in art history and appreciation, film studies, fashion design,

architecture, digital photography, and other related fields can enhance your knowledge base of design principles such as line, color, texture, lighting, symmetry, composition, and other elements which can support your analytic work.

As a theatre practitioner, I was trained to design for the stage, so visual literacy is a “given” in my ethnographic ways of working. Today’s mediated and visual cultures seem to indoctrinate and endow all of us by default with visual literacy—heightened awareness of images and their presentation and representation. From my readings of various systematic methods for analyzing visual data, I have yet to find a single satisfactory approach that rivals the tacit and visceral capabilities of human reflection and interpretation. Trust your intuitive, holistic impressions when analyzing and writing about visual materials—employ a personal response methodology coined as “organic inquiry.” Overall, the goals of visual analysis are to “ask what kinds of ideas, values and identities are therefore communicated and what elements, processes and causalities are hidden” (Ledin & Machin, 2018, p. 32).

The next chapter begins with an overview of how to use this manual to guide you through its first cycle coding methods profiles, and how to select the most appropriate one(s) for your particular qualitative research study.