

RRISIQ Workshop April 10, 2014

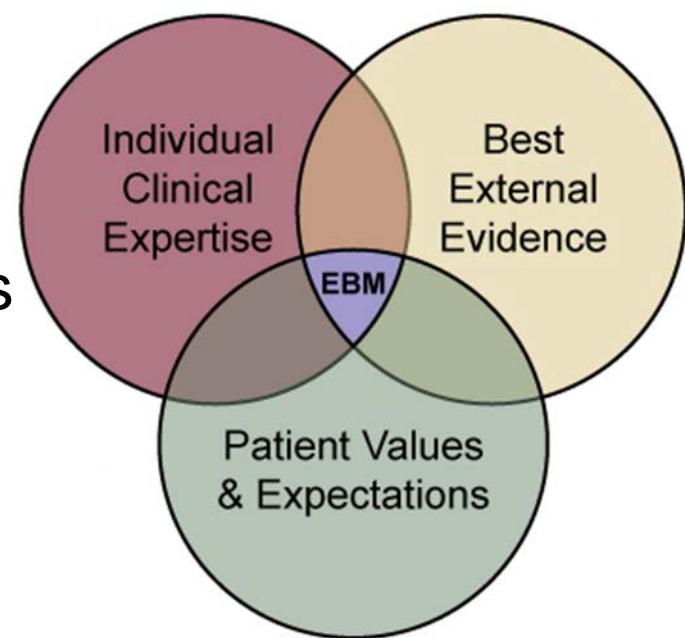
Qualitative Meta-Synthesis

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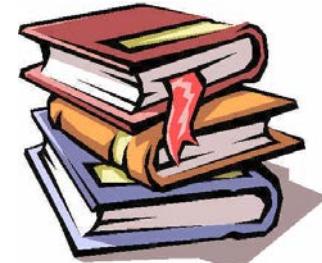
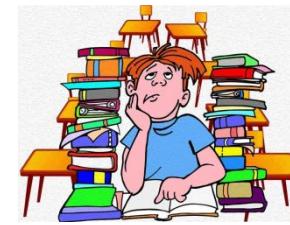
Why Meta-Synthesis?

- Proliferation of qualitative research in the health sciences and practice disciplines
- New turn to evidence-based practice and systematic reviews of research
- Under-utilization of qualitative findings in practice
- Lack of methods for conducting systematic reviews of qualitative research



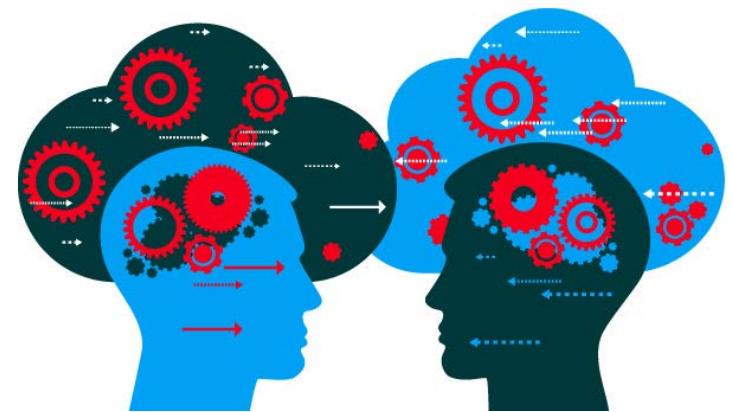
What Meta-Synthesis is Not

- Conventional narrative reviews of qualitative or quantitative research
- Quantitative meta-analyses of quantitative research
- Secondary analyses & pooled case comparisons of qualitative data
- Critical integrative literature review



Inherent Complexity of the Challenge

- Multiple methods
- Multiple disciplines
- Multiple epistemologies



Good qualitative meta-synthesis
is harder than it looks

Terminological Context of Qualitative Meta-Synthesis

Social Sciences

- Meta-Ethnography (Noblit & Hare, 1988)
- Meta-Theorizing (Ritzer, 1991)
- Metatheory, Metamethod, Meta-data-analysis (Zhao, 1996)

Health Sciences

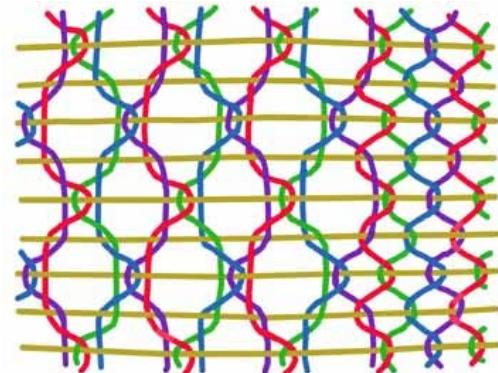
- Aggregating Qualitative Findings (Estabrooks, Field & Morse (1994))
- Qualitative Meta-Analysis (Schreiber, Crooks & Stern (1997))
- Formal Grounded Theory (Kearney, 2001)
- Meta-Study (Paterson, Thorne, Canam & Jillings, 2001)
- Qualitative Metasummary (Sandelowski & Barroso, 2003)

Qualitative Metasynthesis

- An interpretive integration of qualitative findings that are themselves interpretive syntheses of data, including phenomenologies, ethnographies, grounded theories, and other integrated and coherent descriptions or explanations of phenomena, events, or cases.
- Reflects an inclusive logic - all findings are accommodated & crafted into a novel interpretation

Qualitative Metasynthesis Techniques

- Constant comparison analysis
- Taxonomic analysis
- Reciprocal translation & synthesis of *in vivo* concepts
- Use of imported concepts to synthesize data



Challenges Across Metasynthesis Approaches

- Finding reports of qualitative studies
- Appraising qualitative research reports
- Finding the findings in research reports
- Integrating findings



Finding reports of qualitative studies

- Need to search across disciplines
- Need for exhaustive list of search terms
- Recall (over precision) as goal of search
- Need to have working definition of *qualitative research*
 - Qualitative research vs. qualitative data
 - Qualitative research vs. studies using techniques associated with qualitative research
 - Qualitative research vs. survey, mixed methods, and other reports using numbers

Appraising studies

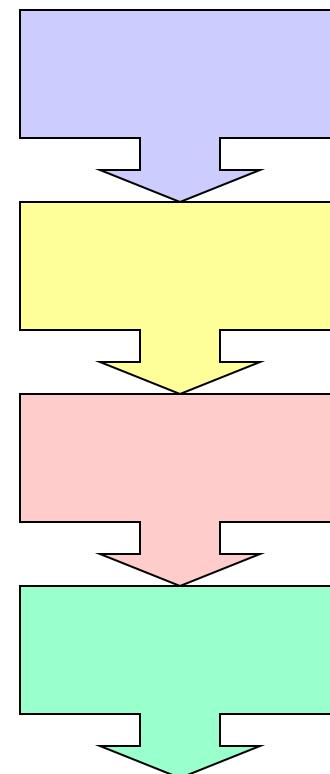
- Need to differentiate between understanding and evaluation
- Need to differentiate report from study
 - Reconstructed logic vs. logic-in-use
- Need to differentiate between and offset reporting inadequacies and methodological or interpretive errors
- Need to understand idiosyncrasies of evaluation process
- Need for connoisseurship in critique

Use of a reading guide

- To ensure that each report meets inclusion criteria or, conversely, that inclusion criteria require no further modification
- To ensure familiarity with the informational content, methodological orientation, style, and form of each report as basis for comparison, summary, & analysis
- To permit identification of key elements in reports required for judicious appraisal & valid integration
- To enable reviewers to understand reading preferences & expectations and thereby maximize reflexive accounting practices

Finding the findings

- Defining *findings*
- Locating them
- Classifying findings
- Extracting them



Challenges in finding the findings

- Relationship between findings and the question (assumptions as to the role of the question?)
- Relationship between findings and method (how does chosen design influence what we report?)
- What do we know about the data?
- Within the data reported, what do we understand as findings?



What are *findings*?

- The researchers'/writers' interpretations of the data they collected, or the data-based and integrated discoveries, conclusions, judgments, or pronouncements they offer about the phenomena, events, or cases under investigation.
- The primary data in research integration studies are the findings in reports, not the quotes or events researchers present as offers of proof or illustration of findings.
e.g., the finding in a grounded theory study is the grounded theory, not the empirical material from which it was derived.

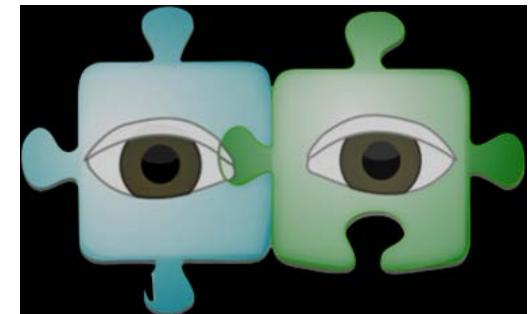
Where are the findings?



- Findings are typically in the “results” section of experimental-style reports.
- Findings may also be found in the introduction & discussion sections of amended-experimental-style reports.

Orientations to *findings*

- Empirical/analytical; data-based
 - Independent status vis-a-vis *data*
 - Data are collected
 - Data are plural & countable
 - Primary orientation in research integration studies
- Constructivist; data as representation
 - Interdependent with data; distinction is false
 - Deciding something constitutes data is the first data transformation
 - Data is generated
 - Data is singular; a body of experience



Findings vs. presentations of data & analysis

■ Data

- Empirical material, such as case descriptions, case histories, quotes, incidents, and stories obtained from participants, which researchers use to support their interpretations, or findings

■ Analysis

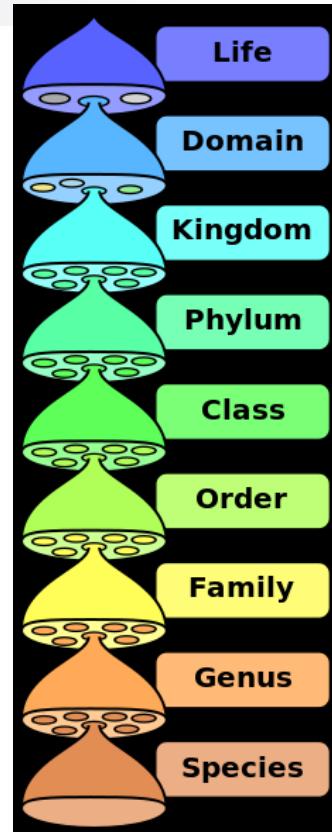
- Data management techniques, e.g., coding schemes, visual displays, or other treatments of data researchers used to produce their findings

More challenges related to finding the findings

- Depending on style & form, there may be no findings in the data-oriented sense
 - Misrepresentation of data as findings
 - Misrepresentation of analysis as findings
 - Alternative-style reports
 - Theses & dissertations
- Misplacement of findings in experimental-style report
- Misuse of quotations and incidents
 - Staging, under-/over-interpretation, no apparent link to finding
- The intra-subject vs. cross-subject theme problem
- Conceptual confusion and drift

Classifying the findings

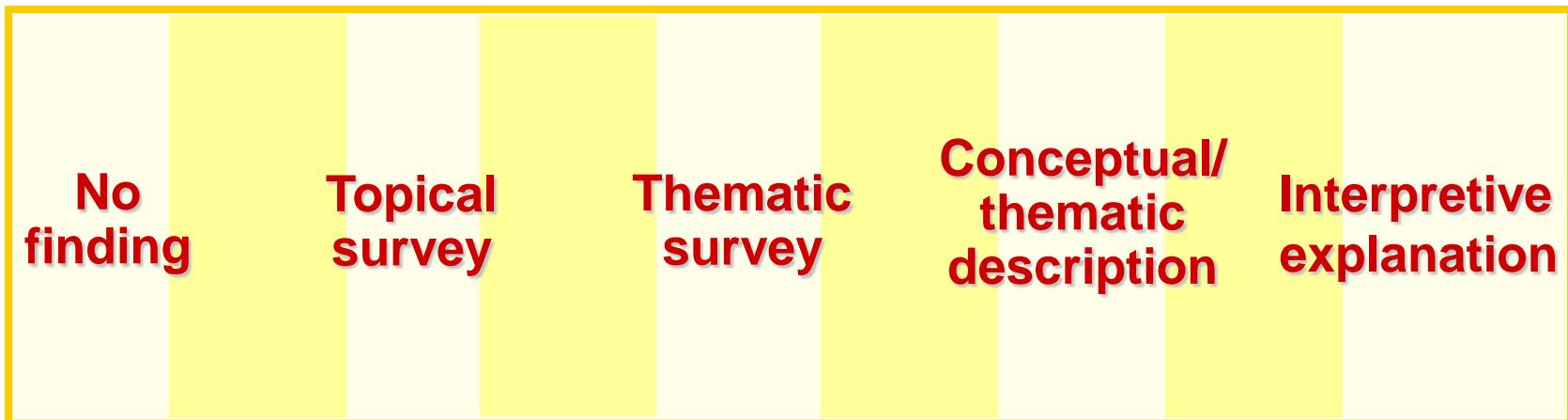
- Development of typology to:
 - offset the quality criterion problem
 - bypass the discrepancy between method claims and the actual method used
 - prevent exclusion of valuable information for practice because of method errors that do not undermine the value of this information
 - have a basis for selecting integration approaches
- Typology emphasizes *differences in kind* between qualitative *findings*, not *differences in quality* between qualitative *studies*.



Typology of Qualitative Findings

Closest
to data

Farthest
from data



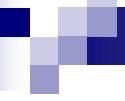
Not research Not qualitative research

Exploratory Descriptive Explanatory
Qualitative Research



Borderline studies

From: Sandelowski & Barroso (2003)



Type 1. No finding

- Neither research nor qualitative research
- Re-presentation of data with no interpretation
- A likely consequence of mistaking heaped data for thick description

Type 2. Topical survey

- Not qualitative research
- Quantitatively-informed inventories of data
- Surface reduction & re-arrangements of data
- Emphasis on the nominal and the numerical

Type 3. Thematic survey

- Least transformed of qualitative findings
- Latent as opposed to manifest content analysis
- Nominal use of concepts

Type 4. Conceptual or thematic description

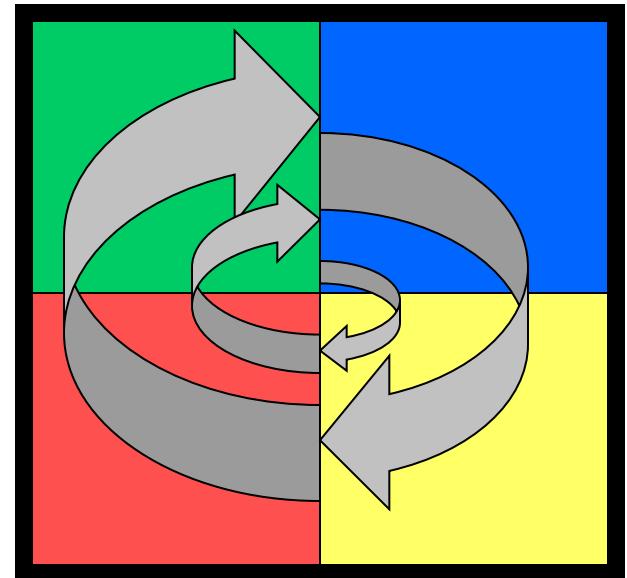
- Interpretive use of concepts or themes
- Conceptual or thematic descriptions move beyond surveying data toward interpretively integrating portions of data

Type 5. Interpretive explanation

- Most transformed of qualitative findings
- Coherent, integrated rendering in forms of, e.g., grounded theory, phenomenological description, ethnographic explanation, addressing causality or essence and attentive to relevant variations in both sample and data

Methodological Variations: Types of qualitative metasynthesis approaches

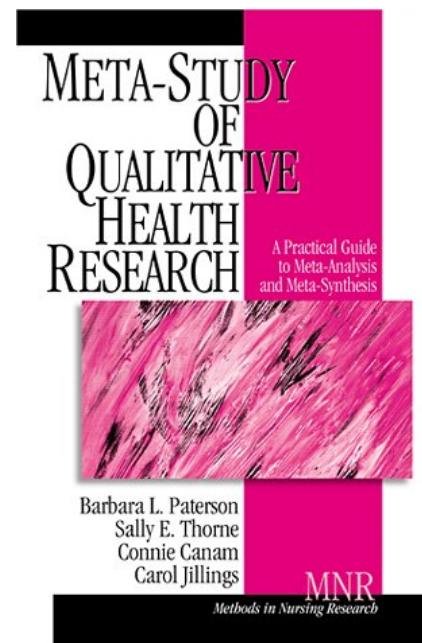
- Qualitative meta-study
- Qualitative research integration



Meta-Study

“remapping the cognitive status” (Zhao, 1991, p. 381)

of a changing field of study
by considering its
theoretical, methodological,
and epistemological bases
within a historical and
sociocultural context.



Components of Meta-study

Meta-Data-Analysis: “analysis of analyses” or an analysis of the data analyses available in reports about primary qualitative research studies

Meta-Method: study of the rigor, epistemological soundness, and fruitfulness of the research methods used in the research studies

Meta-Theory: uncovering underlying structures of extant theory as the theoretical framework and/or emergent theory that is grounded in the research findings

Meta-data-analysis

- the study of the underlying assumptions of various data analysis procedures
- the comparison of different forms of data in terms of their quality and utility
- the synthesis of research findings of various studies in a particular area of research

Challenges: Deriving data from the text of a primary research report; adapting the procedures using a coherent methodology; being analytically honest (e.g.. quality vs. substantive content).

Meta-method

- the initial appraisal of individual primary research studies in regard to research design and data collection
- an overall appraisal of the themes and patterns that are evident in the collection of primary research included in the meta-study

Challenges: Determining how the methodological decisions by the primary researcher have influenced the nature of the research findings; the requirement of considerable methodological knowledge

Meta-theory

- identifying major cognitive paradigms and schools of thought that are represented in the theoretical frameworks and emerging theory of selected research reports
- relating the theory to the larger sociocultural, historical and political context
- uncovering significant assumptions underlying specific theories

Challenges: Theory can be difficult to detect in qualitative research; theory may be variously understood in primary reports; meta-theory without accountability can become pseudoscience.

Products of Meta-Study



- Historical critical analysis of a field
- Complexity of the final synthesis step once the diversities, patterns and methodological imperfections emerge

Qualitative Research Integration

- Scientific inquiry aimed at systematically & judiciously appraising and combining the findings in reports of completed qualitative studies in a target research domain
- Term refers to both analytic processes and interpretive products



Research integration of
qualitative findings

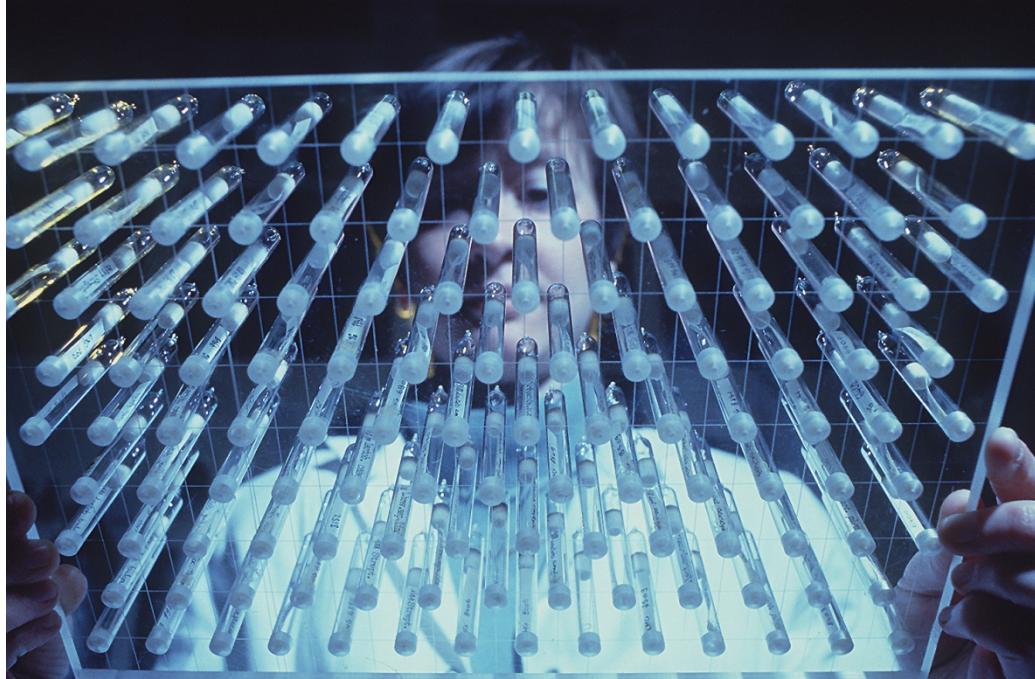
versus

Interpretive syntheses
of data in primary
qualitative studies



Research integration vs. meta-study

	Research Integration	Meta-study
Focus	Study findings	Study studies
Primary data	Findings	Various elements of reports
Orientation to data	Empirical; findings are indices of target events	Discursive; reports are socio-historical constructions
Method examples	Qual metasummary Qual metasynthesis	Meta-theory, -method Citation analysis Discourse analysis
Product examples	Evidence synthesis Research hypotheses	Critique Intellectual history



- Qualitative research integration has more limited empirical goals but greater immediate utility for practice than meta-study.
- Qualitative meta-study offers an historical staging and explanatory context for research integrations.

Logic of analysis

Empirical: Integration

- Reading lines
- Reducing text
- View of language as neutral vehicle of communication



Discursive: Critique

- Reading into and between the lines; over-reading"; reading for "silences," what is "missing"
- Complicating text
- View of language as interpretive structure, artifact of culture

Critical Caveats in Qualitative MetaSynthesis

Or...the
importance of
humility in
claims-making



1. Experience thrice-removed

- All research integrations are reviewers/readers' constructions of researchers/writers' constructions of the data they obtained from research participants, which are themselves constructed by participants in the course of the research encounter to represent their experiences.

2. The problem of representation

- The best access anyone has to *experience-as-lived* is via *experience-as-told*.





3. Discursive readings as correctives to empirical claims

- An empirical reading takes findings to be verifiable indexes of actual experience.
- A discursive reading takes them to be the result of language and other social practices involving researchers, participants, and reviewers of research reports as (re)producers of discourse.

4. Choices & judgments

- All metasyntheses are the result of a series of choices and judgments made by reviewers at every stage of the process.
- The obligation of reviewers is not to standardize judgments (an impossibility), but rather to engage in reflexive accounting practices to clarify and defend the choices and judgments they made.

5. Methodological groundings

- What constitutes science?
- What is the role of a theoretical claim within a truth construction?
- How does method relate to “evidence” claims?



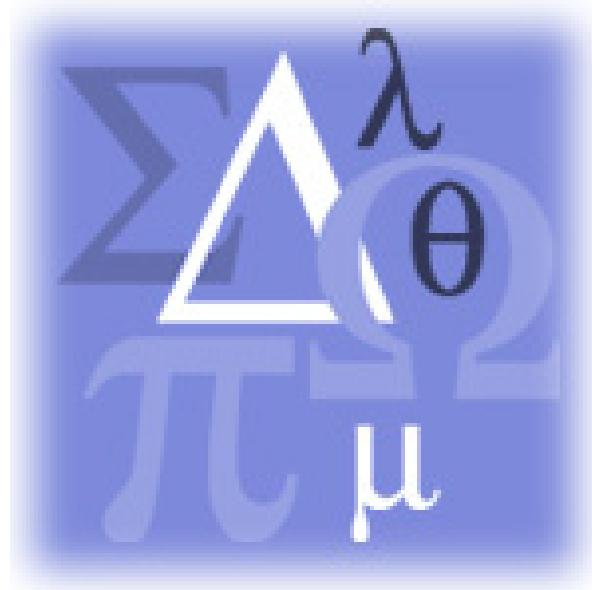
7. Homogenizing variation

- Commonalities and diversities in human experience
- Researcher assumptions
- Representation issues
- Generalization issues
- Compounding effects



7. Reproducing bias

- Implications of research design
- Quality criteria
- Theoretical frame



8. Objectifying meaning

Complexities in social construction

- Example: What does it mean to experience breast cancer?

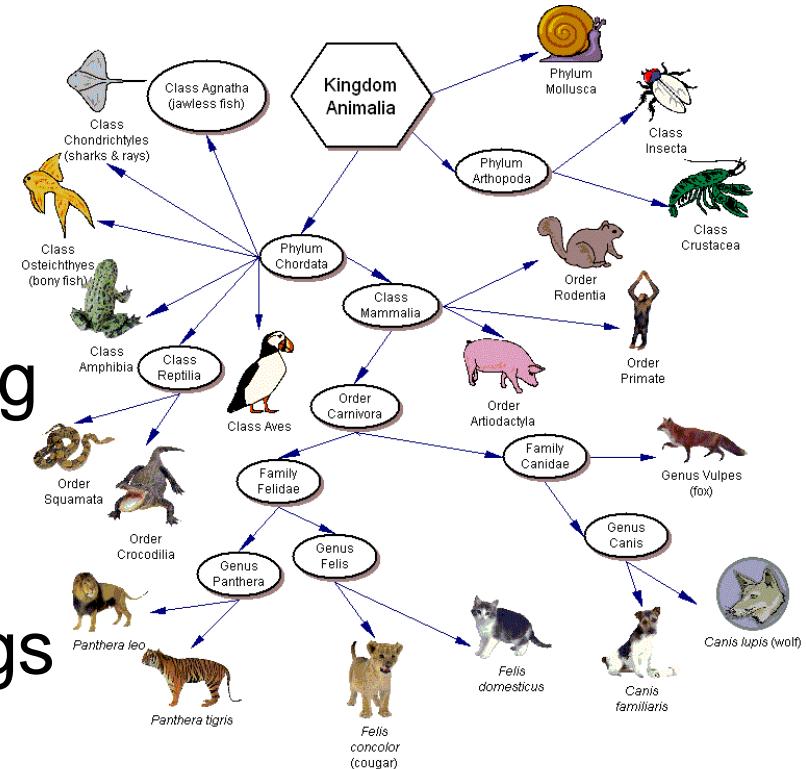
- (1991) – Intrusion
 - (1994) – Hair Loss
 - (1996) – Challenge
 - (2000) – Spiritual transformation



- What constitutes truth?

Approaches to Synthesis

1. Taxonomic Analysis
 - Similar to axial and selective coding
 - To identify the underlying conceptual relations signified (even if not expressed) in the findings



2. Constant Targeted Comparison

- Deliberate search for similarities and differences between a target phenomenon and other phenomena with apparent resemblance
- Helps clarify defining and overlapping attributes of target phenomenon to minimize likelihood of inflating its uniqueness
- Like “related cases” process in concept analysis



3. Imported Concepts

- Borrowed from empirical or theoretical literature as a device to integrate finding



4. Reciprocal Translation

- Constant comparison of intra-study phenomena *with in vivo* concepts

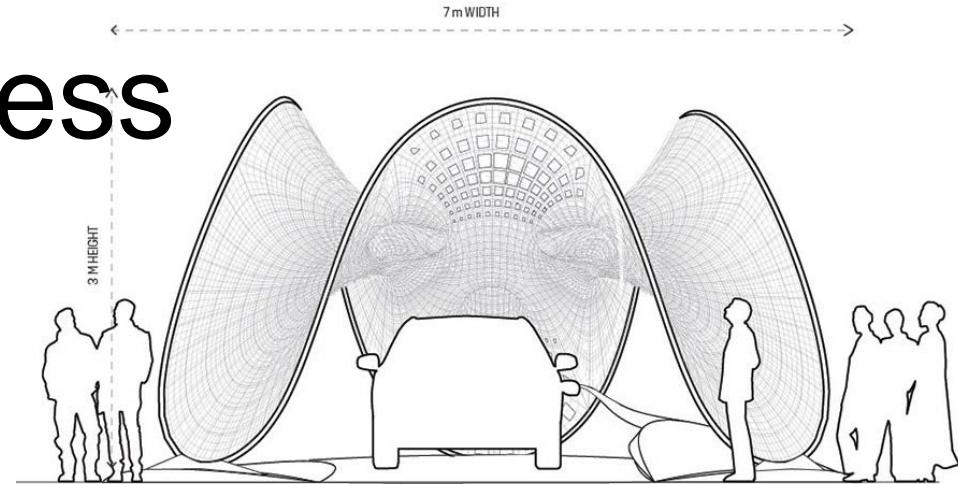


Mechanics of Synthesis

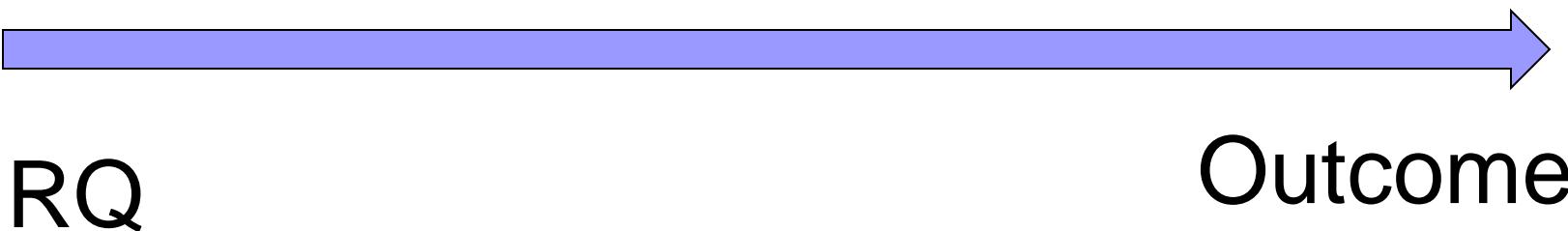
- Data display system
- Methodological “noise” (eg samples)
- Contextual determinants (eg chronology)
- “Findings” (eg take home messages)

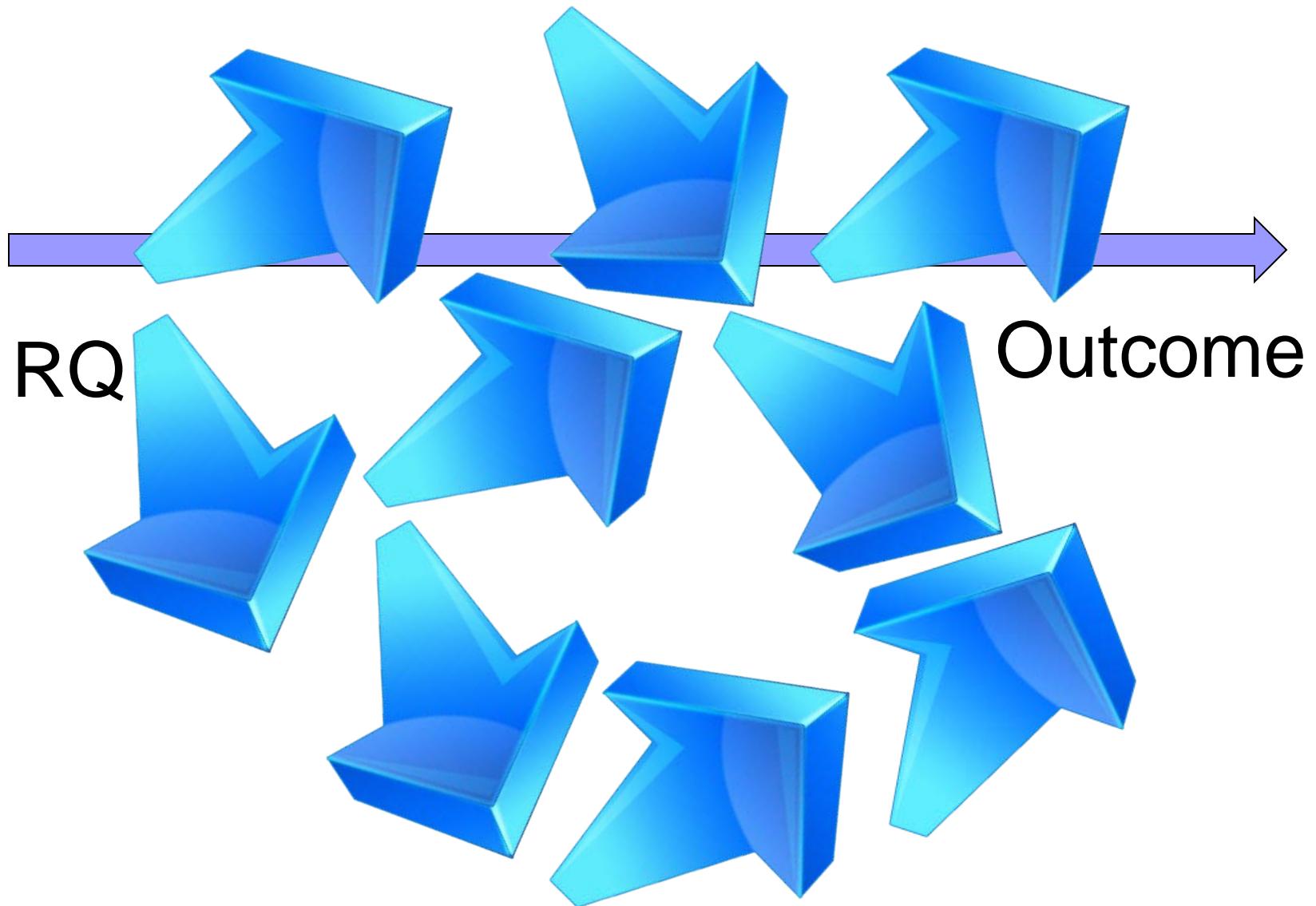


Synthesis Process



- Immersed vs arms length
- Competing investments/agendas
- Representation of original vs capacity to synthesize whole
- Decisional vs confirmational roles



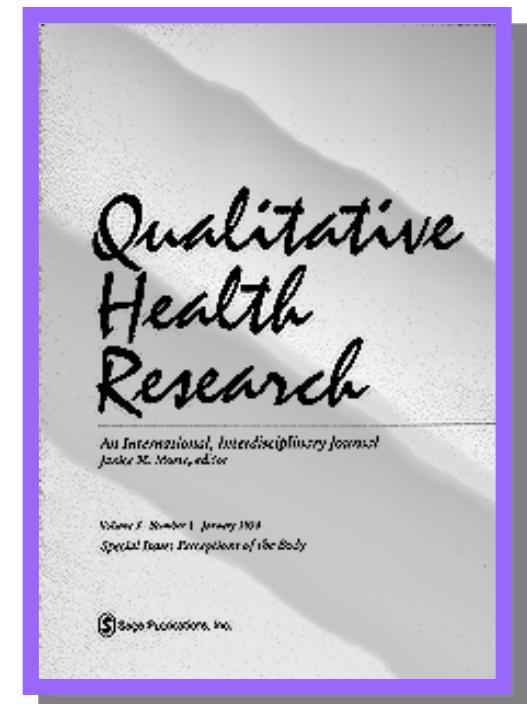




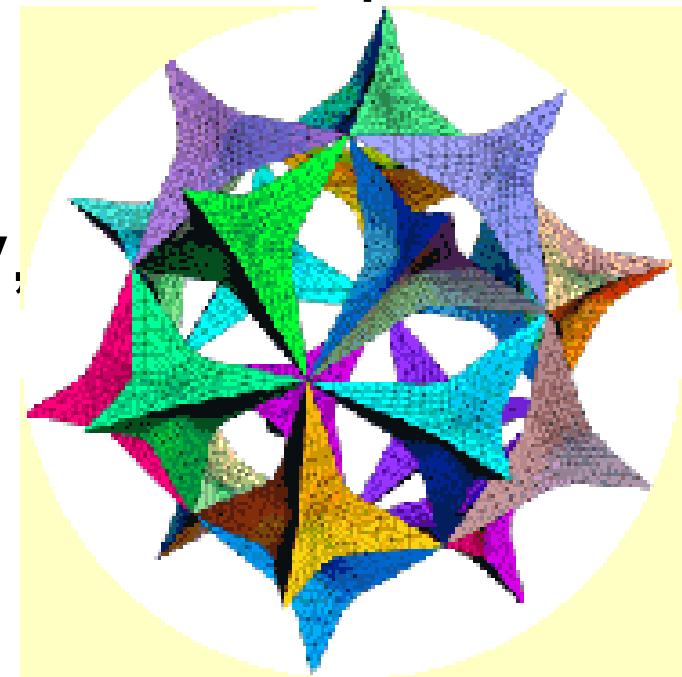
RQ **SYNTHESIS** Outcome

Possible Correctives?

- Acknowledge qualitative research as social construction rather than evidence.
- Create a language within the health (applied) qualitative research community to account for “probable truths” or pragmatic generalizations



- Slow down our momentum toward meta-synthesis until we have a strong foundation of theoretically sound options
- Strengthen our quality criteria for qualitative health research
- Create a culture of complexity, not simplicity, in the presentation of our findings



Questions

- What meta-questions should be driving our synthesis process?
- What criteria should we use to assess quality of evidence pieces?
- What ideas should be in or out of synthesis?
- How will reciprocal translation be managed?
- Expected shape of the synthesis product?