EDUC 500 2014s Lecture 5 (Day 05)
Lectures Notes- F. Feng, 08, July, 2014

- Mixed methods research
- Chapter Overview: Mapping approach
  - Significant shifts (Research 2.0)
  - Third way, triangulation
  - Philosophical underpinnings
  - Mixed methods research: questions/objectives
  - Design issues in mixed methods research
  - Sampling issues in mixed methods research
  - Mixing Methods of Data Collection/Observation
  - Analytical Issues in Mixed Methods Research

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Mixed Methods Research

- ➢ Significant shifts in research enterprise (Research 2.0)
- ✧ Research infrastructure- impact of digital technologies
  - PCs, Internet only academic institutions, non-public, less content; no search engines: Google, Yahoo; no social network: Facebook, Twitter, Wikipedia
  - 21st century research: Digital revolution, paradigmatic shift (2.0); new opportunities, new ways, new possibilities: search, contact, recruit, gather, manage, analyze data
- ✧ Embrace of greater methodological diversity
  - Unique dual methodological text; beyond paradigm wars, broaden perspectives

Method(ologie)s: Implications on mixed methods research

- Schwandt (2007), “Methodology refers to… a theory of how inquiry should proceed. It involves the analysis of the assumptions, principles, and procedure in a particular approach to inquiry… while methods refer to… a procedure, tool or technique used by the inquirer to to generate and analyze data” (p. 191).
- Schwant (2007) as cited in mixed methods claim, how combining positivist and interpretivist methodologies, would be two studies as “methodologies make different assumptions about the nature of the world and what counts as valuable knowledge… each requir[ing] different procedures or methods to find the type of data needed (Glesne, 2011, p. 14).

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Schwandt, T. (2007). *The SAGE Dictionary of Qualitative Inquiry*. 3rd. Ed. Thousand Oaks, CA: Sage Publications

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Mixed Methods Research

- A third way
  - Merging respective strengths and weaknesses
  - Two or more methods
  - History of mix in social and health researchers ‘
  - (Maxwell & Loomis, 2003)
  - Donald Campbell- initial openings
  - Multi-trait method matrix
  - among first to encourage mix, multiple traits, improve validity, measure not method producing observed results (Campbell & Fiske, 1959)

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- A third way
  - Methodological pluralism
  - Campbell- encouraged different disciplines to collaborate, diversity of approaches accrue
  - Campbell (quantitative)- experimenting society, quasi-experimentation
  - Analytical power of strategically merging different types and sources of data
  - Denzin- (qualitative) triangulation- validate observations by drawing upon multiple sources or perspectives, within same investigation

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- A third way:

Denzin- 4 ways of triangulation:

1. Theoretical- multiple theories throughout design, collection and analysis process, studying phenomenon via multiple lenses
2. Investigator- different researches contributing: collect, analyze, interpret, observe-improve credibility of observations and interpretations: multi/trans/inter disciplinary research collaboration, researching problem of common interest

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- A third way
  - Denzin- 4 ways of triangulation (continued)

  3 Methodological- employing multiple methods to study a phenomenon, to overcome deficiencies and biases from single method approach

  4 Data Analysis- employing several different methods of analyzing and interpreting data, to improve validity of conclusions, ensuring robustness of results

  - Campbell, et al (quantitative) + Denzin (qualitative)- set stage for emergence of "third paradigm"- combining elements of approaches, breadth and depth

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- A third way
  - Bridging the divide
  - shared terrain: objectives, scopes, nature of inquiry
  - eclectic approach draws on complimentary strengths
  - Multiple viewpoints, perspectives, positions, standpoints
  - Continued development of mixed methods approaches
  - More complex: variety of practical, theoretical, procedural considerations when employing
  - Philosophical underpinnings, questions more suited for mixed methods, unique methodological considerations to keep in mind

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- Philosophical underpinnings
  - Epistemological traditions: Positivism, phenomenology- different perspectives of what is knowable, how best to study phenomena
  - Corresponding polar positions: between naïve realism and constructivism
  - Single reality, right theoretical concepts and testing vs. knowledge, truth, reality as socially constructed, always in a state of change, never quite knowable
  - Distinct differences between traditions/visions; on how to define and study truth, knowledge and reality

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- Philosophical underpinnings
  - Epistemological differences: rigidity with preference and defensive of methods
  - Conflation of perspective and method: realism with quantitative, constructivism with qualitative
  - Mutual championing and calling into question: “paradigm wars” or “science wars”
  - While “paradigm wars” ended, fundamental differences: incompatibility thesis: incommensurable
  - These claims rejected by mixed methods researchers, middle ground sought

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- Philosophical underpinnings
  - Pragmatism
    - Not committed to any single philosophy/view of reality
    - Rejection of traditional dualisms: real vs. constructed, freewill vs. determination, subjectivism vs objectivism, induction vs. deduction
    - What works best in particular situation
    - Method of inquiry based on iterative relationship between processes of discovery and action vs. search for singular truth or correct answer

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- Philosophical underpinnings
  - Pragmatism (continued)
    - Theoretical, methodological and analytical approaches: Favor eclecticism and pluralism over dogmatism
    - Results and outcome-oriented, less concerned with prior knowledge, laws, rules governing what is considered as valid knowledge
    - Finding most complete answers to research questions through best method of combination of methods
    - Strong commitment to praxis- theory informing practice

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- Mixed methods research: Questions and objectives
  - Simultaneously inductive and deductive
  - Types of questions more layered, nuanced, comprehensive then single method studies
  - Concern with both variance and process
  - Variance question: frequency, aggregate statistics, predictive capacities
  - Process questions: exploring, describing, understanding, and/or explaining origins, meanings, relationships re: particular events, phenomena, processes: *how* they occur, what they *mean* to those involved

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- Design Issues in mixed methods research
  - Best chance of finding comprehensive answers to specific and multifaceted research questions
  - Different projects with differing objectives and priorities influence way in which different methods are brought together within the project
  - Often involve mixture of strategic choice, happenstance
  - Solid research design requires paying attention to the relationships among and between components
  - Ideally, all components compatible and complement for comprehensive understanding: order might vary

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- Order: More easily implemented in text, than field
  - Concurrent mixed method designs
    - Both qualitative/quantitative data collection same time
    - Mostly with deductive approaches, theories- identifying research questions and data sources from start, gathering data: members coordinating in parallel, also with concurrent data acquisition
  - Sequential mixed method designs
    - Data collection process broken into logical stages
    - Primary data collection, followed by supplementary information at secondary stage, which sequence is best, depends on number of factors

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- Integrative mixed method design
  - Not always orderly, deviations
  - Systemic mixed method integration-
    - many incorporate both concurrent and sequential
    - Same mixture can occur within study
  - Ad hoc mixed method integration
    - Surprises, stochastic factors
    - Ad hoc recognition of significance
    - Ad hoc discovery of data sources

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- Sampling issues in mixed methods research
  - Considered and complex mix of quantitative/qualitative methodologies relying on combination of probablistic and purposive sampling strategies
  - Type of sampling procedures: by research objective
  - Multi-faceted research questions require multiple and diverse sampling sampling techniques
  - No matter what sampling techniques, keep in mind that overlapping sampling strategies in mixed methods designs normally need to be congruent
  - Need to be careful when combining probability and purposive within same investigation

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- Sampling issues in mixed methods research
  - Sequential design sampling strategies
  - Potential to dramatically improve:
  - sample selection and solicitation
  - Technique used in one stage assist in identifying or contacting sample for second stage
  - Can include participant: both stages of research
  - Or redirect to stages more appropriate

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- Mixing methods of data collection, observation
  - Familiarity with strengths and weakness of both
  - Solid understanding of relative strengths and weaknesses of various methods is vital component
  - Mixed to emphasize complimentary of strengths, non-overlapping weaknesses of methods
  - Neutralize effects on inherent weakness of single method, used mixed method observation and data collection strategies to help develop more reliable/valid instruments
  - Relying on two independent data collection strategies
  - Can result in poorer data quality and observations

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- Analytical issues in mixed methods research
  - All mixed methods investigations require us to merge data and observations for analysis and interpretation
  - One of the greatest benefits of mixed methods designs found at data analysis stage when different types of data can be brought together to inform each other
  - Merged data can provide a much greater diversity of divergent views that allow for falsifying aspects of theory, question assumptions, etc.
  - Greater confidence in research: can analyze data in way to more thoroughly validate plausibility of conclusions

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- Analytical issues in mixed methods research
  - Key question: to transform or not to transform data
  - Transformation for compatibility or maintaining integrity
  - Transforming qualitative data- could defeat richness of data, challenging to connect, no single software that analyzes both
- Closing notes
  - Epistemology does not dictate methodological and analytical approaches, problems with notions of incommensurability
  - Decision after consideration, research question ⇔ method
  - More nuanced reading than following from question

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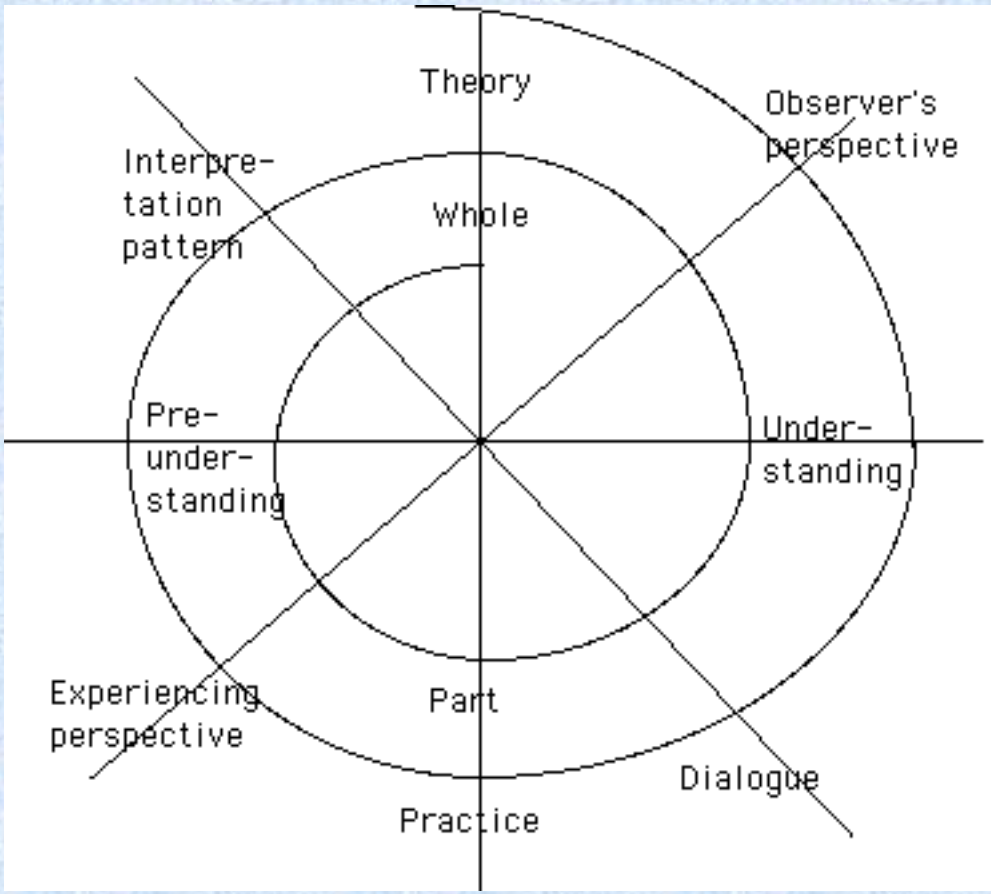
Hermeneutical Phenomenology (a condensed introduction)

http://blogs.ubc.ca/educ500/files/2014/06/Phenomenology-Activity-AF-TPI.pdf

- *Phenomenology*
  - Husserl: "Back to the things themselves", lived attentiveness
  - Immediacy, disclosure, bracket preclusion and theories of mind
  - Pre-verbal, pre-reflective, pre-conceptual, pre-theoretic (van Manen, 1989)
  - Lived Experience in Lifeworld, seeing the familiar as strange,
- *Hermeneutics*
  - Theory and practice of interpretation, understanding
  - Hermeneutical circle, in the lived everyday, possibilities
  - Interpretive method, of text, Lifeworld as text, writ large
- *Hermeneutical Phenomenology:*
  - Readings/perform: Visceral, powerful, evocative, poetic, in persuasion:
  - Human condition (Arendt, 1998): lived, poetic, narrated, linguistic, hopeful
  - Carson (1962), Varela et al (1991), Kohák (1984)

The Hermeneutical Circle (Bontekoe, 1996)

http://people.dsv.su.se/~evafaahr/lic/lic02.gif



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Hermeneutical Phenomenology

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