A Mixed-Methods Approach to Micro & Macro in Text (& Content) Analysis

Hovig Tchalian
Discussion points in my talk today:

1. Dissociating *micro* studies from (exclusively) *qualitative* and *macro* studies from (exclusively) *quantitative* methods

2. Combining small-scale, micro methods (intensive coding, grounded theory) with large-scale, macro ones (automated coding, dimensionality reduction) to generate theory

3. Walking through a case study of a current project, to demonstrate the alignment across analytical methods → *fine-grained* study of large-scale processes

DEFINITIONS & LEVELS

• As scholars of language, it’s fitting to be precise and … define our terms:
  1. **Mixed-methods** (in this instance) = quant + qual
  2. Term often assumes *multi-level*, due to the conflation between:
  3. Also suggests an implicit equation between:
     [qual ← → induction] & [quant ←→ deduction]
• I suggest a ‘mixed’ level, what we might call a “micro-quant” or “macro-qual” approach focused on word associations
• The *objective*: identifying consistent, theoretically relevant *associations* present (but often *latent*) in large-N textual data
• Very much in line with developments in *content analysis* toward incorporating new methods, especially with advances in computational analysis
CASE STUDY (EXTENDEDLY-NASCENT EV CATEGORY)

• Multi-part project with Mark Kennedy, Vern Glaser, Anthony Corso
• Focus: the development of the EV as a ‘problematic’ category
• Using GM’s, Tesla’s (and Nissan’s) launches into category as a complex case

GM Impact / EV1

• Qual + quant analysis (N>20k articles): methodologically + theoretically generative

Tesla Roadster
**Analytical Method**

Step → Methodological procedure → Analytical outcome

1. *Qual coding: sentence-level associations* → *Firm-level associations*
2. *Qual analysis: associational groupings* → *Firm vs. category associations*
3. *Quant replication: consistent assoc. patterns* → *Extension of analytical procedures at scale*

Large-scale + fine-grained analysis
HIGH-LEVEL PROCESS OVERVIEW

“curse” of multi-dimensional data

1. dimensionality reduction

2. pattern recognition

3. generalization

meaningful theoretical insights
IMPLICATIONS

- Empirical method: sentence-level co-occurrence (‘mixed’ levels → mixed-method)
- Method & software (e.g., MaxQDA) blur lines bet. quant and qual
  - Approach mimics NLP / comp ling studies (taggers, parsers)
  - “Partaking” of micro / macro (analytically + empirically)
- Instantiates the “curse of dimensionality”
  - Meaning-making requires some form of dimensionality reduction
- Requires comfort with ambiguity / living without DV
  - Also avoids “net effects” thinking (Ragin, 1987) & unnecessary creation of propositions / “weak hypotheses” (Delbridge & Fiss, AMR 2013)
- Combines analysis + theory → relevance / so-what
  - Theory largely, though not exclusively, emergent (Durand & Paolella, 2013; Kennedy & Fiss, 2013)
  - Loop (and a bit of a throwback): Theory → normative features → coding for emergent features ... (Rosa et al, 1999; Rosa & Porac, 2002)
THANK YOU!
**Empirical Levels**

- Macro phenomena
- Micro phenomena

= Large-N Studies?
= Small-N Studies?

= [empirical / ontological]
+ [analytical / epistemological]