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

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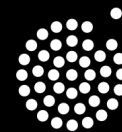
CONTEXT-SETTING

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

Tchalian, H. 2020. *Microfoundations and recursive analysis: A mixed- methods framework for language-based research, computational methods, and theory development* (Ch. 6 in Microfoundations of institutions – Research in the Sociology of Organizations, 65b, 107–125)

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:
       [qual ← → micro] & [quant ← → macro] *(Cattani & Fleischer, 2012)*
    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

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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

Tesla Roadster

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

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ANALYTICAL METHOD

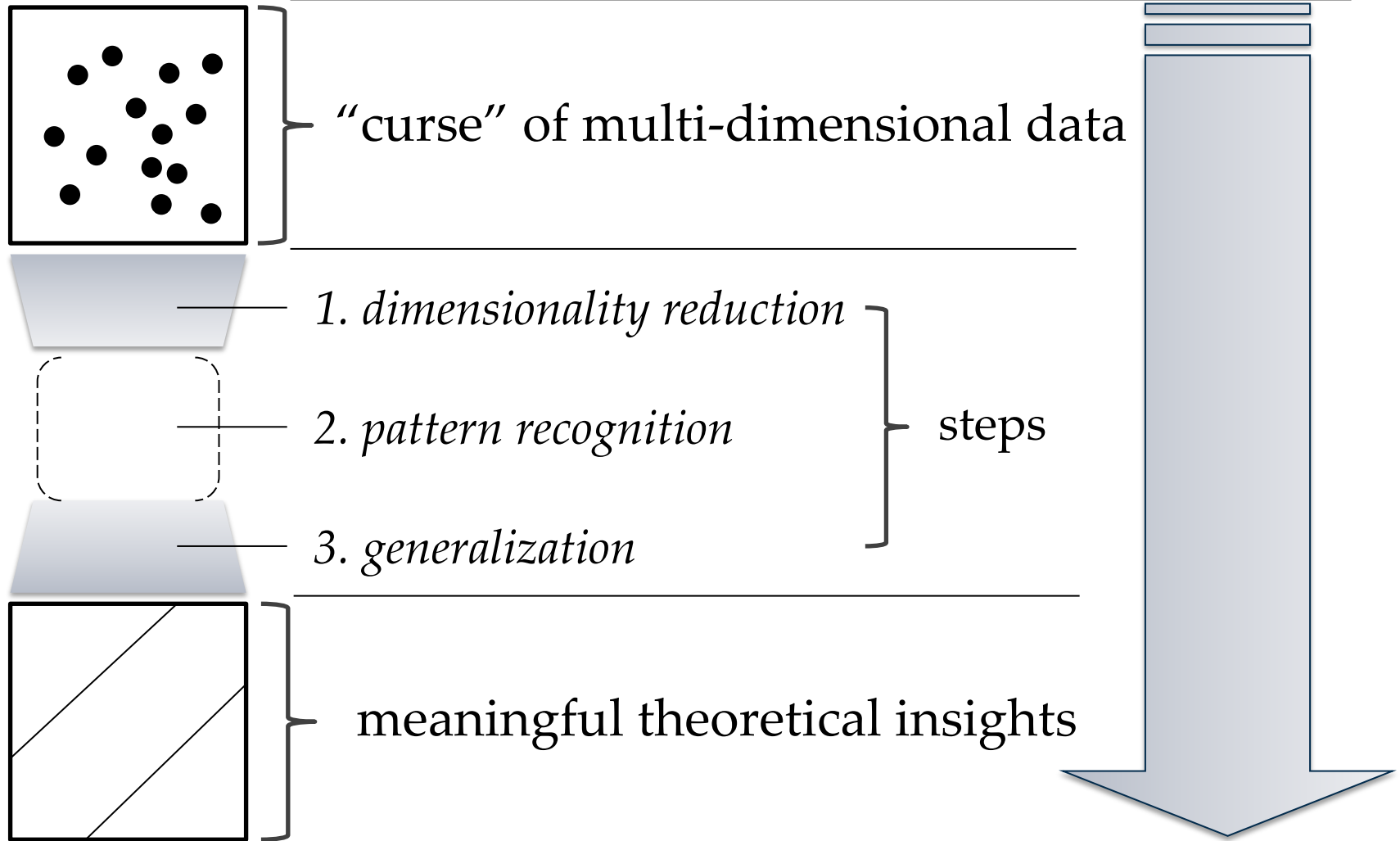| Step	Methodological procedure	Analytical outcome
1	*qual* coding: sentence-level *associations*	*firm*-level associations
2	*qual* analysis: associational *groupings*	*firm* vs. *category* associations
3	*quant* replication: *consistent* assoc. patterns	*extension* of analytical procedures at *scale*

large-scale
+
fine-grained

analysis

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HIGH-LEVEL PROCESS OVERVIEW

"curse" of multi-dimensional data

1. dimensionality reduction

2. pattern recognition   steps

3. generalization

meaningful theoretical insights

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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)

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THANK YOU!

EMPIRICAL LEVELS

= Large-N Studies?

Macro phenomena

Partaking

Micro phenomena

= Small-N Studies?

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