

The Role of Qualitative Research in Agri-Food Systems



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The Research Challenge

- Agribusiness scholars live in a **translational space** between industry peers and academic peers.
- These two sets of peers have **distinctly different demands**.

Industry Peers	Academic Peers
Relevant, actionable prescriptions for firm and market behavior	Elegant, quantitative, rigorous contributions to knowledge
Critical of "ivy tower" vocabulary and methods	Critical of agribusiness research as qualitative or subjective
We are to mimic their way of knowing.	We are to mimic their way of knowing.
If we serve the academy, our industry peers continually question our relevance.	If we serve industry, our academic peers continually question our science.



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Our Peers' Epistemologies

- Industry Peers
 - Epistemology of **practical knowledge**
 - They know what they know because **it works**
 - Derived from **action**; learned through **practice**
- Academic Peers—Agricultural, food, etc. Economics
 - Epistemology of **positivistic knowledge (one type of science)**
 - They know what they know because of **its objective derivation and statistical significance**
 - Derived from **theory/deduction**; learned through **empirical testing and application**
- Limitations for both our peers
 - Practical knowledge limited by range of experience and radical changes in context
 - Positivistic knowledge limited by its abstraction from context which also limits its ability to deal with structural change.



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Just use peers' epistemologies?

- To take on the epistemology of practical knowledge is to become wholly practitioners
 - We leave the academy and science.
- To take on the epistemology of positivistic knowledge is to fail to address research problems critically important to agri-food systems.
 - **Positivism works when theory is strong, phenomena are quantifiable and separable from context, and structure is stable.**
 - Our most important agribusiness problems do **not** have these characteristics!
 - **Strategy, sustainability, etc.**



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A Third Way

- Epistemology of **grounded theory knowledge**
- We know what we know because **it corresponds to practice and to theory**
 - More inductive than deductive
 - More qualitative than quantitative
 - Context matters: contingent theory not general theory
- Derived from **reflection on action**; learned through **working hypotheses**
- Limited by the relevance, transferability and flexibility of the working hypotheses
- It is **SCIENCE!**



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Comparative Characteristics Regarding Rigor

Characteristic of Knowledge	Grounded Theory Knowledge	Positivistic Knowledge
Researcher Goals	Focus on meanings Develop ideas inductively	Focus on facts Test hypotheses deductively
Applicable Research Settings	<ul style="list-style-type: none"> • Theory construction • Phenomena not quantifiable nor separable from context • Unstable/unknown structure 	<ul style="list-style-type: none"> • Theory confirmation • Quantifiable phenomena separable from context • Stable underlying structure
Preferred Methods	Seek multiple views Small purposeful samples	Precise measurement Large random samples
Construct Validity	Capture full meaning of informants	Instrument measures what it is supposed to measure
Internal Validity	Uncover and lay bare the logic of phenomena	Proper deduction and testing of hypothesis
Reliability	Triangulation	Consistency of measure
External Validity	Transferability to new setting	Application to whole population



Case Study Research

- An example of the third way!
- A case study is the holistic story of a particular situation or phenomenon.
 - Captures the richness of context
 - Focuses on verifiable information
- Types of cases
 - Descriptive
 - Exploratory
 - Explanatory



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Objectives of Case Research

- To conduct problem-solving research.
 - Plan B Master's Papers
- To develop new theory
 - Examine an “archetypical” case
 - Examine an “outlier” case
- To test existing theory
 - analogous to an experiment in physical sciences



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Appropriate Context for Use

- What is the research question?
 - “How” and/or “why”
- Control over contextual variables?
 - Control is not an option
- The time-frame of relevant events?
 - The “present” or contemporaneous time
- The applicability of existing theory?
 - theory is not highly developed
 - “structure” of reality is changing
- There are only “small” numbers related to the phenomenon of interest



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Methods of data collection

- Sources of evidence
 - Documentation
 - Archival records
 - Interviews
 - Direct observation
 - Participant observation
 - Physical artifacts
- Principles of data collection
 - Triangulation: use multiple sources of evidence and look for convergence
 - Create a case study database
 - Maintain a chain of evidence
 - Do not “lead the witness”
 - Look for disconfirming information



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Generalization of Case Findings

- Statistical generalization is not possible.
 - Case selection is not random.
 - Small numbers problem
- Kennedy
 - Limited generalization based on how representative the case is of a population
 - Archetypical cases and multi-case design
- Yin
 - Analytic generalization through contribution to theory
 - Theory/data/theory revision cycle



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A Research Example

- Under what circumstances (i.e., why) do smaller agri-food firms export?
 - Theory and prior empirical work limited.
 - Exploratory case research
- A simple four factor model created:
 - Demand signals
 - Transformation advantage
 - Transaction advantage
 - Decision makers mental map
- Research Proposition
 - All four factors had to be positive for a firm to be, become, or remain an exporter.



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Table 1. Comparisons of Case Studies: Classification of Firms by Firm-specific Status of Proposed Necessary Conditions for Globalization

Necessary Conditions:	Experienced Active Exporter (n = 4)	New Entrant (n = 1)	Former Participant (n = 2)		Domestic (n = 1)
			Entry	Exit	
Perceived Demand	yes	yes	yes	yes	no
Perceived Competitive Advantages:					
In Transformation Costs	yes	yes	yes	no	no
In Transaction Costs	yes	yes	yes	yes	yes
Motivated by Decision Rules	yes	yes	yes	no	no



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“Natural Experiments” as Cases

- Natural experiments in change
 - Example A: Some form of major disturbance occurs in a system (war, disease, economic collapse, etc.) and economic actors must respond.
 - The Tsunami in Japan
 - Unit of analysis: the set of responses
 - Example B: “New” business strategy or public policy interventions are implemented.
 - Deregulation of bioelectricity market in Brazil
 - Unit of analysis: the intervention
 - Example C: Often a “B” case follows an “A” case
 - USDA Map program in Armenia as intervention to fall of Soviet Union
- Such cases follow a pattern
 - A set of conditions exist at Time 0
 - Performance and/or outcomes
 - “States” of the world: resources, strategies, etc.
 - An intervention is made or a major system disturbance occurs during the next time period
 - A new set of conditions is established at Time 1



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“Natural Experiments” as Cases

- **Goal of case analysis:** Explain the change in conditions based on the disturbance or the intervention.
- **Case description:** Set up conditions at Time 0, report on disturbance/intervention, and end with conditions at Time 1.
 - A chronological description
- **Case analysis:** Based on existing theory or current research proposition, explain how the disturbance/intervention resulted in change of conditions.
 - Make compelling argues for target explanation
 - Make compelling argues against rival explanations
 - Null hypothesis: All factors are merely chance occurrences.
 - Something other than target disturbance/intervention is the “real” explanation



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Recommendations for qualitative research in agri-food systems

- Pursue an epistemology of grounded theory when the theory is weak/unknown, context matters, structure is unstable.
- Be rigorous in using grounded theory and qualitative methods.
- Qualitative methods are not an easy way out.
- Use positivism and quantitative methods when appropriate
- Reach out to both sets of peers—industry & academic
 - They need to understand the potential and limits of our knowledge as well as their own knowledge.
 - We need to remain relevant, scientific, and engaged



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