

# How do we explain Migration and Fertility? Causality, Mixed Methods and Demography

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## First of all, what is our notion of causality in the social sciences and Demography?

Traditionally, formal demography limited its scope to the measurement of different population processes and dynamics, describing and predicting trends. But within the field of social demography broad and valid explanations are needed, as our discipline is becoming much more integrated and theory – driven. Then, causal attribution is a key component of many studies and should be based on explicit procedures.

In social sciences in general, contrafactual causality is the “traditional” way of achieving a valid link between cause and effect. The notion, taken from medical trails, is embedded in experimental and quasi-experimental strategies. The robust internal validity of this kind of designs allows attribution of change, which make them very useful for evaluating population policies, for example (“natural experiments” are becoming quite popular). But these strategies have also certain shortcomings (narrow account of phenomena, context blindness) and in many cases they are just impossible to develop, for ethical or practical reasons. Non experimental approaches can also help us explain phenomena (with longitudinal data) even though they face important validity threats. For all these reasons, alternative and complementing notions of causation, such as generative causality, should be taken into account. To achieve this, we need qualitative and quantitative methods.

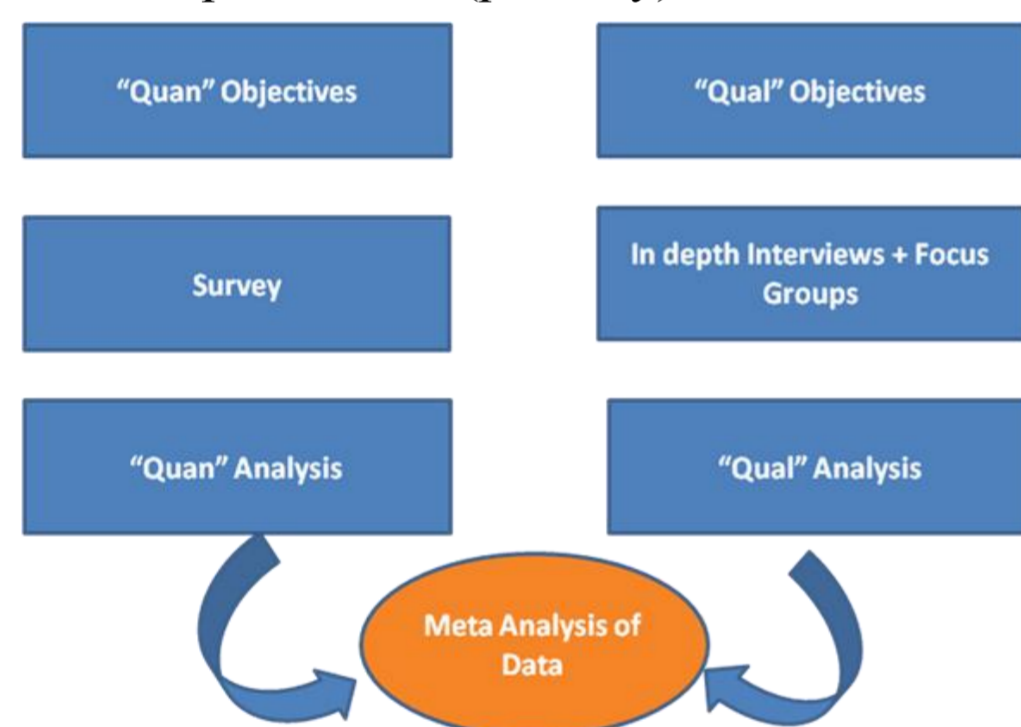
A broader notion of causation needs a complex research design... → Mixed Methods approach

## Mixed – Methods approach

- Methodological innovation (1990’s and 2000’s)
- Widely used in Social Program Evaluation / Sociology of Education / ...

- But hen and How? (First of all: partially mixed design, fully mixed design?)

One example of basic (partially) Mixed Methods design:



- When and How?

Basic design strategies (status and timing of QUAN / QUAL):

	Concurrent	Sequential
Equal	QUAL + QUAN	QUAL -> QUAN QUAN -> QUAL
Dominant	QUAL + quan QUAN + qual	QUAL -> quan qual -> QUAN QUAN -> qual QUAL -> quan

Source: Teddlie, C. & A. Tashakkori. 2009

- Purposes for mixing:

Triangulation  
Complementarity (for example, evaluation of process + outcomes)  
Development of tools (Likert scales, questionnaires)  
Initiation (paradox, contradiction, new questions)  
Expansion

## What about Demography?

Could we use Mixed Methods to gain better explanations for demographic change (migration, fertility)?

- Multidimensional issues, with “QUAN” and “QUAL” aspects.
- Macro – micro link
- Cultural meaning of trends
- Design flexibility
- Multiple types of evidence
- Innovative techniques for Demography: *modus operandi* technique, forensic analysis, direct observation, *modus narrandi*, reasons as causes

## Migration

“QUAN” questions: **How many? When? How? Who? Why?** (flows, seasonality, attraction, push and pull factors, Social network analysis?)

“QUAL” questions: **How? Why?** (links with the country of origin, emigration motives, different meanings of the immigration experience, Social network analysis?)

## Fertility

“QUAN” questions: **How many? When? Who? Why?** (calendar, age at first birth...)

“QUAL” questions: **Why?** (Fertility behavior, Second Demographic Transition: decision making process ... still a black box!...)

## MIXED – METHODS DESIGN

## Steps forward: some Mixed Methods designs in Demography (Axxin & Pearce, 2006)

**Micro-demographic community study approach** ( Survey methods + Observational methods + Semi structured interviews)

**Systematic Anomalous Case Analysis** (Secondary data -> fieldwork project -> further survey and data collection)

**Neighbourhood History Calendars / Life History Calendars** (Timing and sequencing of changes / Causal relationships at a micro level / Relationship between the individual and the community, organizational and ecological contexts / Contextual event history data?)

**Longitudinal Data Collection** (Integrating calendar methods and self report measures in longitudinal design)

## Main References:

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2nd Demographic Conference of "Young Demographers"  
Actual Demographic Research of Young Demographers (not only) in Europe

Prague  
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