



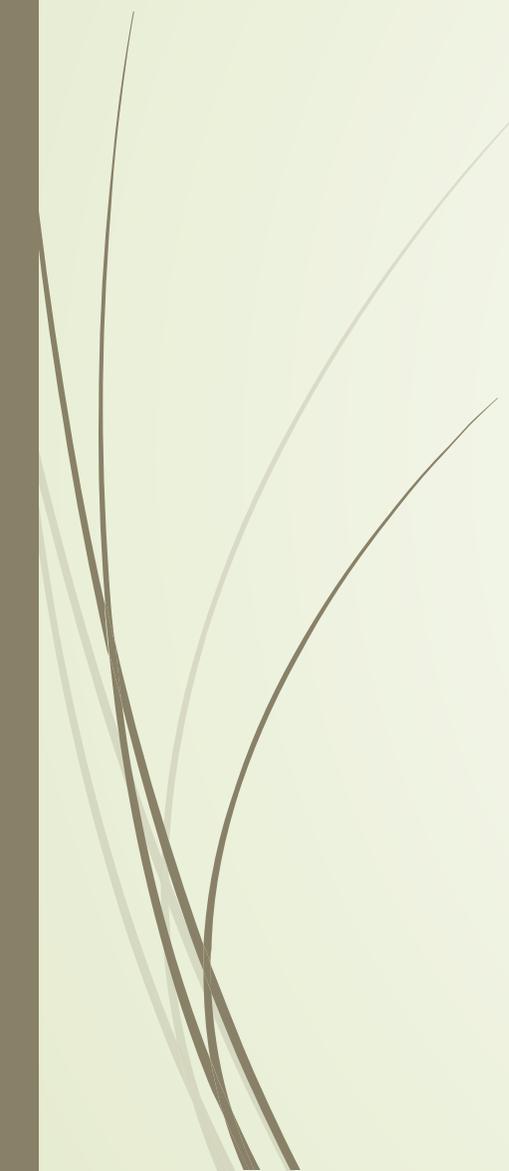
# Using Instruments and Protocols in Mixed Methods Designs

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# Why mixed methods?

- Uses established quantitative and qualitative methods
  - At least 30 years of use
  - Acceptance in this century as a third way
  - A body of published research using mixed methods
- 



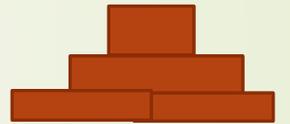
# How is mixed methods done?

***Mixes quantitative and qualitative methods in:***

- Ways of knowing
- Research questions
- Sampling procedures
- Measures
- Data collected
- Collection methods
- Data analysis
- Conclusions
- Outside observer & contextual
- Generalizability & understanding
- Probability & purposeful
- Standardized & situation specific
- Numeric & visual or textual
- Surveys & focus groups
- Statistical & thematic
- Objective & subjective

# When is mixed methods needed?

- To fully address the research questions
- To satisfy the standards of evidence required
- To systematically use multiple perspectives
- To engender confidence in findings





# What are the designs?

- Convergent parallel
  - Explanatory sequential
  - Exploratory sequential
  - Embedded
  - Concurrent qualitative and quantitative
  - Use qualitative to help explain quantitative
  - Explore with qualitative before quantitative
  - Different questions answered with qualitative or quantitative
- 



In a speech last year, Creswell declared that mixed methods had finally been accepted as a third way



**40** years to be accepted!

**20** more years to explore?

**20** more years to be codified?

**Only to be replaced?**



Our challenge is to create  
this third method as a  
growing, changing place



**NOT**

A defined, codified and  
anointed method that blocks  
other development



# The Opportunity

## Define mixed methods as:

- A birthing place for studying what we know and how we know with numbers and narrative
- The method that values new approaches, tools, and protocols for increasing explanatory power
- A marketplace where ways of knowing emerge and are embraced, not measured against existing paradigms



# What would that look like?

Investigative labs with real-time processing that yield new questions as well as answers like Abby in her NCIS lab



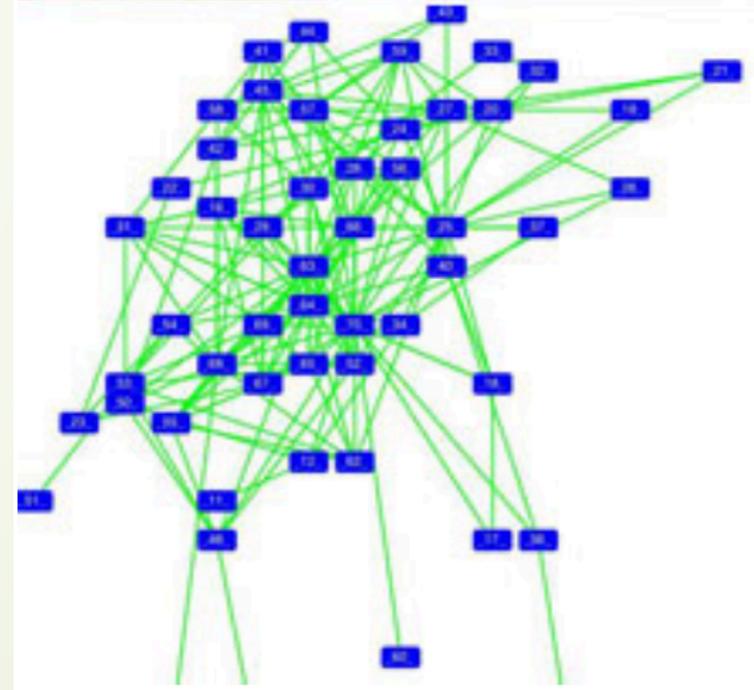
# New ways of tracking effects

Ways to see trajectories of effects and emerging patterns like Cameron's hyperkinesis in the TV show *Alphas*, for tracking interactions between participants and intervention events



# New types of data

Wearable devices that provide biometric data like MITs smart badges that can predict who will follow up with whom based on speech patterns and motion



# Broader contextual understanding

Google glasses that give us related data in real time for what we are seeing, hearing and observing



# Metacognition as embedded data

Participants' ongoing reflections heard or recorded like in Woody Allen's movies or Burn Notice



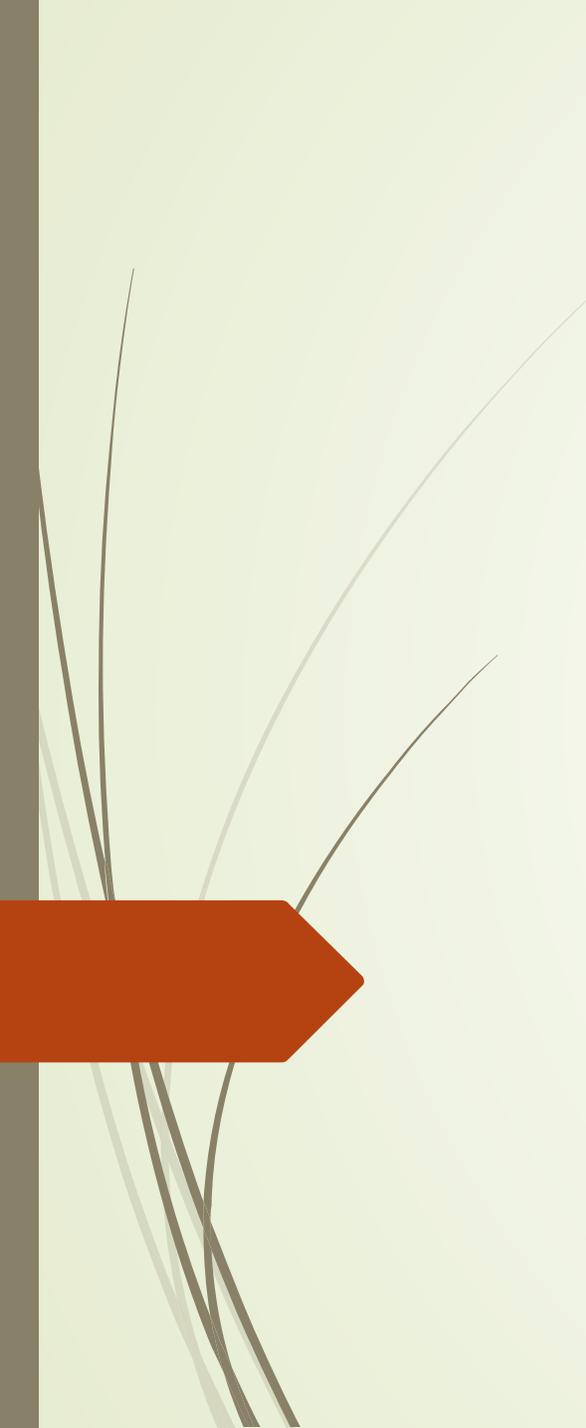
# Patterns across dimensions

Looking at patterns along different dimensions or wavelengths like Gary in Alphas





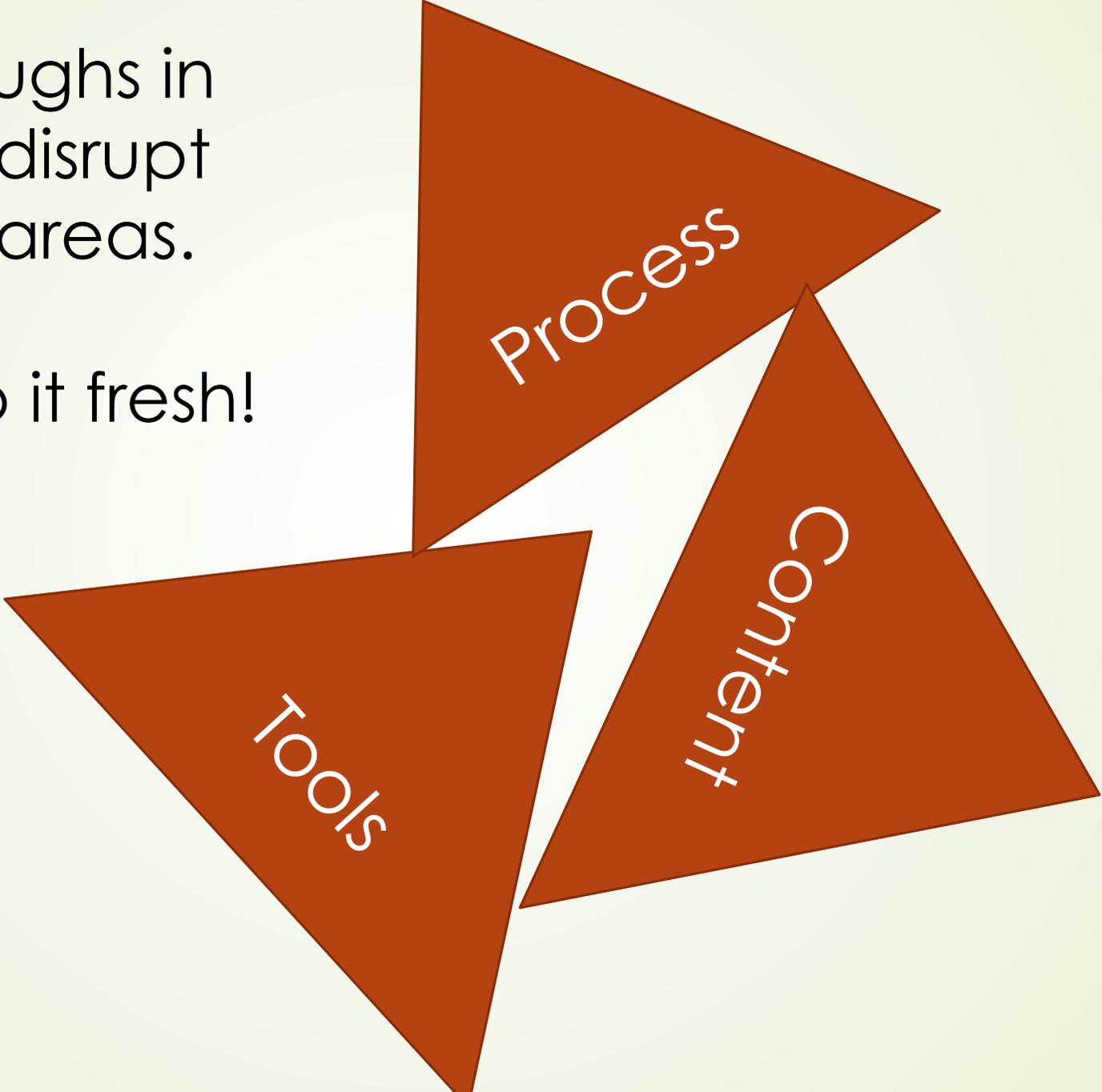
All  
unavoidably  
naturally  
intriguingly  
powerfully  
quantitative and qualitative



Perhaps our ultimate success with mixed methods depends on the extent to which we develop ways to capture and analyze data that paint richer, more compelling pictures of what is and what works

Breakthroughs in  
any area disrupt  
the other areas.

Let's keep it fresh!



Process

Tools

Content



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