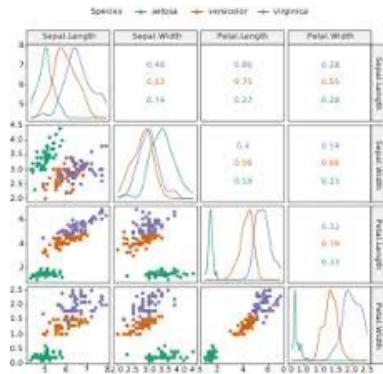# Quant vs Qual

Naïve Realism

- "senses provide us with direct awareness of objects as they really are" (Wikipedia)
- Any observation is an observation of something real
- If it can be measured it exists; it if cannot be measured, it does not exist (metaphysical)

McNamara Fallacy

- AKA "quantitative fallacy"
- Making decisions based solely on quantitative data and ignoring all other data sources
- Yankelovich (1971)
  - Measure what can easily be measured
  - Disregard what cannot be easily measured or assigned a quantitative value
  - Consider things that cannot be measured to be unimportant
  - Decide if it can't easily be measured that it doesn't exist

Measurement in Psychology/Language Science

- Constructs
  - Latent
  - Unobservable
  - Predictive of behavior
  - Examples: Universal Grammar, Depression, Working Memory
- Variables
  - Available to the senses
  - Observable
  - Behavior
  - Examples: utterances, Beck Depression Inventory, forward recall span

Constructs

- Constructs are not real
- They are theoretical and only useful to the extent that they serve a purpose
  - Explain behavior (theory explains observed behaviors)
  - Predict behavior (theory predicts yet-to-be-observed behaviors)
- Construct validity
  - Is the construct appropriate, meaningful, and useful?
  - Does it explain and predict in important ways?

Construct Validity meets McNamara Fallacy

- An example – "intelligence"
- Construct = general intelligence (g)
  - Construct validity – is g appropriate, meaningful, and useful
  - McNamara Fallacy
    - Intelligence can be measured using intelligence tests – easy to administer and to quantify
    - Some aspects of what we think of as intelligent behavior are really hard to quantify and assign a value to (examples?)
    - These things are therefore unimportant
    - In fact, if they cannot be quantified, then they likely don't really exist
- Examples from linguistics and language sciences?

Quant vs Qual?

- Quantitative and qualitative approaches are only in opposition to each other if we adopt naïve realism and commit the McNamara Fallacy

- Quantitative approaches to language assessment, for example, can be appropriate, meaningful, and useful

- The error is to consider only those things that can be (easily) observed as real and important objects of study

- Qualitative approaches should therefore be seen as complementary (not supplementary!)

Translanguaging

- Translanguaging has a "core" tenet that English, Spanish, ASL and all other "languages" are simply (political, social, cultural) constructs

- Does the theory argue that these constructs are not appropriate, meaningful, or useful? The constructs have no validity. New constructs are needed.

- Or just that their quantification is inappropriate, lacks meaning, and is not useful? The constructs are valid, but the quantitative fallacy is at play. Qualitative methods are needed to complement our qualitative approach.