

Psychology 305A; Lecture 4

Methods Part 2
Psychoanalysis: Freud (Part 1)

## Class updates

#### Exam 1

- Monday, September 16
- 15 Multiple Choice items
- 1 essay question

#### Will cover:

- What is personality (introduction to course)
- Methods in personality research
- Freud/Psychoanalytic Approach
- Bring a No. 2 Pencil
- Questions?

# Methods: Wrap Up

## **Descriptive Methods**

#### **Case Studies (Life History)**



Intensive examination of a single person or group

## **Case Study Method**

- Obtained from life history (interviews, autobiography)
- Other life records (Life Outcome Data)
  - School grades
  - Criminal records
  - Work record
  - Facebook page

## Case Study Method: An Example

- Why did Margot in the Royal Tannenbaums become a playwright?
- Data sources
  - School grades
  - Diaries, journals
  - Plays
  - Family history (e.g., divorce, sibling relationships, adoption)

# **Case Study Method**

#### Advantages

- Rich source of hypotheses
- Allows for studies of rare behaviors

#### Disadvantages

- Observer bias
- Difficult to generalize
- Difficult to reconstruct causes from complexity of past events

# **Using LOTS of data**

• Example: Shyness

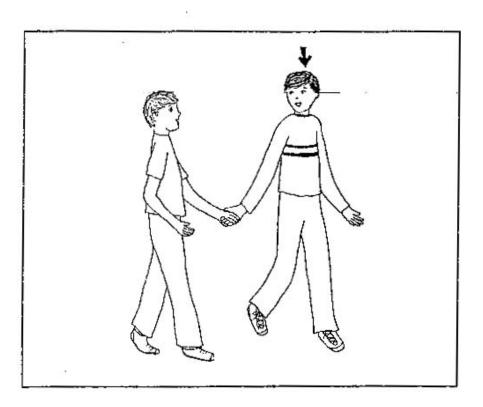
# Measuring Shyness

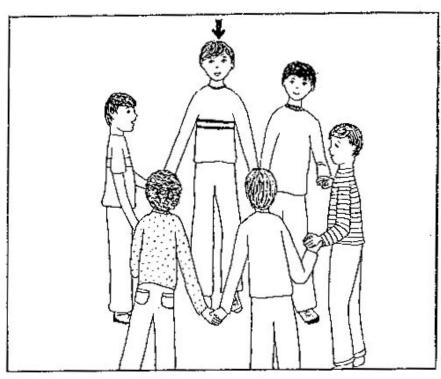
#### Self-Report Questionnaires

#### ITEMS ON SHYNESS QUESTIONNAIRE

- "I feel tense when I'm with people I don't know well."
- "I find it difficult to talk to strangers."
- "I have trouble looking someone right in the eye."
- "I am socially somewhat awkward."

# Shyness in children













# Measuring Shyness through Observation:

- Paces; shuffles feet; knees tremble
- Extraneous arm and hand movement
- No eye contact
- Face muscles tense
- Moistens lips
- Clears throat
- Breathes heavily
- Perspires
- Voice quivers; speech stammers

# **Measuring Shyness**

#### • Test Measures

- Psychophysiology
  - Heart rate, skin conductance, etc.
  - Cortisol levels
- Brain imaging
  - Response to novel stimuli
  - Right brain activation
- Behavioral
  - Walking in the middle vs. side of hallway

# **Measuring Shyness**

- <u>L</u>ife records data
  - # of social clubs joined
  - # of dates in the past year
  - Attended school reunion

# **Example: Using LOTS of data to understand Chuck Graner**



#### L-data: Life records

 Employment records at prison; court records related to spousal abuse

#### O-data: Observer data

 Ratings by Graner's ex-spouse, other prison guards, military supervisor's, his parents, etc.

#### T-data: Test data

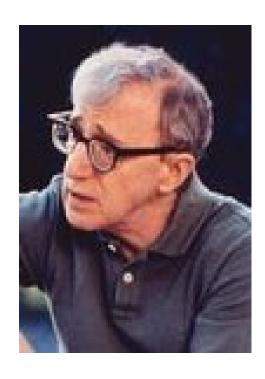
- IQ scores
- Brain imaging and other physiological measures

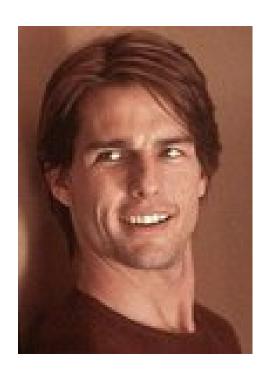
#### S-data: Self-report data

Personality tests completed when he entered the military

### Which Method to Use?

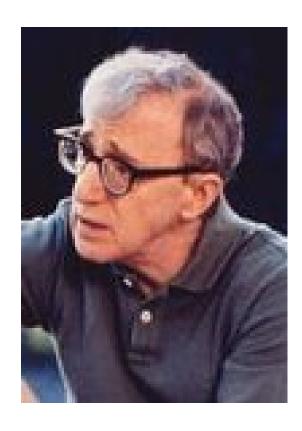
• Who is more extraverted?

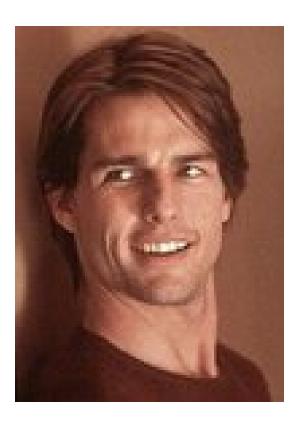




### Which Method?

• Who is more conscientious?

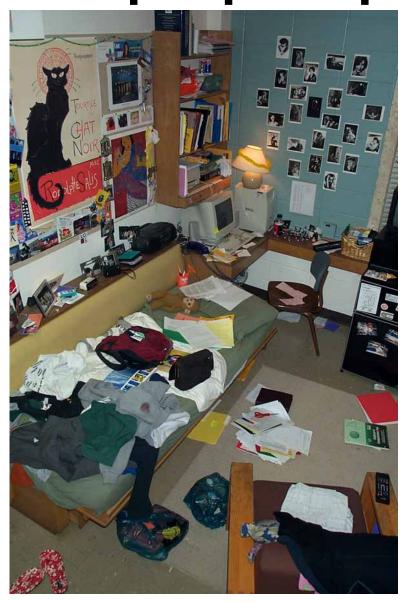


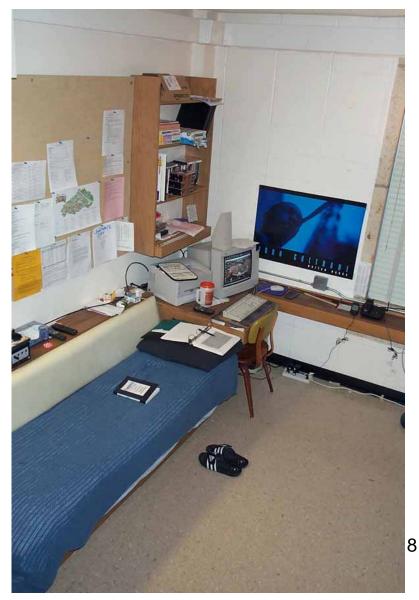


### Which Method?

- Some traits are more easily judged by observers
  - E.g., extraversion
- Other traits require other methods
  - Dorm room study
    - Which traits could you best judge by seeing someone's dorm room?

# How would you rate these people's personalities?





### Results

- Which traits are easiest to rate from observing a dorm room?
- Observers were most accurate in rating
  - Openness to Experience
  - Conscientiousness
  - Extraversion
  - (based on correlations with self ratings and ratings by two close peers)

# **Evaluating Personality Measures**

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## Reliability

Extent to which scores on the measure are stable and replicable, vs. amount of error or randomness in the measure

# **Measuring Reliability**

#### Test-retest reliability

– Are scores highly correlated across 2 testing times?

#### Internal consistency reliability

- How do the items on a single measure "hang together"?
  - Do all items measure the same construct?
- Correlation among the items

#### Inter-rater reliability

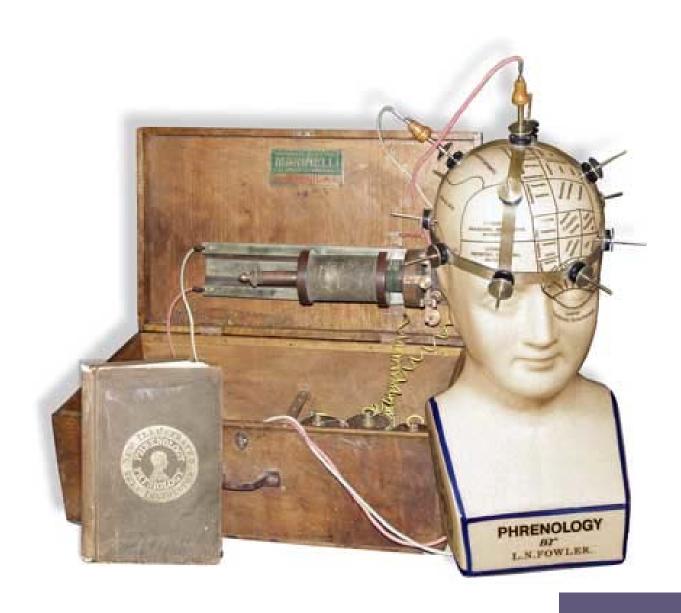
- For O-Data only
- Do multiple observers agree?

# **Evaluating Personality Measures**

## **Validity**

- Degree to which measure assesses what it is supposed to assess
- Bulls eye analogy
  - Reliability = are you hitting the same spot each time?
  - Validity = are you actually hitting the bulls eye?

## Reliable but not Valid



# **Measuring Validity**

#### Face validity

– Does it measure what you think it measures?

#### Predictive validity

– Does it predict an external criterion?

#### Convergent validity

- Relation to other measures of same variable

#### Construct validity

All of the above

## Inter-rater Reliability and Validity

An Example: Measuring Height (without a ruler)

- How tall am I?
- Reliability of ratings of height
  - Average correlation between two judges = .76
  - Reliability of 5 judges is about .90

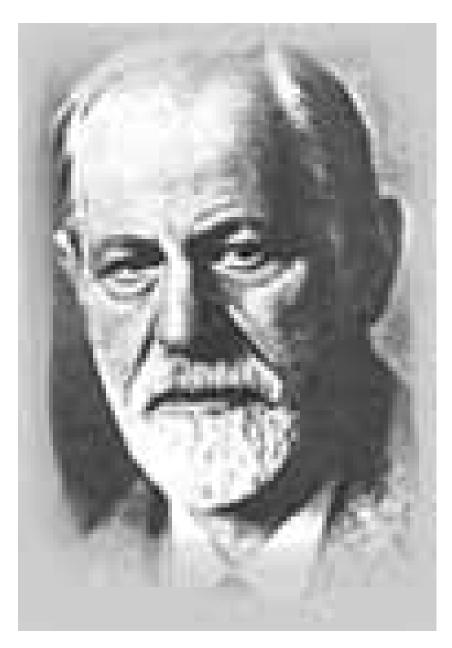
#### Validity is high

- Individual judges correlated .71 to .86 with actual height
- Mean of 6 judges correlated .90 with actual height
- If measures are more reliable, they provide a more valid assessment!
- By combining the judgments of multiple people (or using multiple items on a personality test) we can get fairly reliable and valid measures of personality (reliabilities about .80-.90)

### **Freud**

# And the Psychoanalytic Approach

## Why do we care about Freud?



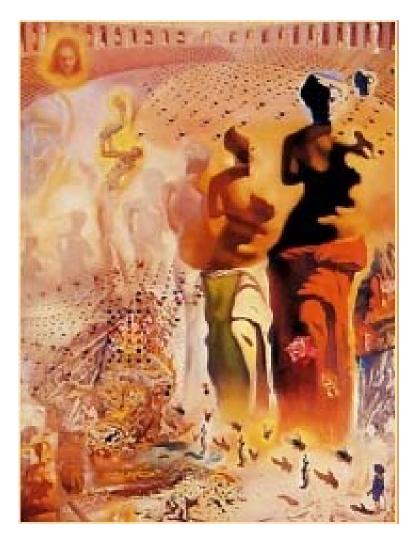
# Sigmund Freud

#### Founder/creator of psychoanalysis

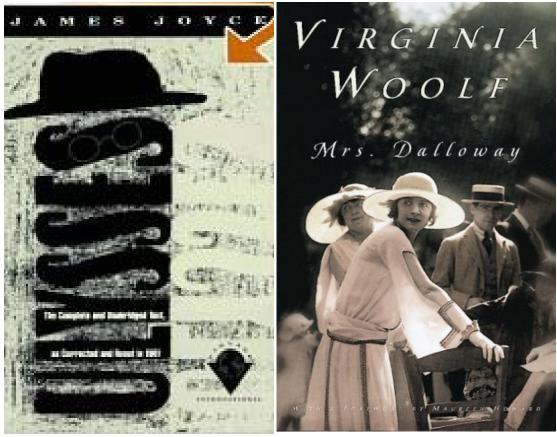
- One of the most influential schools of thought in the 20<sup>th</sup> Century
- Considered one of 4 major revolutions in humans' understanding of the world:
  - Copernican, Darwinian, Freudian, DNA

#### Influenced thinking and research in:

- Therapy ("talk therapy")
- Philosophy
- Science
- Humanities: modern art, literature, films



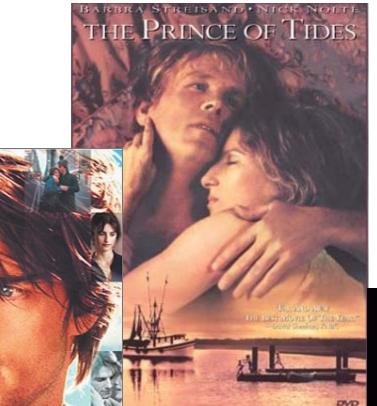
Modern artists (Dali) visually represented dream states and unconscious contents

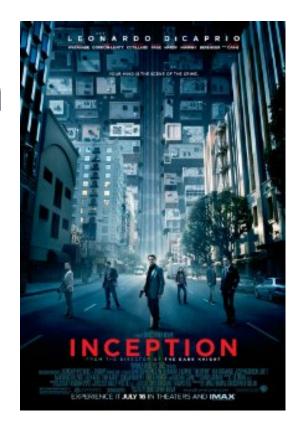


Modern writers (Joyce, Woolf) used stream of consciousness" style, emphasis on link between early life and adulthood



## Freud in Film





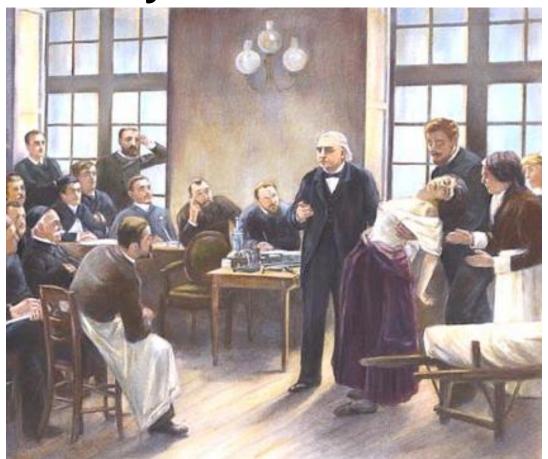


## The origins of Freudian Theory

- Viennese neurologist
  - Trained as a medical doctor, but more interested in research and understanding the mind
  - Worked with famous neurologist Dr. Breuer
    - Developed the "Talking Cure"
- They both picked up on the work of Charcot, another neurologist

# Mental Illness in the late 19<sup>th</sup> Century

Charcot's "Hysteria"



### The Case of Anna O.

- Patient of Dr. Breuer, a neurologist colleague of Freud
- Numerous symptoms, contracted shortly after she nursed her father (who had TB)
  - coughing, hallucination, refusal to drink water, partial paralysis
- No physical cause
- Breuer would talk with Anna each night, and found her symptoms would improve the following day
- Anna called their talks "chimney sweeping"

# A "talking cure"

- After Anna refused to drink for several weeks, she revealed to Breuer that she'd seen a dog drinking from her water glass
- After the revelation, asked for a drink
- Breuer had an epiphany!

# **Curing Hysteria**

#### • The "talking cure"

- Physical symptom (e.g., numb arm) with no physical origin (e.g., arm nerves not damaged)
- The Cure
  - Step 1: Hypnotize patient, or allow for free association
  - Step 2: Talk with patient to reveal psychological anxiety/neurosis
  - Step 3: Patient has "catharsis"—insight into psychological problem
  - Step 4: Physical symptom disappears

# October, 2006, New York Times Science Times...



- Neurologists continue to study hysteria
- Now called "conversion disorder"

## **Current Research on Hysteria**

- Neurologists analyzed brain function of a woman paralyzed on left side
  - no identifiable physical source
- When the woman tried to move her "paralyzed leg," her motor cortex did not activate
- Instead, right orbitofrontal and anterior cingulate cortex activated
  - EMOTION brain areas
- Emotional areas of the brain may be suppressing movement in the leg

# Neuroscientific Explanation for Conversion Disorder

#### Cause of Hysteria

- Emotional centers of the brain activated
- Inhibit motor centers of the brain from coordinating movement
- So, there is a biological basis to hysteria
  - What would Freud say?

### **Next Class**

Freud's model of personality