


# Social Categorization

Fall 2015

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## Perception and Categorization

Paraphrasing Bruner (1957)

Every act of perception involves an act of categorization....

“The use of cues in inferring the categorial identity of a perceived object... is as much a feature of perception as the sensory stuff from which percepts are made.”

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## Concepts as Aspects of Semantic Memory

- Abstract, Context Free
  - Mental Lexicon
  - *Generic* Memory?
- Object Knowledge
- Linguistic Knowledge
- Categorical Knowledge
  - Subsets-Supersets
  - Similarity
  - Category-Attribute Relations

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## Social Categorization and Social Interaction

Cantor & Kihlstrom (1987)

- Categories are Equivalence Classes
  - Unite Persons, Situations, Behaviors
- Basis of Behavioral Consistency (and *Inconsistency*)
  - Behavioral Similarity Depends on Conceptual Similarity

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## Categories and Concepts

Smith & Medin (1981); Murphy (2002)

- Category
  - Partitions Real World into Equivalence Classes
    - Natural (Part of Natural World)
      - Includes Human Artifacts
    - Artificial (Contrived by Experimenter)
- Concept
  - Mental Representation of Category

Is the Structure of the Social World Discovered or Imposed?  
Are Social Categories Natural or Artificial?

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## Labels for Social Categories

- Persons
  - Nouns
- Social Groups
  - Stereotypes, Psychiatric Diagnoses
- Situations
  - Nouns
- Actions
  - Adjectives
- Interactions
  - Labels for behavioral sequences

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## Ingroup vs. Outgroup: Us vs. Them

Sumner (1906, p. 12)

“The insiders in a **we-group** are in a relation of peace, order, law, government, and industry, to each other. Their relation to all outsiders, or **others-groups**, is one of war and plunder....

“Sentiments are produced to correspond. Loyalty to the group, sacrifice for it, hatred and contempt for outsiders, brotherhood within, warlikeness without – all grow together, common products of the same situation.”

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## The Robbers Cave Experiment

Sherif et al. (1961)

- 22 “Average” OKC 5<sup>th</sup>-Graders
  - Eagles and Rattlers
- Stage 1, Independent Activities
  - Cohesion, Hierarchy
- Stage 2, Tournament
  - Intergroup Hostility
  - Shifts in Group Leadership

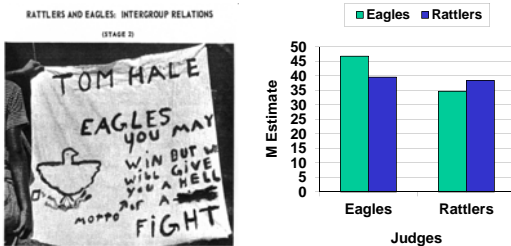


Chris Walters Photography

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## 35-Bean Pickup

Sherif et al. (1961)



One of the Eagle banners during the tournament.

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## The Robbers Cave Experiment

Sherif et al. (1961)

- 22 “Average” Ok 5<sup>th</sup>-Graders
  - Eagles and Rattlers
- Stage 1, Independent Activities
  - Cohesion, Hierarchy
- Stage 2, Tournament
  - Intergroup Hostility
  - Shifts in Group Leadership
- Stage 3, Reducing Friction
  - Noncompetitive Settings
  - Staged Crises → Cooperation



Chris Walters Photography

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## Minimal Group Paradigm

Tajfel et al. (1971); Billig & Tajfel (1973)

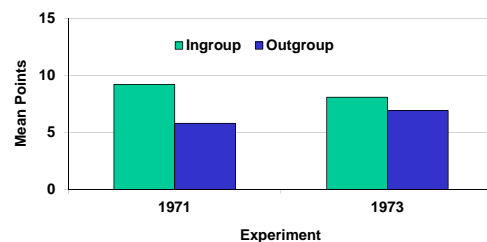


- Arbitrary Assignment to Group
  - Artistic Preferences
  - Coin-Toss
- Group X vs. Group Y
  - Do Not Know Others in Either Group
  - No Basis for In-Group or Out-Group Stereotypes
  - No History of Group Interaction
- Distribute Rewards between Individuals
  - Maximum of 15 Points
  - Member of X vs. Member of Y

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## Distribution of Rewards

Tajfel et al. (1971); Billig & Tajfel (1973)



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## Social Identity Theory

Tajfel & Turner (1979)



- Two Sources of Self-Esteem
  - Personal Status and Accomplishments
  - Status and Accomplishments of Groups
- Boost Status of Ingroup
  - Indirectly Increase Own Status, Self-Esteem
- Basking in Reflected Glory
  - Even When Connection is Tenuous

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## Outgroup Homogeneity Effect

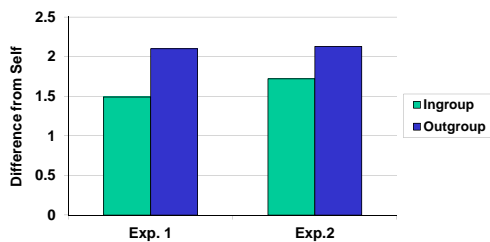
Allen & Wilder (1979)

- Pre-Experimental Measures of Attitudes
- Rate Paintings by Klee, Kandinsky
  - Assignment to Groups
    - Ostensibly Based on Painting Preference
    - Actually Random
- Survey of Attitudes and Beliefs
  - Predict Responses of Group Members
- Outgroup Homogeneity Effect
  - Increase Perceived Outgroup Similarity
  - Increase Perceived Ingroup-Outgroup Difference



## Outgroup Homogeneity Effect

Allen & Wilder (1979)



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## Natural Categories of Persons?

After Roger Brown (1980)



- Sex (Gender)
- Kinship
- Age
- Occupation
- Nationality
- Race/Ethnicity
- Personality Types (nouns)
- Local Culture

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## Gender Categories

- Two Sexes
  - Male
  - Female
- Determinants
  - Chromosomal Sex (XY vs. XX)
  - Phenotypic Sex (Reproductive Anatomy)
- Intersection of Categories
  - Natural, Artificial
  - Biological, Social

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## The Five Sexes... And More?

Anne Fausto-Sterling, *Myths of Gender* (1985, 1992);  
*Sexing the Body* (2000)

- Male
- Female
- Intersex (Pseudohermaphrodites)
  - XY, Female Anatomy
  - XX, Male Anatomy
  - "Ovotestis" Gonadal Tissue

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## Gender Identity

- Male
- Female
- Transgendered

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## Gender Categories Beyond Identity

- Gender Role
  - Masculine
  - Feminine
  - Androgynous
  - Undifferentiated
- Sexual Orientation
  - Heterosexual
  - Homosexual
  - Bisexual
  - Asexual

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## Implications of Orthogonality In Gender-Related Categories

- Biological Sex Does Not Determine Gender Identity, Role, or Sexual Orientation
- Gender-Related Categories
  - 5 Biological Sexes
  - 3 Gender Identities
  - 4 Gender Roles
  - 4 Sexual Orientations

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Gender-Related  
Categories

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## Gender Categories in UC Admissions

UC Task Force and Implementation Team  
on Lesbian, Gay, Bisexual and Transgender Climate and Inclusion, 2015

- Sex Assigned at Birth
  - Male
  - Female
- Gender
  - Male, Female
  - Trans Male, Trans Female
  - Gender Queer/Gender Nonconforming
- Sexual Orientation
  - Heterosexual/Straight
  - Gay/Lesbian
  - Bisexual
  - Not Listed Above

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## Kinship Categories

### Nuclear Family

- Parents
  - Mother
  - Father
- Children
  - Son
    - Brother
  - Daughter
    - Sister

### Extended Family

- Great-Grandparents
- Grandparents
  - Grandfather
- Aunts, Uncles
- Cousins
  - First, Second, Third
- Nephews, Nieces
- Grandchildren
- Great-Grandchildren

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## Selected Cross-Cultural Sibling Categories

Nerlove & Romney (1967)

- Type A - Sibling Only
- Type B - Brother v. Sister
- Type C - Elder v. Younger Brother Only
- Type H - Elder v. Younger Brothers, Sisters
- Type G - Parallel v. Cross Sex
- Type L - Parallel v. Cross, Elder v. Younger

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## Hopi Sibling Terminology

Eggen (1950); Nerlove & Romney (1967); Kronenfeld (1974)

- Elder Brother
- Elder Sister
- Younger Sister of Male
- Younger Brother of Male
  - or Younger Sibling of Female

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## Age Categories

- Prenatal
  - Conception, 1st & 2nd vs. 3rd trimesters
  - Zygote, Blastocyst, Embryo
- Infancy
- Childhood
  - Toddlerhood, “Terrible Twos”, White-Food Stage
- Adolescence
  - Preteens, “Tweens”
- Young Adults, Middle Aged
- Elderly, “Old Old”

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## The Eight Ages of Man

Erikson (1950, 1998)



<b>Infancy</b>	Birth – 18 mos	Trust vs. Mistrust	Drive & Hope
<b>Early Childhood</b>	18 mos – 2 yrs	Autonomy vs. Shame	Courage & Will
<b>Play</b>	3 – 5 yrs	Initiative vs. Guilt	Purpose
<b>School</b>	6-12 yrs	Industry vs. inferiority	Method & Competence
<b>Adolescence</b>	12 – 18 yrs	Identity vs. Role Confusion	Devotion & Fidelity
<b>Young Adulthood</b>	18 – 35 yrs	Intimacy & Solidarity vs. Isolation	Affiliation & love
<b>Middle Adulthood</b>	35 – 55	Generativity vs. Self-Absorption or Stagnation	Production & Care
<b>Late Adulthood</b>	55 – 80s	Integrity vs. Despair	Wisdom
<b>Very Old Age (?)</b>	80s -- Death	Despair vs. Faith, Hope	Transcendence

## Periods of Transformation

Gould (1978)



16-22	Leaving Our Parents' World
22-28	I'm Nobody's Baby Now
28-34	Opening Up to What's Inside
35-45	Mid-Life Decade

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## Passages

Sheehy (1976)



18-22	Pulling Up Roots
22-28	Trying Twenties
28-35	Catch-30
35-45	Deadline Decade

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## New Passages

Sheehy (1995)



Tryout Twenties
Turbulent Thirties
Flourishing Forties
Flaming Fifties
Serene Sixties

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## The Seasons of a Man's Life

Levinson (1985)



22	Early Adult Transition
28	Entering the Adult World
33	Age 30 Transition
40	Settling Down
45	Mid-Life Transition (Crisis)
50	Entering Middle Adulthood
55	Age 50 Transition
60	Ending Middle Adulthood
65	Late Adult Transition

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## Generations

Strauss & Howe (1991, 1997)

1860-1882	Missionary Generation
1883-1900	Lost Generation
1901-1924	G.I. Generation
1925-1942	Silent Generation
1943-1960	Baby Boomers (1946-1964?)
1961-1981	Generation X (Baby Bust)
1982-2001	Generation Y (Millennials)

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## Occupation Categories

- Socioeconomic Status
  - Occupation, Education, Income
- White-Collar vs. Blue-Collar
- Professional vs. Managerial
- Skilled vs. Unskilled Labor

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## The Caste System in Hindu India

*Varna vs. Jati*

- Brahmins
  - Priests, Scholars
- Kshatriyas
  - Rulers, Warriors
- Vaisyas
  - Merchants, Traders, Farmers
- Sudras
  - Artisans, Peasants, Laborers, Slaves
- Panchamas (“Fifth Division”)
  - Untouchables

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## Political Categories



- Democrat
- Republican
- Progressive
- Communist
- Independent
- Conservative
- “Left” vs. “Right”
- Neoconservative
- Paleoconservative
- Liberal
- Libertarian

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## The Japanese Diaspora (*Nikkei*)

Azuma (2005)

<b><i>Issei</i></b>	Immigrated before 1924
<b><i>Nisei</i></b>	American-Born Children of <i>Issei</i> (Silent Generation)
<b><i>Sansei</i></b>	Baby-Boom Children of <i>Nisei</i>
<b><i>Yonsei</i></b>	Generation X/Y Children of <i>Sansei</i>

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### Nationality Categories

- European
  - Anglo-Irish vs. Continental
  - Northern vs. Southern
  - Western vs. Eastern
- African
  - North African vs. Sub-Saharan
  - African-American vs. Afro-Caribbean
- Asian
  - South vs. East vs. Southeast

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### Racial and Ethnic Categories

- White vs. Black
  - Negro, Afro-American, African-American
- Hispanic
  - Chicano, Latino
- Native American
  - Aleuts, Eskimos (Inuits), American Indians
- “Asian”
  - South Asian, East Asian, Southeast Asian
- Pacific Islander

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### Race, Nationality, and Ethnicity in the United States Census

#### 1790 - 1850

- White
- Black
  - Free
  - Slave

#### 1850-1870

- White
- Black
  - Mulatto
- American Indians
  - Only Those Taxed (added 1860)
  - All (added 1870)
- Chinese (added 1860)
- Japanese (added 1870)

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### Race, Nationality, and Ethnicity in the United States Census: 1890

- White
- Black
  - Mulatto, Quadroon, Octoroon
- American Indians
  - “Taxed”
  - Indian Territory, Living on Reservations
- Chinese
- Japanese

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### Race, Nationality, and Ethnicity in the United States Census: 1910

- White
- Black
- American Indians
- Chinese
- Japanese
- Asian
- Pacific Islander

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### Race, Nationality, and Ethnicity in the United States Census: 1930

- White
- Black
- American Indians
- Chinese
- Japanese
- Asian
- Pacific Islander
- Mexican

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Race, Nationality, and Ethnicity  
in the United States Census:  
1940

- White
- Black
- American Indians
- Chinese
- Japanese
- Asian
- Pacific Islander
- ~~Mexican~~ White Hispanic

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Race, Nationality, and Ethnicity  
in the United States Census:  
1950

- White
- Black
- American Indians
- Chinese
- Japanese
- Filipino
- "Other Race" (including Mixed Race)

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Race, Nationality, and Ethnicity  
in the United States Census:  
1960

- White
- Black
- American Indians
- Chinese, Japanese, Filipino
- Eskimos, Aleuts
- Hawaiians
- "Other Race" (including Mixed Race)

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Race, Nationality, and Ethnicity  
in the United States Census:  
1970

- White
- Black
- American Indians
- Chinese, Japanese, Filipino
- Eskimos, Aleuts, Hawaiians
- Koreans
- Spanish Language/Heritage/Origin, Descent
- "Other Race" (including Mixed Race)

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Race, Nationality, and Ethnicity  
in the United States Census:  
1980-1990

- White
- Black
- American Indians
- Chinese, Japanese, Filipino, Korean
- Eskimos, Aleuts, Hawaiians
- Spanish Language/Heritage/Origin, Descent
- Asian and Pacific Islander
  - Vietnamese, Asian Indian, Guamanian, Samoan
- "Other Race" (including Mixed Race)

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Race, Nationality, and Ethnicity  
in the United States Census:  
2000

Spanish, Hispanic,  
or Latino?      →      Race

<ul style="list-style-type: none"> <li>• No</li> <li>• Mexican, Mexican-American, Chicano</li> <li>• Puerto Rican</li> <li>• Cuban</li> <li>• Other</li> </ul>	<ul style="list-style-type: none"> <li>• White</li> <li>• Black, African-American</li> <li>• American Indian/Alaska Native</li> <li>• Asian Indian</li> <li>• Chinese</li> <li>• Filipino</li> <li>• Japanese</li> <li>• Korean</li> <li>• Vietnamese</li> <li>• Other Asian</li> </ul>	<ul style="list-style-type: none"> <li>• Native Hawaiian</li> <li>• Guamanian or Chamorro</li> <li>• Samoan</li> <li>• Other Pacific Islander</li> </ul>
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## Race, Nationality, and Ethnicity in the United States Census: 2010

### Hispanic, Latino, Or Spanish Origin?

- No
- Mexican, Mexican-American, Chicano
- Puerto Rican
- Cuban
- Other

### → Race

- White
- Black, African-American, Negro
- American Indian/Alaska Native
- Asian Indian
- Chinese
- Filipino
- Japanese
- Korean
- Vietnamese
- Other Asian
- Native Hawaiian
- Guamanian or Chamorro
- Samoan
- Other Pacific Islander

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## Race, Nationality, and Ethnicity in University of California Admissions

1995-2005

- American Indian
- African American
- Chicano/Latino
- Asian/Filipino/Pacific Islander
- White
- Other
- Unknown

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## Race, Nationality, and Ethnicity in University of California Admissions

2008-2009

- African American/Black
- American Indian/Alaska Native
  - Specify Tribal Affiliation
- Chinese/Chinese-American
- East Indian/Pakistani
- Filipino/Filipino American
- Japanese/Japanese American
- Korean/Korean American
- Other Asian
  - Not incl. Middle Eastern
- Mexican/Mexican American/Chicano
- Other Spanish American/Latino
  - Incl. Cuban, Puerto Rican, Central American, South American
- Pacific Islander
  - Incl. Micronesian, Polynesian, other Pacific Islanders
- Vietnamese/Vietnamese American
- White Caucasian
  - Incl. Middle Eastern
- Other

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## Race, Nationality, and Ethnicity in University of California Admissions

2009-2010, following "Count Me In" Campaign, 2007

- African American/Black
- American Indian/Alaska Native
  - Specify Tribal Affiliation
- Chinese
- Taiwanese
- Asian Indian
- Pakistani
- Japanese
- Korean
- Filipino
- Vietnamese
- Hmong
- Thai
- Cambodian
- Laotian
- Bangladeshi
- Indonesian
- Malaysian
- Sri Lankan
- Other Asian
  - Not incl. Middle Eastern
- Mexican/Mexican American/Chicano
- Other Spanish American/Latino
  - Incl. Cuban, Puerto Rican, Central American, South American
- Native Hawaiian
- Guamanian/Chamorro
- Samoan
- Tongan
- Fijian
- Other Pacific Islander
- White Caucasian
  - Incl. Middle Eastern
- Other

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## Race, Nationality, and Ethnicity in the Research Participation Program

2004

- African American
- Caucasian
- Chinese
- Filipino
- Indian
- Japanese
- Korean
- Southeast Asian
- Other Asian
- Mexican, Mexican-American, Chicano
- Other Latino
- Native American
- Other

## Race, Nationality, and Ethnicity in the Research Participation Program

2006

- Asian-American/Asian
  - Cambodian
  - Chinese
  - Filipino
  - Hmong
  - Indian
  - Japanese
  - Korean
  - Laotian
  - Pacific Islander
  - Pakistani
  - Sri Lankan
  - Taiwanese
  - Vietnamese
  - Other
- African-American/Black
  - Other
- European-American/White
  - Eastern European (e.g., Polish, Czech, Slavic)
  - Western European (e.g., English, German, Italian)
  - Middle Eastern (e.g., Arab, Persian, Israeli)
  - Other
- Latino/Hispanic
  - Mexican-American, Chicano/a
  - Puerto Rican
  - Other
- American Indian

### Evolution of Models of Conceptual Structure

Smith & Medin (1981); Murphy (2002)

- **Classical View: Proper sets**
  - Summary: Defining Features
- **Prototype View: Fuzzy Sets**
  - Summary: Characteristic Features
- **Exemplar View**
  - No Summary
- **Theory-Based View**
  - Not Based on Similarity

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### Two Views of Prototypes

Smith & Medin (1981); Murphy (2002)

- **Classical View: “All of None”**
  - Defining Features Present or Absent
  - Object Belongs in Category or Not
- **Dimensional View**
  - Features Vary Along Dimensions
  - Prototype is Average Value of All Instances
- **Featural View**
  - Probabilistic Relation to Category Membership
  - Prototype Has Many Characteristic Features

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### Personality: The Classical Fourfold Typology

Kant (1798), after Hippocrates and Galen

<ul style="list-style-type: none"> <li>• <b>Melancholic</b> <ul style="list-style-type: none"> <li>– Anxious</li> <li>– Worried</li> <li>– Unhappy</li> <li>– Suspicious</li> <li>– Serious</li> <li>– Thoughtful</li> </ul> </li> <li>• <b>Phlegmatic</b> <ul style="list-style-type: none"> <li>– Reasonable</li> <li>– High-Principled</li> <li>– Controlled</li> <li>– Persistent</li> <li>– Steadfast</li> <li>– Calm</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Choleric</b> <ul style="list-style-type: none"> <li>– Quickly Roused</li> <li>– Egocentric</li> <li>– Exhibitionist</li> <li>– Hot-Headed</li> <li>– Histrionic</li> <li>– Active</li> </ul> </li> <li>• <b>Sanguine</b> <ul style="list-style-type: none"> <li>– Playful</li> <li>– Easy-Going</li> <li>– Sociable</li> <li>– Carefree</li> <li>– Hopeful</li> <li>– Contented</li> </ul> </li> </ul>
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### Dimensional Analysis of the Classical Fourfold Typology

Wundt (1903), after Kant

	Strong		
	<ul style="list-style-type: none"> <li>• <b>Melancholic</b> <ul style="list-style-type: none"> <li>– Anxious</li> <li>– Worried</li> <li>– Unhappy</li> <li>– Suspicious</li> <li>– Serious</li> <li>– Thoughtful</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Choleric</b> <ul style="list-style-type: none"> <li>– Quickly Roused</li> <li>– Egocentric</li> <li>– Exhibitionist</li> <li>– Hot-Headed</li> <li>– Histrionic</li> <li>– Active</li> </ul> </li> </ul>	
Slow	<ul style="list-style-type: none"> <li>• <b>Phlegmatic</b> <ul style="list-style-type: none"> <li>– Reasonable</li> <li>– High-Principled</li> <li>– Controlled</li> <li>– Persistent</li> <li>– Steadfast</li> <li>– Calm</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Sanguine</b> <ul style="list-style-type: none"> <li>– Playful</li> <li>– Easy-Going</li> <li>– Sociable</li> <li>– Carefree</li> <li>– Hopeful</li> <li>– Contented</li> </ul> </li> </ul>	Fast
	Weak		

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### Diagnosis as Categorization

- **Diagnosis Classifies Patient**
  - Symptoms are Features
  - Syndromes are Categories
- **Diagnosis as Feature-Matching**
  - Match Patient’s Symptoms to Syndrome
- **Diagnostic & Statistical Manual (DSM)**
  - American Psychiatric Association
  - “Official” List of Syndromes, Features
    - Used for Classifying Mental Illnesses

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### Growth of the Psychiatric Nosology

American Psychiatric Association  
Diagnostic and Statistical Manual of Mental Disorders

Year	DSM Version	Number of Disorders (Approximate)
1952	DSM-I	100
1968	DSM-II	180
1980	DSM-III	260
1987	DSM-III-R	290
1994	DSM-IV	300
2013	DSM-5	370

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## Psychiatric Diagnoses as Proper Sets Symptoms as Defining Features

Bleuler (1911)



### The "4 As" of Schizophrenia

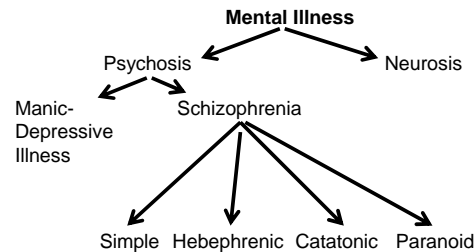
- Association Disturbance
- Anhedonia
- Ambivalence
- Autism

### Schizophrenic Subtypes

- Simple
- Hebephrenic
- Catatonic
- Paranoid

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## Hierarchical Organization of Psychopathology



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## Problems with Diagnoses as Proper Sets

- Partial Expression
  - Schizoid Personality Disorder
  - Schizotypal Personality Disorder
  - Paranoid Personality Disorder
- Combined Expression
  - Pseudoneurotic Schizophrenia
  - Pseudopsychopathic Schizophrenia
  - Schizoaffective Disorder
  - Borderline Personality Disorder

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## Diagnoses as Fuzzy Sets

DSM-III (1980), DSM-IV (1994), DSM-5 (2013)

- Characteristic Symptoms
  - Textbook Cases as Prototypes
- Heterogeneity within Category
  - Family Resemblance
- No Clear Boundaries

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## Schizophrenia

DSM-5 (2013)



### 2 or More Symptoms

- Delusions
- Hallucinations
- Disorganized Speech
- Grossly Disorganized or Catatonic Behavior
- Negative Symptoms
  - Diminished Emotional Expression
  - Avolition

### Plus

- Postmorbidity Decline
  - Occupational
  - Social
  - Self-Care
- Duration 6+ Months
- **Subtypes?**
  - Acute vs. Chronic
  - First vs. Multiple Episodes
  - Type I vs. Type II
    - Positive vs. Negative Symptoms

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## Major Depressive Disorder

DSM-5 (2013)



### 5+ Symptoms Over 2 Weeks

- **Depressed Mood**
- **Diminished Interest**
- Weight Loss
- Insomnia or Hypersomnia
- Psychomotor Agitation or Retardation
- Loss of Energy or Fatigue
- Worthlessness or Guilt
- Inability to Concentrate or Indecisiveness
- Thoughts of Death or Suicide

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## Implications of Categorization

- **Logically**, Categories are Structured as Proper Sets
  - Represented by Defining Features
- **Psychologically**, Categories are Structured as “Fuzzy” Sets
  - Represented by Prototypes, Exemplars
  - Representations Differ by Expertise
- Principles of Reasoning Do Not Necessarily Follow the Principles of Formal Logic
  - Cannot be Discovered by Reason Alone

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## Natural Categories of Persons?

After Roger Brown (1980)



- Sex (Gender)
- Kinship
- Age
- Occupation
- Nationality
- Race/Ethnicity
- Personality Types (nouns)
- Local Culture (Stereotypes)

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## Stereotypes as Social Categories

Hamilton & Sherman (1989); Judd & Park (1993)

- Conception of the Character of a Group
  - Shared by Members of Ingroup
  - Concerning Members of Outgroup
- Functions of Social Stereotypes
  - Positive
    - Reduce Effort in Impression-Formation
    - Infer Unobserved Features
    - Predict Past and Future Behaviors
  - Negative
    - Emotional Prejudice
    - Behavioral Discrimination

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## Stereotypes Defined



“A stereotype is an oversimplified picture of the world, one that satisfies a need to see the world as more understandable than it really is.”

Lippman (1922)

“A stereotype is a cognitive structure that contains the perceiver’s knowledge, beliefs, and expectations about a human group.”

Hamilton & Trolier (1986)

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## Elements of Stereotypes

Judd & Park (1993), after Lippman (1922)


- Generalizations About Social Groups
- Rigidly Held
- Illogically Derived
- Erroneous in Content

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## Perspectives on Stereotyping


- Economic
  - Realistic Group Conflict Theory
  - Ethnocentrism
- Motivational
  - Social Identity Theory
  - Distinction between Us and Them
- Cognitive
  - Inevitable Outcome of Categorization
    - “Simple Model of Great Blooming, Buzzing, Confusion of Reality” (Lippman, 1922)

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## Contents of Social Stereotypes

Hamilton & Sherman (1994)




- Features (Traits)
  - Variability
- Instances (Exemplars)
  - Exceptions



"He was wowed by Obama's oratorical gifts and believed that the country was ready to embrace a black presidential candidate, especially one such as Obama – a 'light-skinned' African American 'with no Negro dialect, unless he wanted to have one,' as he later put it privately."

Mark Halperin & John Heileman, *Game Change* (2010) 73



## "The Princeton Trilogy"

Katz & Braly (1933); Gilbert (1951); Karlins et al. (1969)

- 3 Generations of Princeton University Students
  - List of 84 Personality Traits
    - Chose 5 Characteristic of Different Ethnic Groups
- 1933: Considerable Agreement
  - Positive Bias Towards Ingroup
- 1951: Less Agreement
  - Disliked Making Generalizations
    - Extremely Negative Stereotype of Japanese
- 1969: Task Even More Objectionable
  - Stereotypes Now More Positive

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## Comparative National Stereotypes

Katz & Braly (1933)

<u>Americans</u>	<u>Germans</u>
Industrious	Scientifically Minded
Intelligent	Industrious
Materialistic	Stolid
Ambitious	Intelligent
Progressive	Methodical
Pleasure-Loving	Extremely Nationalistic
Alert	Progressive
Efficient	Efficient
Aggressive	Jovial
Straightforward	Musical
Practical	Persistent
Sportsmanlike	Practical

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## Stability of National Stereotypes

Katz & Braly (1933); Karlins, Coffman, & Walters (1969)



<u>Germans in 1933</u>	<u>Germans in 1967</u>
Scientifically Minded	Industrious
Industrious	Scientifically Minded
Stolid	Efficient
Intelligent	Extremely Nationalistic
Methodical	Aggressive
Extremely Nationalistic	Methodical
Progressive	Arrogant
Efficient	Ambitious
Jovial	Progressive
Musical	
Persistent	
Practical	

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## Secular Trends in Stereotypes

Dovidio & Gaertner (1986, 1991); Devine & Elliot (1995)

- Fading of Negative Stereotypes
  - Select Different Traits
  - Decreased Consistency
  - Less Negative Valence
- Problems with Princeton Paradigm
  - Instructions Ambiguous
    - Knowledge of Stereotype vs. Personal Belief
  - No Assessment of Respondents' Own Prejudice
  - Outdated Adjective Set

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## Re-Assessment of Stereotyping

Devine (1989); Devine & Elliot (1995)

- Stereotypes Not the Same as Personal Beliefs
  - Associations of Features with Group Label
    - Acquired Through Socialization
    - Automatically Activated by Group Member
  - Beliefs: Propositions Accepted as True
    - Not Necessarily Congruent with Stereotypes
    - Control Expression of Prejudice
- Levels of Prejudice
  - High: Beliefs Congruent with Stereotype
  - Low: Beliefs Incongruent with Stereotype

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## Re-Assessment of African-American Stereotype

Devine & Elliot (1995)

- Checklist: 93 Adjectives
  - Most from Katz & Braly (1933)
- Dual Assessment
  - Cultural Stereotype
  - Personal Beliefs
- Social/Political Attitude Survey
  - Included Modern Racism Scale
    - Discrimination against blacks is no longer a problem in the United States.
    - It is easy to understand the anger of black people in America.
    - Blacks have more influence upon school desegregation plans than they ought to have.
    - Blacks are getting too demanding in their push for equal rights.
    - Blacks should not push themselves where they are not wanted.
    - Over the past few years, blacks have gotten more economically than they deserve.
    - Over the past few years, the government and news media have shown more respect to blacks than they deserve.

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## Re-Assessment of African-American Stereotype

Devine & Elliot (1995)

Uniformity

Favorability

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## Favorability of Stereotype as a Function of Prejudice

Devine & Elliot (1995)

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## Stereotype and Personal Belief

Devine & Elliot (1995)

- Stereotypes Are Coherent and Consistent
  - Widely Shared Knowledge
  - Negative
    - Precise Content Changes Across Time
- Personal Beliefs May Be Different
  - High Prejudice, Endorse Stereotype
    - Automatically Activated, Translated into Behavior
  - Low Prejudice, Reject/Qualify Stereotype
    - Automatically Activated, Consciously Controlled
      - Requires Time, Effort, Cognitive Capacity

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## Stereotypes and Individuals

- Inductive Aspect
  - Attribute to Entire Group Features of Single Instance
- Deductive Aspect
  - Attribute to Every Instance Features Ascribed to Group

True of All?  
True of Most?  
Typical?

What Does *Typical* Mean?

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## Bayesian Analysis of the German Stereotype

McCauley & Stitt (1978), after Brigham (1969, 1971)

Trait	$p(T)$	$p(T G)$	Diagnostic Ratio
Efficient	49.8	63.4	1.27
Nationalistic	35.4	56.3	1.59
Industrious	59.8	68.2	1.14
Scientific	32.6	45.5	1.32

Diagnostic Ratio =  $p(T|G) / p(T)$

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## “Typicality” in Stereotype Content

McCauley & Stitt (1978)

- Stereotype Traits...
  - Need Not Be Present in All Group Members
    - Stereotypes are Overbroad
  - Need Not Be Present in Majority of Members
  - May Be *Less* Frequent than Nonstereotype Traits
  - *Relatively* More Probable in Group Members
    - Compared to Another Group (Ingroup)
    - Compared to Population as a Whole
  - Probabilities are *Subjective*

85

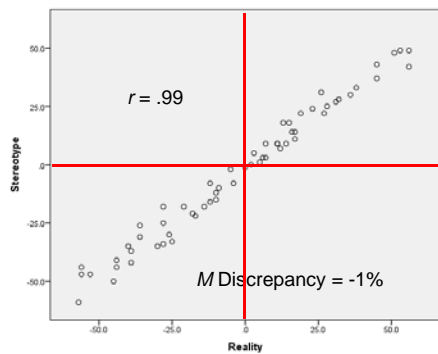
## Elements of Stereotypes

Judd & Park (1993), after Lippman (1922)

- Generalizations About Social Groups
- Rigidly Held
- Illogically Derived
- **Erroneous in Content (?)**

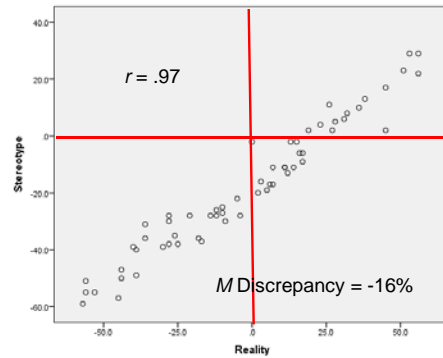
86

## Stereotype Accuracy



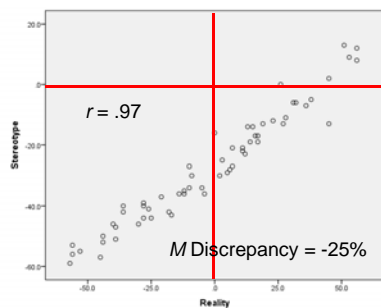
87

## Negative Stereotyping



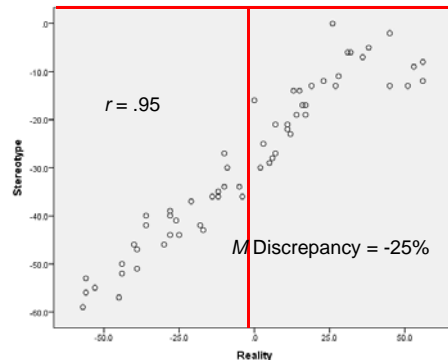
88

## Even More Negative Stereotyping




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## A Completely Negative Stereotype



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### Accuracy of Political Stereotypes

Judd & Park (1993)

- Departures from Neutrality
- Inaccuracy
  - Stereotype Inaccuracy (Over/Underestimation)
  - Valence Inaccuracy (More/Less Positive/Negative)
  - Dispersion Inaccuracy (Over/Undergeneralization)
- Full Accuracy Design
  - Two Contrasting Groups
    - Stereotypic Attributes
    - Counterstereotypic Attributes
  - Valid Objective Criterion

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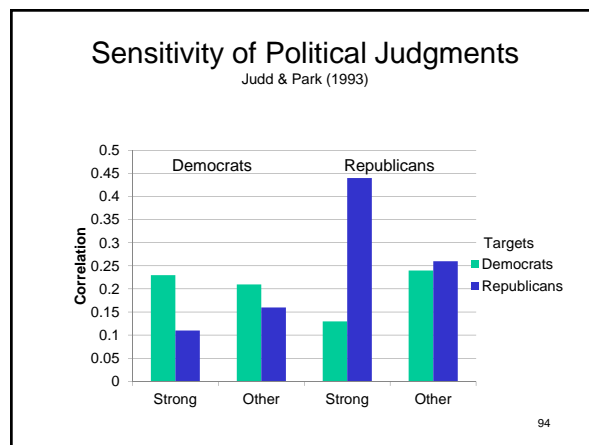
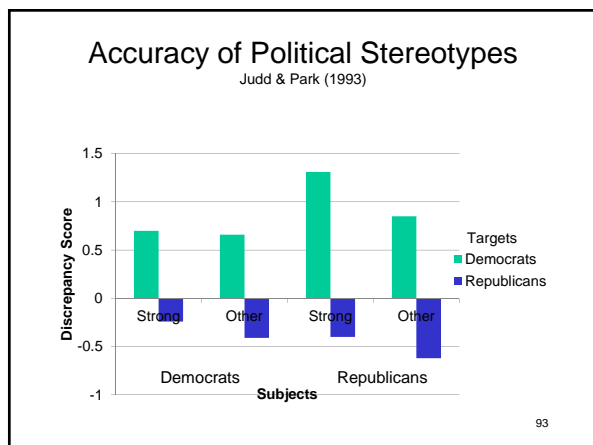


### Accuracy of Political Stereotypes

Park & Judd (1993)


- 1976 National Election Study
- Democratic and Republican Voters
  - Strength of Party Affiliation
- Rate 10 Political Issues
  - Rights of Accused
  - Aid to Minorities
  - School Busing
  - Government Health Insurance
- Own Position (Criterion)
- Position of Democrats in General
- Position of Republicans in General

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### Aspects of Stereotyping

Jussim (2012, 2015)




- Discrepancy from Perfection
  - Accuracy of Beliefs About a Group
- Correspondence with Differences
  - Appreciation of Variability Within a Group
- Personal Stereotypes
  - Individual's Beliefs About a Group
- Consensual Stereotypes
  - Group Average Beliefs About Another Group

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### Four Types of Stereotype Inaccuracy

Jussim (2012, 2015)



- Discrepancies from Perfection
  - Personal
    - Difference between Individual's Beliefs vs. Criterion
  - Consensual
    - Difference between Group Mean vs. Criterion
- Correspondence with Criteria
  - Personal
    - Correlation of Individual's Beliefs with Criterion
  - Consensual
    - Correlation of Group Average with Criterion

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## Ethnic and Racial Stereotyping

Jussim (2012, 2015)

- Consensual Stereotypes Mostly Accurate
  - Most < 10% or .25 SD of Criterion
  - Most Others are “Near Misses”, 10% > 20%
  - Relatively Few are “Inaccurate”, > 20%
- Little Exaggeration of Real Differences
- Correspondence “Very Strong”
  - Personal Stereotypes,  $.36 < r < .69$
  - Consensual Stereotypes,  $.53 < r < .93$

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## Gender Stereotyping

Jussim (2012, 2015)

- Consensual Stereotypes Mostly Accurate
  - Most < 10% or .25 SD of Criterion
  - Most Others are “Near Misses”, 10% > 20%
  - Relatively Few are “Inaccurate”, > 20%
- Little Exaggeration of Real Differences
- Correspondence “Very Strong”
  - Personal Stereotypes,  $.40 < r < .60$
  - Consensual Stereotypes,  $.34 < r < .98$

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## Problems with Studies

- Very Few Studies of Accuracy
  - Consensus that Stereotypes are False
- Wide Variations in Method
  - Convenience Samples
  - Self-Reports vs. Objective Criteria
- May Miss Relevant Characteristics
  - Relevant to Group
  - Relevant to Stereotype

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## Effects of Stereotypes

### The Stereotype Corollary to the Thomas Theorem

W.I. Thomas & D.S. Thomas (1928)

“If men define situations as real, they are real in their consequences”

If **Stereotypes** are Defined as Real, **They** are Real in **Their** Consequences



W. I. Thomas

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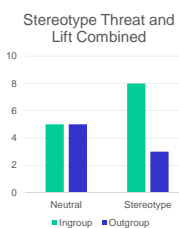
## Effects of Stereotypes on the Target

- Outright Prejudice, Discrimination
- Expectancy Confirmation
  - Behavioral, Perceptual
- Attributional Ambiguity
  - Positive Statements to Condescension?
  - Negative Statements to Prejudice
- Stereotype Avoidance
  - Blunt Expectancy Confirmation
- Stereotype Vulnerability
  - Anxiety, Frustration
- Stereotype Threat
  - Diminished Performance

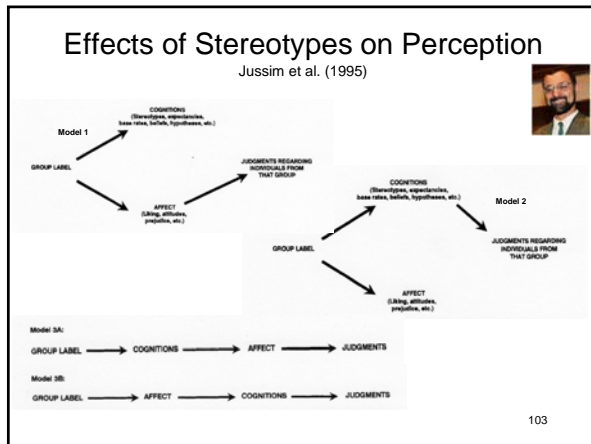
101

## Effects of Stereotypes on the Perceiver

- Outright Prejudice, Discrimination
- Stereotype Lift
  - Enhanced Performance
  - Magnifies Ingroup-Outgroup Differences



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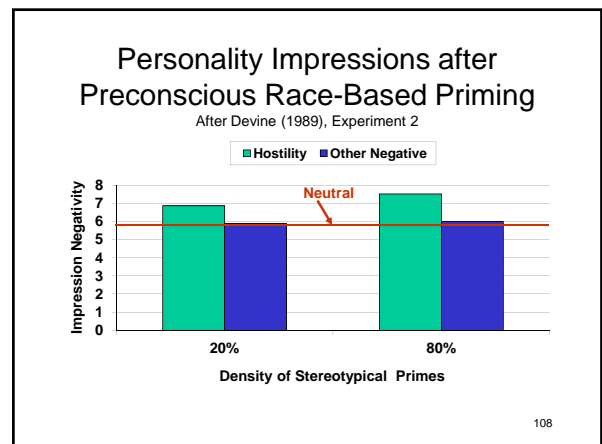


- ### Stereotype Change
- Bookkeeping Model
    - Information Integration
  - Conversion Model
    - Stereotype Disconfirmation
  - Category Differentiation
    - Subtypes
  - Role of Awareness
    - Hypothesis-Testing
    - Disconfirmatory Evidence
- 104

- ### Stereotypes are Automaticity Elicited
- Presence of Outgroup Member
  - Features of Automaticity
    - Inevitable Evocation
    - Incorrigeable Execution
    - Effortless
    - No Interference
  - Unconscious
    - Operate Outside Phenomenal Awareness
    - Operate Independent of Voluntary Control
- 105

- ### Race-Based Priming
- Devine (1989)
- Thought-Listing Procedure
    - Elicit “Black” Stereotype from Whites
      - Poverty, Education/Intelligence, Crime, Athletics
  - Vigilance task
    - Prime White Subjects with Black Stereotype
      - Masked Presentation
      - Low vs. High Density of Primes
  - Read “Donald” Story
    - Not Described in Terms of Race
  - Evaluate Donald
- 106

- ### “Donald” Story
- Srull & Wyer (1979)
- 
- Refused to Let Salesman into House
    - Had a Visitor
  - Refused to Pay His Rent
    - Until Landlord Repainted Apartment
  - Took His Car to Another Mechanic
    - Couldn’t Get It Serviced the Same Day
  - Bought Item at Hardware Store
    - Demanded Money Back
- 
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## Automatic and Controlled Processes in Race-Based Priming

Devine (1989), Studies 2 and 3

- Measure Racial Prejudice
  - “Modern Racism Scale”
- Effects on Race-Based Priming
  - No Differences Due to Racial Prejudice
- Unconscious Prejudice
  - Stereotype Operates Automatically
  - Stereotype Itself is Unconscious(?)

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## The “Blindspot”

Banaji & Greenwald (2013)



- **Hidden biases** we all carry from a lifetime of exposure to cultural attitudes
  - Age, Gender, Race, Ethnicity, Religion, Nationality
  - Sexuality, Social Class, Disability Status
- Perceptions of social groups – **without our awareness or conscious control** – shape our likes and dislikes and our judgments about people’s character, abilities, and potential

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## Implicit Attitude Test

Greenwald et al. (1998); Banaji & Greenwald (2013)

- Make Dichotomous Judgment
  - Phase 1: Is X a Swedish or Finnish name?
    - Aaltonen, Eriksson, Haapakoski, Lind, Nurminen, Sundqvist
  - Phase 2: Is Y a Good or a Bad Thing?
    - Admiration, Aggression, Caress, Abuse, Freedom, Crash
- Then Superimpose Tasks
  - Swedish-Finnish Alternates with Good-Bad
    - Phase 3: Swedish Shares Key with Good
      - Finnish Shares Key with Bad
    - (Phase 4 is a Control Condition)
    - Phase 5: “Swedish” Shares Key with “Bad”

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## Pattern of Responses Reveals Implicit Associations

Greenwald et al. (1998)

### Stimulus-Response Compatibility

Fitts & Seeger (1953), after Small (1951)

Faster Responses when Compatible with Stimulus  
“Left” with Left key, “Right” with Right

- Implication of S-R Compatibility
  - Same Response to Swedish Names, Positive Words
    - Faster Latencies: Association **Swedish ↔ Good**
  - Same Response to Finnish Names, Negative Words
    - Faster Latencies: Association **Finnish ↔ Bad**

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## The “Race IAT” Paper & Pencil Version

Project Implicit (2007)

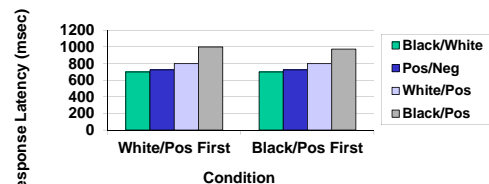
The image shows two columns of words and faces for pairing. Column A (left) lists words: disaster, hatred, honest, grief, lucky, peace, rotten. Column B (right) lists words: agony, white, sincere, crash, diamond, sweet, tragedy. Each word is paired with a face (Black or White) and a radio button for selection. The instructions at the top of each column explain the task: to pair the words with the faces in the center to the left or right, and to pair the words with the faces in the center to the left or right, depending on the word.

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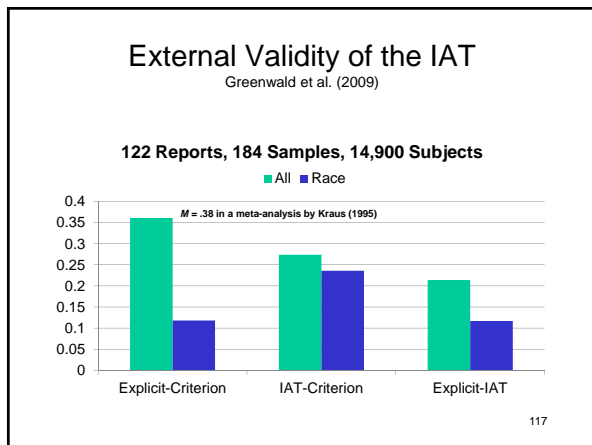
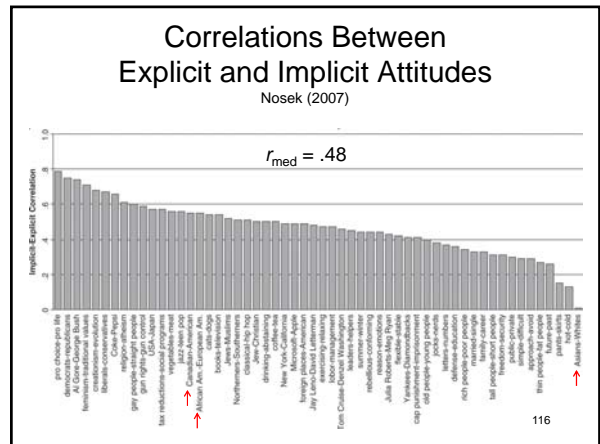
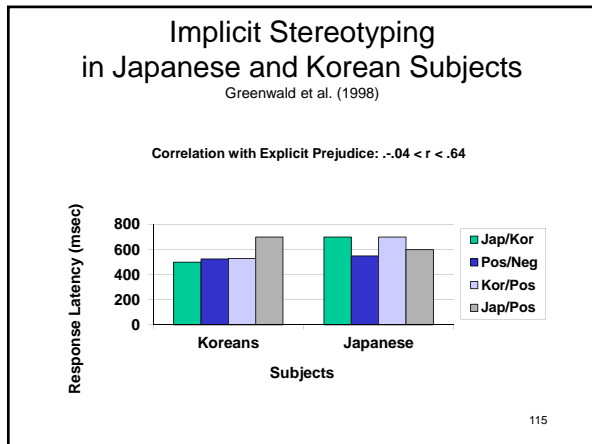
## Implicit Stereotyping in White Subjects


Greenwald et al. (1998)

Correlation with Explicit Prejudice:  $.07 < r < .30$



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- ### Problems with the IAT
- Arkes & Tetlock (2004); Levitin (2013)
- **Confounding Factors**
    - Target Familiarity
    - Task Difficulty
    - Complementarity Assumption
      - Negative vs. “Less Favorable”
      - Positive vs. “More Favorable”
    - Associations vs. Attitudes
  - **Construct Validity**
    - Predict External Criterion
    - Relevant Group Differences
      - “Would Jesse Jackson Fail the IAT?”
- 
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- ### Problems with IAT
- **Dissociation from Explicit Measure?**
    - Significant Correlations Show Validity
    - Nonsignificant Correlations Show Dissociation
    - Correlations Usually Significant
      - Increase with Importance
      - Decrease with “Social Sensitivity”
  - **The Psychologist’s Fallacy (James, 1890)**
    - Every Event has a Psychological Explanation
    - Psychologist’s Explanation is the Right One
- 119

- ### Social Categories:
- Accurate Reflection vs. Systematic Distortion
- **Natural Categories Exist in the Real World**
    - Independent of Mind of Perceiver
    - Reflected in Mind of Perceiver
  - **Some Social Categories are Social Constructs**
    - Exist in Mind of Perceiver
    - Systematic Distortion of Reality
    - Become Real Through Behavior
- 120