

Social Judgment and Inference

Fall 2015

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Midterm Exam

Wednesday, October 21, 2015

Review in Class (Q&A Format)
Monday, October 19

Narrative Review
Now Posted to Course Website

DSP Students
Information on Accommodations Forthcoming

2

Covers August 26 – October 14, Inclusive

- Introduction
- Cognitive Perspective on Social Interaction
 - Fiske & Taylor Chs 1-2; Zerubavel Ch 1
- Social Perception
 - F&T Chs 3, 9-10; Z, Chs 2-3
- Social Memory
 - F&T, Ch 4; Z, Ch 6
- Social Categorization
 - F&T, Chs 11-12; Z, Chs 4-5
- Social Judgment & Inference
 - F&T, Chs 6-8

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Format of Exam

- Exactly 15 Questions
 - 3-5 Points Each
 - 50 Points Total
- Short Answers
 - No More Than 3-5 Sentences
- Answer on Exam Itself
 - No “Blue Books” Required
 - Write Answers *in Ink*
 - If Pencil, No Re-Evaluation

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Exam Preparation

- “Exam Information” Page on bCourses
 - “Philosophy of Exams”
 - Information on Scoring
 - Narrative Review
 - All Old Exams (with Scoring Guide)
- Lecture Illustrations
- Lecture Supplements
- Post Questions to bCourses Forum
 - “Comments and Queries”
 - Deadline: Tuesday, October 20, 12:00 Noon

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Tasks of the Social Perceiver

- Impression Formation
 - Mental Representations of Social Stimuli
- Social Categorization
 - Similarity Judgment
- Causal Attribution
 - Explanations of Social Events
 - Sufficient Reasons
- Moral Judgment
 - When Outcome Attributable to a Person

6



Lewin's Formula Lewin (1933/1935)

$$B = f(P, E)$$

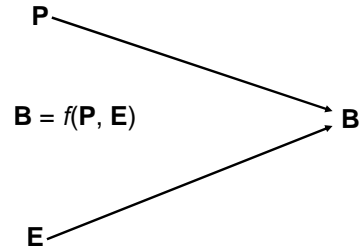
where

- B** = Behavior
- P** = Factors Internal to Person
- E** = Factors in External Environment

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Lewinian Framework for Causal Attribution



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Fritz Heider (1896-1988)



- **Basic Writings**
 - “Social Perception and Phenomenal Causality” (1944)
 - *The Psychology of Interpersonal Relations* (1958)
- **Lewin: $B = f(P, E)$**
 - Possible Causes of Behavior
 - Something About Person (Actor)
 - Something About the Environment (Situation)
 - Actual vs. Perceived Causes
 - Professional vs. Naïve Psychologist

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Covariation Model of Causal Attribution

Kelley (1967, 1971)



- **Statistical Model: Analysis of Variance**
 - Multiple Observations of Behavior
- **Principal Causes (Main Effects)**
 - Actor
 - Target
 - Context
- **Joint Causes (Interaction Effects)**
 - Actor x Target Actor x Context
 - Target x Context Actor x Target x Context

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Information for Causal Attribution

Kelley (1967, 1971)

- **Consistency Across Contexts**
 - Actor's Behavior Toward Target
 - High vs. Low
- **Distinctiveness of Across Targets**
 - Actor's Behavior In Context
 - High vs. Low
- **Consensus Among Actors**
 - Behavior Toward Target in Context
 - High vs. Low

$2 \times 2 \times 2 = 8$ possible combinations

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Naïve Experiment

- **Vary One Cause, Keep Others Constant**
- **Phenomenal Cause**
 - Element which Covaries with Behavior
- ***John laughed at the comedian***
 - Behavior: Laughing
 - Actor: John
 - Target: Comedian
 - Context: Performance



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Why did John Laugh at the Comedian?

- Something about John
- Something about the Comedian
- Something about the Situation
- Something about John *and* the Comedian
 - Interaction
 - Both Necessary Causes
 - Neither Cause Is Sufficient

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Event Descriptions

McArthur (1972)



- Event: *John Laughed At the Comedian*
- Consensus Information
 - *Almost everyone* vs. *Hardly anyone...*
 - ...who heard the comedian laughed at him.
- Consistency Information
 - In the past, John has *almost always* vs. *has hardly ever...*
 - ...laughed at the comedian.
- Distinctiveness Information
 - John *rarely* vs. *almost always...*
 - ...laughs at other comedians
- Control
 - No Consensus, Consistency, or Distinctiveness Information

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Choice Among Alternative Causes

McArthur (1972)

- Something About the Actor
- Something About the Target
- Something About the Circumstances
- Some Combination of Causes

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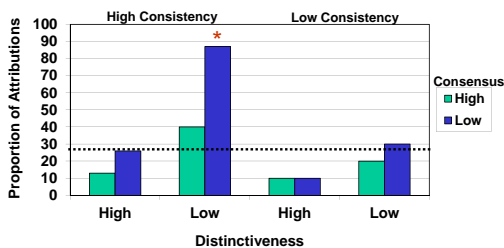
John Laughed at the Comedian... Case 1

- Consistency *High*
 - In the Past, John has *Almost Always* Laughed at this Comedian
- Distinctiveness *Low*
 - John *Also* Laughs at Other Comedians
- Consensus *Low*
 - *Hardly Anyone* Laughed at this Comedian
 - *Causal Attribution to John (Actor)*

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Attributions to Actor

McArthur (1972)

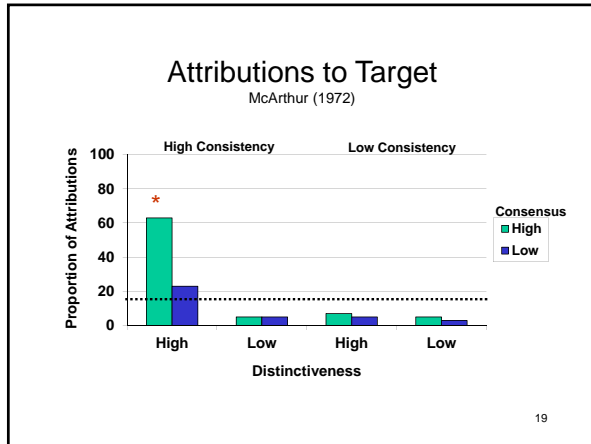


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John Laughed at the Comedian... Case 2

- Consistency Remains *High*
 - In the Past, John has *Almost Always* Laughed at this Comedian
- Distinctiveness Now *High*
 - John *Doesn't* Laugh at Other Comedians
- Consensus Also *High*
 - *Everyone* Laughed at this Comedian
 - *Causal Attribution to the Comedian (Target)*

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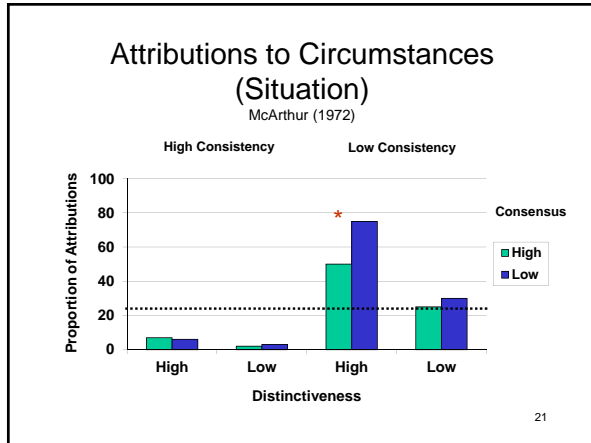


John Laughed at the Comedian... Case 3

- Consistency Now *Low*
 - In the Past, John has *Almost Never* Laughed at this Comedian
- Distinctiveness Remains *High*
 - John *Doesn't* Laugh at Other Comedians
- Consensus Also Remains *High*
 - *Everyone* Laughed at this Comedian

Causal Attribution to the Context (Situation)

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The Covariation Calculus for Causal Attribution

After Kelley (1967), and Brown (1986)

Consistency	Distinctiveness	Consensus	Attribution
High	Low	Low	Actor
High	High	High	Target
Low	High	High	Context
High	High	Low	Actor x Target

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The Covariation Calculus and Theories of Normative Rationality

- Person as Naïve Scientist
 - Designs Controlled Experiments
 - Takes Account of Confounding Variables
 - Statistical Analysis of Data
 - Logical Conclusions Given Premises
- Covariation Calculus as Rational
 - Algorithm for Combining Information
 - Always Gives the Correct Answer

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Problems with Algorithms in Social Judgment

Tversky & Kahneman (1974); Hastie & Dawes (2001, 2010)

- Algorithm Unknown
- Not Enough Information Available
- Available Information Cannot Be Used
 - Insufficient Time
 - Insufficient Motivation

Judgment Under Uncertainty

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Departures from the Covariation Calculus

Despite Sufficient Information

- **Fundamental Attribution Error** (Ross, 1977)
 - Overestimate Role of Dispositions
 - Underestimate Role of Situations
- **Actor-Observer Difference** (Jones & Nisbett, 1972)
 - Make Dispositional Attributions About Others
 - Make Situational Attributions About Self
- **Self-Serving Bias** (Hastorf et al., 1970 ; Greenwald, 1980)
 - Take Responsibility for Good Outcomes
 - Deny Responsibility for Bad Outcomes

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The Fundamental Attribution Error

Changes in the environment are almost always caused by acts of persons in combination with other factors. The tendency exists to ascribe the changes entirely to persons. Heider (1944, p. 361)

[T]he intuitive psychologist's shortcomings... start with his general tendency to overestimate the importance of personal or dispositional factors relative to environmental influences.... He too readily infers broad personal dispositions..., overlooking the impact of relevant environmental forces and constraints. Ross (1977, p. 183)



[T]he tendency to attribute behavior exclusively to the actor's dispositions and to ignore powerful situational determinants of the behavior. Nisbett & Ross (1980, p. 31)

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Attitude Attribution Paradigm

Jones & Harris (1967)

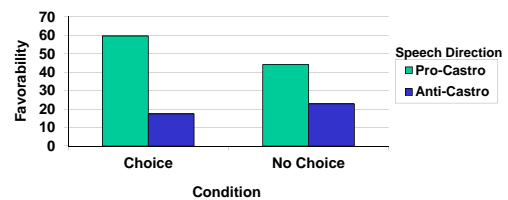
- Read Transcripts of Pro/Con Speeches
 - Castro, Racial Segregation
 - “Con” Side is Normative
- Evaluate Attitudes of Speech-Writers
- Choice vs. Assignment

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Ratings of Speaker's Attitudes

Jones & Harris (1967), Exp. 1

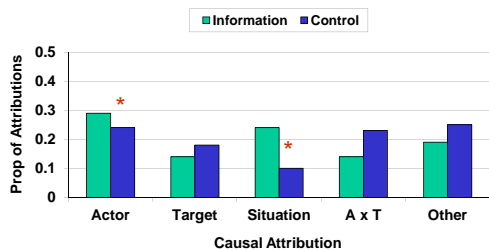
Attitudes Toward Castro



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Dispositions and Situations in Causal Attribution

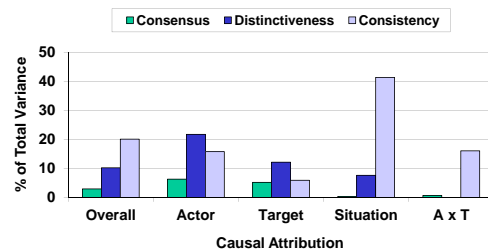
McArthur (1972)



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Consensus and Consistency in Causal Attribution

McArthur (1972)



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The Actor-Observer Difference in Causal Attribution



The person tends to attribute his own reactions to the object world, and those of another, when they differ from his own, to personal characteristics [of the other]. Heider (1958, p. 157)

[T]here is a pervasive tendency for actors to attribute their actions to situational requirements, whereas observers tend to attribute the same actions to stable personal dispositions. Jones & Nisbett (1972, p. 80)

Also known as the
Self-Other Difference in Causal Attribution

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Illustrating the Actor-Observer Difference in Causal Attribution

Jones & Nisbett (1972, p. 79)



When a student who is doing poorly... discusses his problems with a[n] adviser, there is often a fundamental difference of opinion between the two.

The student... is usually able to point to environmental obstacles such as a particularly onerous course load, to temporary emotional stress..., or to a transitory confusion about life goals....

The adviser... is convinced... instead that the failure is due to enduring qualities of the student -- to lack of ability, to irremediable laziness, to neurotic ineptitude.

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Aspects of the Actor-Observer Difference

Watson (1982)



- Attributions re: Self Situations > Traits
- Attributions re: Others Traits > Situations
- Attributions to Traits Other > Self
- Attributions to Situations Self > Other

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The Self-Serving Bias in Causal Attribution



That reason is sought that is personally acceptable. It is usually a reason that flatters us, puts us in a good light, and it is imbued with an added potency by the attribution. Heider (1958, p. 172)

We are prone to alter our perception of causality so as to protect or enhance our self esteem. We attribute success to our own dispositions and failure to external forces. Hastorf, Schneider, & Polefka (1970, p. 73)

Also known as the
Ego, Ego-Defensive, or Ego-Protective Bias

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The Totalitarian Ego

Greenwald (1980), p. 604

- *Conservatism*
 - The Self-Concept is Characterized by “Resistance to Cognitive Change”
- *Egocentricity*
 - People Perceive Themselves as “More Central to Events” Than They Really Are
- *Beneffectance*
 - People Perceive Themselves as “Selectively More Responsible for Desired, but not Undesired, Outcomes.”

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Illustrating the Self-Serving Bias in Causal Attribution

Greenwald (1980, p. 605)



In asking students to judge an examination's quality as a measure of their ability to master course material, I have repeatedly found a strong correlation between obtained grade and belief that the exam was a proper measure.

Students who do well are willing to accept credit for success;

those who do poorly, however, are unwilling to accept responsibility for failure, instead seeing the exam (or the instructor) as being insensitive to their abilities.

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Aspects of the Self-Serving Bias

Miller & M. Ross (1975)



- Self-Protective Bias
 - Failure is Attributed to External Rather than Internal Causes
- Self-Enhancing Bias
 - Success is Attributed to Internal Rather than External Causes

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Moderators of the Self-Serving Bias

Campbell & Sedikides (1999)



- Self-Esteem
- Achievement Motivation
- Self-Focused Attention
- Task Choice
- Outcome Expectancies
- Task Difficulty
- Interpersonal Orientation
- Status
- Affect
- Locus of Control
- Gender
- Task Type

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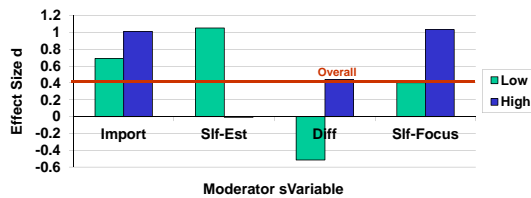


The Self-Serving Bias

Campbell & Sedikides (1999)



Meta-Analysis of 70 Experiments



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Normative Model of Human Rationality

- When Reasoning About Events...
 - People Follow Normative Principles of Logic
- Judgments, Decisions, Choices...
 - Based on Rational Self-Interest
- Rational Self-Interest...
 - Expressed as Principle of *Optimality*
 - Maximize Gains, Minimize Losses
 - Also Expressed as Principle of *Utility*
 - Achieve Goals as Efficiently as Possible

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Expressions of Normative Rationality: Covariation Calculus for Causal Attribution

- Logical, Systematic Rules for Judgment, inference
 - Specifies All Necessary Information
 - How Information is Combined
- Problems Soluble
 - Appropriate Algorithm Inevitably Leads to Correct Solution
- Rational Thought Employs Algorithms
 - Guaranteed to Reach Correct Answer

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Departures from the Covariation Calculus as Departures from Normative Rationality

- Fundamental Attribution Error (Ross, 1977)
- Actor-Observer Difference (Jones & Nisbett, 1972)
- Self-Serving Bias (Hastorf et al., 1970; Greenwald, 1980)

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The *Ultimate* Attribution Error

Pettigrew (1979)



- Negative Behaviors by Outgroups
 - Attributed to Internal, Dispositional Causes
- Positive Behaviors by Outgroups
 - Attributed to Variable / Situational Causes
 - Good Luck / Special Advantage
 - High Motivation
 - Exceptional Cases
- Positive Behaviors by Ingroups
 - Attributed to Internal, Dispositional Causes
- Negative Behaviors by Ingroups
 - Attributed to Variable / Situational Causes
 - Bad Luck / Special Disadvantage, etc.

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Human Inference: Strategies and Shortcomings of Social Judgment

Nisbett & Ross (1980), p. 273



“We have identified a number of shortcomings in everyday inference – shortcomings that, for the most part, can be traced either to people’s over-reliance on primitive judgmental heuristics or to their inattentiveness to conventional normative considerations.”

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How We Know What Isn’t So: The Fallibility of Human Reason in Everyday Life

Gilovich (1991), pp. 2-3



“[M]any questionable and erroneous beliefs have purely cognitive origins, and can be traced to imperfections in our capacities to process information and draw conclusions.... They are the products, not of irrationality, but of flawed rationality.”

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A Little List of Errors and Biases

After Krueger & Funder (2004), Table 1

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> • Overconfidence Bias • Fundamental Attribution Error • False Consensus Effect • Positivity Bias • Confirmation Bias • Justice Bias • Hot-Hand Fallacy • Self-Protective Similarity Bias • Self-Serving Bias • Optimistic Bias • Sinister Attribution Error • Ingroup-Outgroup Bias • Hypothesis-Testing Bias • Durability Bias • Self-Image Bias • Actor-Observer Bias • Systematic Distortion Effect • Asymmetric Insight Illusion • Dispositional Bias • Clouded Judgment Effect • Empathy Neglect | <p>Google
“Cognitive Errors”</p> <p>Decision-Making
Probability and Belief</p> <p>Social
Memory</p> | <ul style="list-style-type: none"> • Correspondence Bias • Halo Effect • False Uniqueness Effect • Negativity Bias • Disconfirmation Bias • Male Bias • Gambler’s Fallacy • Hindsight Bias • “Ultimate” Self-Serving Bias • Pessimistic Bias • Conjunction Fallacy • Positive Outcome Bias • Diagnosticity Bias • Vulnerability Bias • Labeling Bias • External Agency Illusion • Intensity Bias • Just-World Bias • Romantic Bias • Bias Blind Spot • Empathy Gap |
|--|--|---|

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The “People Are Stupid” School of Psychology

Kihlstrom (2004)

- People Are Fundamentally Irrational
- People Act on Automatic Pilot
- Behavior is Unconscious
- We Don’t Know What We’re Doing
- Unconscious Thought Is Superior
- We Don’t Know How Stupid We Are
 - Lack Appreciation of Errors and Biases

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Self-Other Difference in Causal Attribution

- Internal vs. External Attributions
- Is It an Error?
 - Contrast with Fundamental Attribution Error
 - Informational Differences
- Limited Evidence
 - Self-Enhancing but not Self-Protective
 - Greatest Under Conditions of High Self-Threat

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Self-Other Difference

(Malle, 2006)

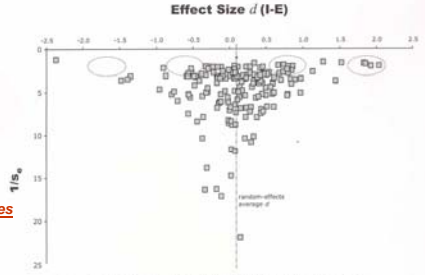


- Limited Evidence (Watson, 1982)
 - Attributions to Situations: Self > Other
- But New Review
 - Quantitative vs. Narrative Analysis
 - Strength of Effect
 - 173 Published Studies
 - Bias Scores
 - Personal or Internal Attributions
 - Situational or External Attributions
 - Bias Score = Internal – External
 - » + = Bias toward Internal Attributions
 - » - = Bias toward External Attributions

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The Actor-Observer Difference in Causal Attribution – Not!

Malle (2006)



Mean Score

All Studies
 $I = 0.062$
 $E = 0.023$
 $I-E = 0.095^*$

Standard Studies
 $I = -0.093$
 $E = 0.007$
 $I-E = -0.001$

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Not Much Self-Serving Bias, Either!

Malle (2006)



Mean Score

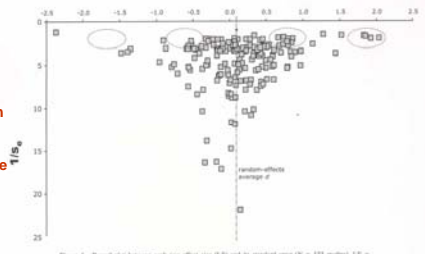
Positive Events
 $I = -0.140$
 $E = -0.134$
 $I-E = -0.158^*$

Negative Events
 $I = 0.311^*$
 $E = -0.020$
 $I-E = 0.241$

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Nor, for that matter, Much Fundamental Attribution Error!

Malle (2006)



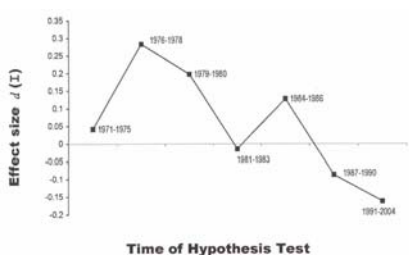
If there is little or no actor-observer difference in causal attribution, then people make attributions about others the same way they make attributions about themselves!

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35 Years to Correct the Record

(Or, Anchoring and Adjustment at Work)

Malle (2006)



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Attribution "Errors" Based on Misconception?

- Lewin: $B = f(P, E)$
 - Common Assumption that P, E Independent of Each Other
- But P and E are Interdependent
 - (As Lewin Clearly Understood)
- P Constructs E
 - Through Behavior
 - Through Mental Activity
- Behavior Caused by Perception of the Situation
 - Perception is Internal to the Person

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Analyzing Social Interaction

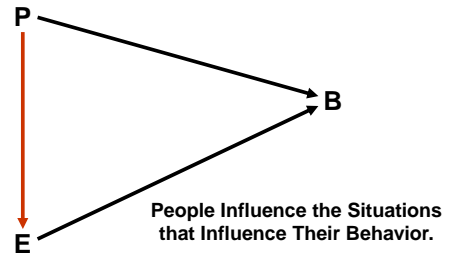
Lewin (1939/1951), p. 140

$$B = F[P, E] = F[L Sp]$$

The psychological environment has to be regarded functionally as a part of one interdependent field, the life space, the other part of which is the person. This fundamental fact is the keynote of the field-theoretical approach.

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The Doctrine of Interactionism



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How Persons Construct Environments

- **Through Overt Behavior**
 - **Evocation**
 - Person Evokes Response from Environment
 - **Selection**
 - Person Chooses to Enter Environment
 - Or, Environment Selected for Person
 - **Behavioral Manipulation**
 - Person Creates or Modifies Objective Environment Through Overt Behavior
- **Through Covert Behavior (Thought)**
 - **Cognitive Transformation**
 - Person Creates or Modifies Mental Representation of Environment
 - Covert Behavior Leads to Overt Behavior

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A False Distinction Between the Person and the Environment

- *Perceived* Situation Causes Behavior
 - Perception Always a Feature of the Person
- Action is Intentional
 - Intentions Are Also Features of the Person
- From a Psychological Viewpoint, Correct Attributions are Always to the Person
 - Doctrine of Mentalism
 - Mental States : Action :: Cause : Effect

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A New Framework for Causal Attribution

Malle (2005)



- Folk-Conceptual Theory
 - Back to Heider (1944)
- Abandons Model of Naïve Scientist
- How People Actually Reason About Behavior
- Generating Factors
 - Reasons (Rational Connection)
 - Mere Causes (Mechanical Connection)

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Intentional vs. Unintentional Behavior

- Intentional Behavior Explained by **Reasons**
 - Actions
 - Beliefs, Desires, Values
 - Anne studied for the test all night because *she wanted to do well.*
 - Assumption of Rationality
- Unintentional Behavior Explained by **Causes**
 - Behaviors
 - No Assumption of Rationality
 - Ann was nervous about the test results because *she wanted to do well.*

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Types of Reasons

- Beliefs and Desires
 - Mental State Necessary for Intentional Action
- Mental State Markers (vs. Unmarked)
 - *She went to the café because she wanted an authentic cappuccino.*
 - *She went to the café because she thought they have authentic cappuccino.*
- Unmarked Mental States
 - Can Confuse External with Internal Causes
 - Assume Subjectivity, Rationality
 - *She didn't speak up because the teacher was there.*⁶¹

Types of Causes

- Apply to Any Physical Event
- Dimensions of Causality
 - Internal vs. External
 - *The tree fell because its roots were shallow.*
 - *The tree fell because the wind was strong.*
 - Stable vs. Unstable
 - *The tree fell because the winds are strong here.*
 - *The tree fell because of a tornado.*
 - Global vs. Local
 - *The tree fell because the soil is bad here.*
 - *The tree fell because it was planted poorly.*⁶²

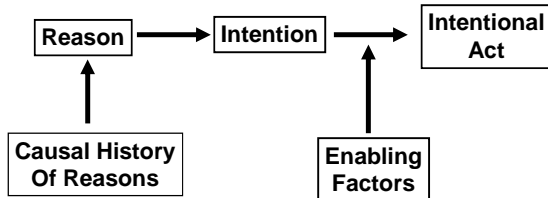
Enabling Factors

- Skill
 - *She got an A because she's very smart.*
- Opportunity
 - *She got an A because her date was cancelled.*
- Removed Obstacles
 - *She got an A because she found her notes.*

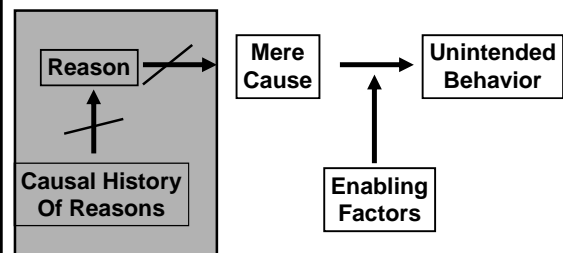
Causal History of Reasons

- Explain Beliefs and Desires
 - No Assumption of Subjectivity, Rationality
- Causal Antecedents of Reasons
 - Unconscious Processes
 - *He planted the garden because he loved his mother.*
 - Personality Factors
 - *He planted the garden because he's cheap.*
 - Socialization and Culture
 - *He planted the garden because he's a farm kid.*
 - Immediate Context
 - *He planted the garden because he likes fresh fruit.*⁶⁴

Model for Intentional Action

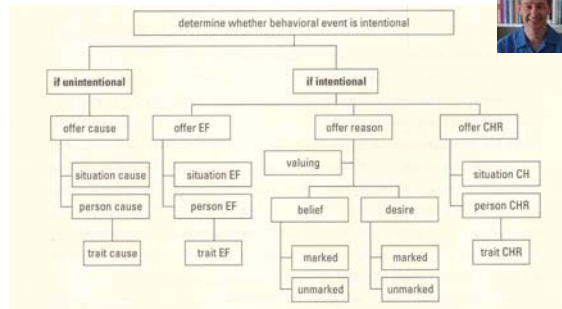


Model for Unintentional Action



Flowchart for Behavior Explanations

Malle (2005)



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Actor-Observer Asymmetries Revisited

Malle et al. (2007)



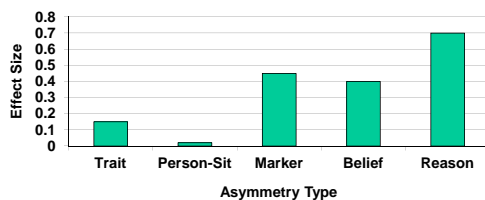
- Reason Asymmetry
 - Actors Use More Reasons (Privileged Access)
 - Actors Use Fewer Causal Histories
- Belief Asymmetry
 - Actors Use More Belief Reasons
 - Actors Use Fewer Desire Reasons (Simulation)
- Marker Asymmetry
 - Actors Leave Beliefs Unmarked
 - Direct Representation of Beliefs

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Actor-Observer Asymmetries

Malle et al. (2007)

Meta-Analysis of 9 Studies



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Social Cognition as Folk Psychology

- How Do People Actually Reason?
- Person-Situation Framework Inappropriate
 - Treats All Causes as “Mere” Causes
 - Traits, Situational Factors
 - Ignores Reasons, Beliefs
 - How People Really Explain Things
- Folk Psychology Better for Science?

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The Fundamental Attribution Error

Attributing Behavior to the Person

It's Not An Error!

But It Is Fundamental!

Legitimizes Moral Judgments

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Automaticity and Control in Social Interaction

- Cognitive Perspective in Social Psychology
 - Traditional Focus on Conscious/Deliberate Thought
 - Impression Formation (Person Perception)
 - Attribution Theory (Causal Explanation)
 - Impression Management (Strategic Self-Presentation)
 - Social Exchange
- Reactions to “Cold, Rational” View
 - “Hot” Cognition (The “New Look”)
 - Emotion, Motivation
 - Automaticity
 - Social Interaction Constrained by Situational Influences
 - Interpretation of Situational Influences as Priming
 - Most Social Cognition Is Automatic in Nature

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Automaticity: Situationism Revived

After LaBerge & Samuels (1974); Posner & Snyder (1975);
Schneider & Shiffrin (1977); Schiffrin & Schneider (1977)

- Inevitable Evocation by Stimulus
- Incurable Completion (Ballistic)
- Efficient Execution (No Resources)
- Parallel Processing (No Interference)
- Unconscious in the Strict Sense of the Term
 - Operate Outside Phenomenal Awareness
 - Operate Outside Voluntary Control

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Mechanisms of Automaticity

- Innate
 - Reflex, Taxis, Instinct
- Acquired Through Extensive Practice
 - Conditioned Responses, Habits

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Automaticity in Social Behavior

- Most Social Behavior is Automatic
 - Triggered by Environment
 - Preattentive/Preconscious Processing
- Internal Mental Representations of the Situation are Constructed Automatically
 - Perception “Dumped” in Consciousness
- Behavior Follows Automatically from Cognition

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“The Automaticity of Everyday Life”

Bargh (1984)



“As Skinner argued so pointedly, the more we know about the situational causes of psychological phenomena, the less need we have for postulating internal conscious mediating processes to explain these phenomena.”

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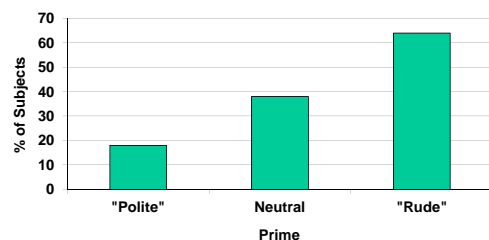
Interruptions of Experimenter

Bargh et al. (1996), Experiment 1

- Cover task: Scrambled sentences
 - “Rude” Primes
 - *aggressively, rude, bother, disturb, intrude*
 - “Polite” Primes
 - *respect, honor, considerate, appreciate, patiently*
 - “Neutral” Primes
 - *exercising, flawlessly, occasionally, rapidly, gleefully*
- Experimenter Engaged with Confederate
 - Ignores Waiting Subject
- Interruptions During 10-minute waiting period

Interruptions of Experimenter

Bargh et al. (1996), Experiment 1



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The Automaticity Juggernaut

Kihlstrom (2008)

- Social Behavior Largely Automatized
 - Conscious Percepts, Goals, Emotions Irrelevant
 - Automatically Triggered by Preconscious Analysis
- Consciousness is an Afterthought
 - Give Plausible/Acceptable Reasons for Behavior
- We Are All Zombies After All
 - Not Because Zombies are Conscious Too
 - Dennett
 - But Because Consciousness is Epiphenomenal
 - Plays No Causal Role in Behavior

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“The Automaticity of Everyday Life”

Bargh (1997, p. 1)

“[T]he more we know about the situational causes of psychological phenomena, the less need we have for postulating internal conscious mediating processes to explain these phenomena....

[!]It is hard to escape the forecast that as knowledge progresses regarding psychological phenomena, there will be less of a role played by free will or conscious choice in accounting for them....

That trend has already begun..., and it can do nothing but continue.”



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“Is Consciousness Riding into the Sunset?”

Bargh (1997), p. 50, 52



“Automaticity pervades everyday life, playing an important role in creating the psychological situation from which subjective experience and subsequent conscious and intentional processes originate....

I emphatically push the point that automatic, nonconscious processes pervade all aspects of mental and social life, in order to overcome what I consider dominant, even implicit, assumptions to the contrary.

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The Unbearable Automaticity of Being

Bargh & Chartrand (1999, p. 462)



“[M]ost of a person’s everyday life is determined not by their conscious intentions and deliberate choices but by mental processes that are put into motion by features of the environment and that operate outside of conscious awareness and guidance.”

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Behavior -- It’s Involuntary

Park (*American Psychologist* 1999), p. 461



“We perceive ourselves to have far more control over our everyday behavior than we actually do....

[T]he source of behavioral control comes not from active awareness but from... mental activations of which we are unaware and environmental cues to which we are not consciously attending that have a profound effect on our behavior.

[T]hese articles represent... fundamental breakthroughs in the understanding of motivations, free will, and behavioral control.”

83

“Naturalization” and Freud’s Sorrow

Introductory Lectures on Psychoanalysis (1915-1916)

- Copernicus
 - Earth is not Center of Universe
- Darwin
 - Man is Just Another Animal
- ~~Freud~~
 - Man is Fundamentally Irrational
- Bargh (and Wegner)
 - Man is (Virtually) a Conscious Automaton



Ohme (2000) 84

Automaticity Pervades Social Cognition

Bargh et al. (2012)



- Preconscious Automaticity
 - Unconscious Inputs to Conscious Processes
 - Direct Activation of Goal Pursuit/Social Behavior
- Postconscious (Goal-Dependent) Automaticity
 - Dependent on Prior Conscious/Intentional Thought

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Sources of the Automaticity Juggernaut

Kihlstrom (2008)

- “Conscious Shyness”
 - Epiphenomenalism



“The Sloop”, built 1891 (Fleming & Western Railway, California)

“The consciousness of brutes would appear to be related to the mechanism of their body simply as a collateral product of its working, and to be completely without any power of modifying that working as the steamwhistle which accompanies the work of a locomotive engine is without influence upon its machinery.” T.H. Huxley (1868)

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Sources of the Automaticity Juggernaut

Kihlstrom (2008)

- Physics Envy
 - “Clockwork” or “Pinball” Determinism
 - “Free Will” Cannot Enter into Closed Causal Sequence
- Alliance of Social Psychology with Behaviorism
 - Traditional Definition as Study of Social Influence
 - Situationism
 - Explain Behavior in Terms of Stimulus
 - Avoidance of Mediating Conscious Processes

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The Automaticity Principle

Huang & Bargh (2013)



- Doubts About Conscious Control
 - Power of Situational Influences
 - Limits of Introspective Access
 - Dual-Process Models
- Effects of Unconscious Processes
 - How a Person Perceives the World
 - How a Person Behaves in Response

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A Softening of Views?

Bargh et al. (2012)



“Any process of sufficient complexity to be of interest to social psychologists involves a complex interplay between both controlled (conscious) and automatic processes.” (p. 601)

“Conscious thought is causal and it often puts automatic processes into play; similarly, automatic processes regularly cause and influence conscious thought processes. These two fundamental forms of human information processing work together, hand in glove, and indeed one would not be able to function without the other.” (p. 602)

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Dual-Process Theories in Psychology

Chaiken & Trope (1999); Sherman et al. (2014)

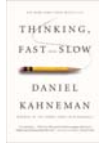
- Conscious or Effortful or Controlled
 - Symbolically Represented Rules
 - Structured by Language, Logic
 - Learned in One Trial (or Very Few)
 - Conscious
 - Optional, Depending on Capacity, Motivation
 - Conscious Awareness of Steps in Processing
- Automatic or Unconscious
 - Associative
 - Structured by Similarity, Contiguity
 - Learned Over Many Trials
 - Automatic (As Defined Previously)
 - Preconscious, with Conscious Awareness of Result



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Two Systems in Judgment and Decision-Making

Kahneman, *Thinking, Fast and Slow* (2011)



- System 1
 - Automatic, Fast, Unconscious
 - Heuristic, “Hot”
 - Emotions, Stereotypes
- System 2
 - Controlled, Slow, Conscious
 - Algorithmic, “Cold”
 - Logical, Systematic
- System 1 Usually Wins the Race

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The Latest Word 1

Bargh et al. (2012), p. 593



“If there is one major trend in research on automaticity of the higher mental processes over the past few years, it is that **the concept has now permeated nearly all psychological domains....**

“[It] is now a **staple and indispensable construct for the explanation and prediction of almost all psychological phenomena.**”

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The Latest Word 2

Bargh (2014), p. 37



“Freud spent countless thousands of words in providing explanations as to why our unfulfilled wishes express themselves in the imagery and stories that populate our nightly dreams. The latest research provides a more pragmatic perspective on **how thought and emotion just below the surface of our awareness shape the way we relate** to a boss, parent, spouse or child. That means we can set aside antiquated notions of Oedipus complexes and **accept the reality that the unconscious asserts its presence in every moment of our lives**, when we are fully awake as well as when we are absorbed in the depths of a dream.”

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Critique of Automaticity

Kihlstrom (2009)

- Weak Operationalization
 - Failure to Apply Canonical Features
 - Inevitable Evocation
 - Incurable Completion
 - Efficient Processing
 - Parallel Processing
- Confusion Between Automatic and Incidental
- Demand Characteristics
- No Assessment of Comparative Influence
 - Automatic vs. Controlled Processes

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Process-Dissociation Procedure

Jacoby (1991); Yonelinas & Jacoby (2012)



- Estimates Influence of Automatic and Controlled Processes
- Method of Opposition
 - Pits the Two Against Each Other
 - Inclusion Condition
 - Automatic, Controlled Processes Work Together
 - » Automatic Process Facilitates Performance
 - Exclusion Condition
 - Automatic, Controlled Processes Oppose Each Other
 - » Suppress of Automatic Process

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20-Year Retrospective of PDP

Yonelinas & Jacoby (2012)

- Many Applications Beyond Memory
- Criticisms of “Process Independence”
 - Processes May be Redundant/Embedded
 - May Need Multinomial Model (>2 Processes)
- But Converging Evidence
 - Outcomes as Predicted by Process-Independence
 - Alternative Measures of A and C in Memory
 - Remember/Know Judgments
 - Signal-Detection Theory

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The False Fame Effect

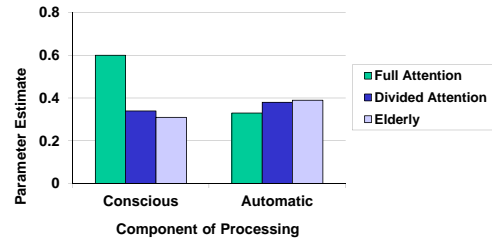
Jacoby et al. (1989)

- Study List of Nonfamous Names
 - Memory Test
- 24 Hours Later, Make Fame Judgments
 - Famous, Nonfamous Names
- Previously Studied Nonfamous Names are Now Judged to be Famous
 - “Becoming Famous Overnight”
- Explanation
 - Study Primes Names on Judgment Task
 - Priming Increases Availability
 - Biases Judgments of Fame
 - Influence of Priming is Automatic

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Components of Processing in Fame Judgments

Jennings & Jacoby (1993)



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Spontaneous Trait Inferences

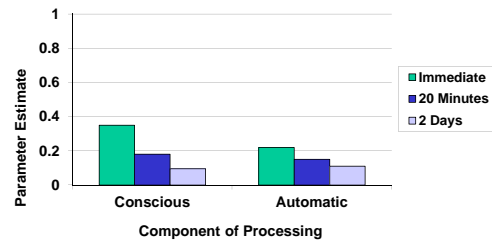
Uleman et al. (2005)

- Study Photos of Strangers
 - Paired with Behavioral Description
- 2 Days Later, Make Trait Judgments
 - Old, New Photos
- Old Photos Receive Trait Attributions in Line with Behavioral Descriptions
- Behaviors Prime Relevant Traits
 - Priming Increases Availability
- Influence of Priming is Automatic

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Components of Processing in Spontaneous Trait Inferences

Uleman et al. (2005)



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The Weapon Bias

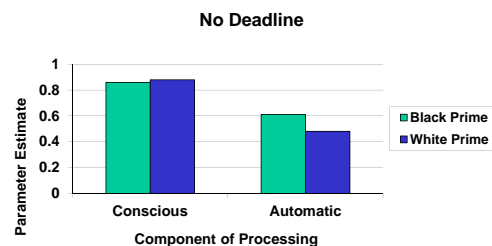
Payne (2001)

- Identification Task: Weapon or Tool?
- Primed with Black or White Faces
- Priming Effects
 - Faster to Identify Gun after Black Prime
 - Faster to Identify Tool after White Prime
 - More Misidentification of Tools as Guns
- Faces Prime Racial Stereotypes
 - Stereotype Primes Related Judgment
- Influence of Priming is Automatic

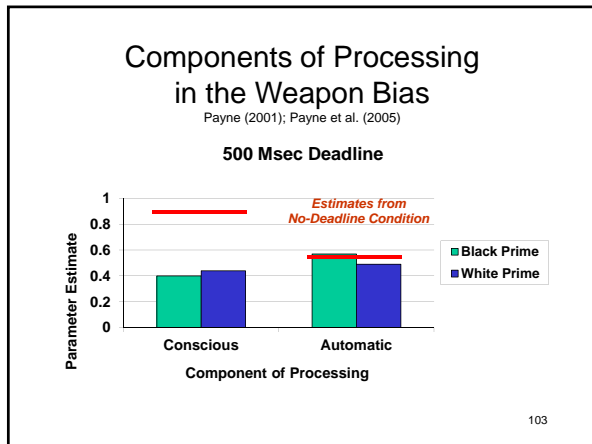

101

Components of Processing in the Weapon Bias

Payne (2001); Payne et al. (2005)



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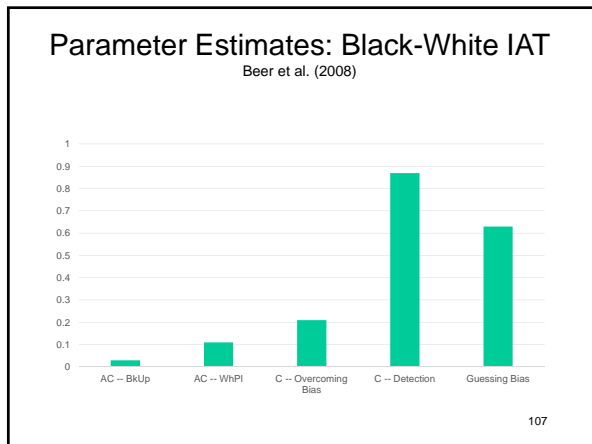
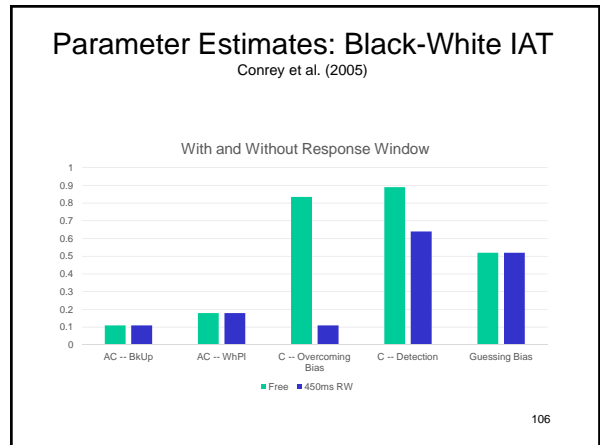
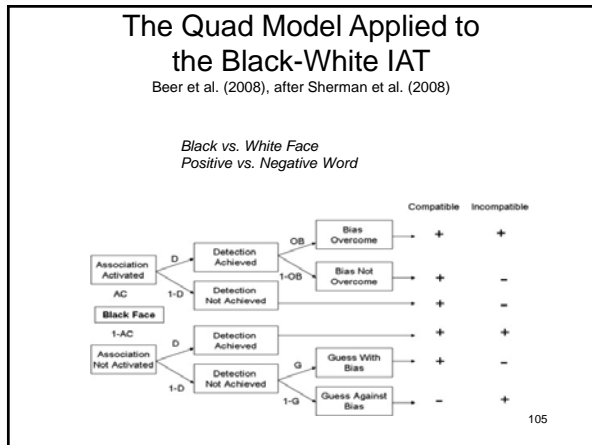



QUAD Model of Automatic Bias in Stereotyping and Prejudice

Sherman et al. (2008)

- Dual-Process Theory of Stereotyping
 - Stereotypes/Prejudice Are Automatically Evoked
 - Both Subject to Conscious Self-Regulation
- Models 4 Parameters, Not Just 2
 - Automatic Association Activation (AC) of Bias
 - Discriminability of Correct Response (D)
 - Overcoming Bias (OB) to Select D
 - Guessing (G) When D and AC Fail

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The Automaticity Argument Summarized

- Experimental Evidence: Automatic Processes Play Some Role, Under Some Conditions, in Social Cognition and Behavior.
- Theoretical Conclusion: Automatic Processes are Pervasive, and Consciousness Is Largely an Afterthought.
 - But Does Not Follow From the Evidence

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