Reminder: select 5 students for rumor demo

Those sitting near side door
Give them index cards with numbers, 1A & 1B– hear rumor simultaneously, 1B goes back in room (control for 1A forgetting too much, and bring back 1B at end-- after #4)

Others get # 2, 3, 4
Vary order by gender

Have door monitor bring them in
Seat them in front of class in 2 chairs
Not to look back at projected scene
“Making Psychology Come Alive!”

How to Make Your Lectures Challenging, Fun and Memorable

Phil Zimbardo
How 2 Do MEMORABLE?

Make it Unique
* Do Music
* Be Personal
* Tell Stories
* Make em Think
* Make em Laugh
* Make em Talk
* Make em Work
* Demo it
* Guest it
Dr. Z’s Rx for Hot Psych

- Do Music Opener warm-ups
- Be Personal- What is your Identity to your class?
- Tell good stories, be Inspiring
- Critical Thinking- pose reflections
- Even in lecture format, have Q & A, interactions, Fun stuff
- Use Demos/ Exps.: Reveal Using Psych to Teach Psych
- What is one take away message for each lecture?
- Utilize local guests when possible
Exploring the Dynamics of Human Memory ~ As a Personal-Social Narrative
Social Memory: Warm-up Music

“In My Life”
- The Beatles
Start with a personal recall

MY HOSPITAL DREAM

- I was isolated in a charity hospital in NYC for all children with contagious diseases for 5 months - when I was 5-6 years old. (1939-Pre-meds)
- But I remembered it as really great!
- How, you ask?
- Learned to read and write before schooling; learned ingratiating skills, learned to be a creative leader...
- But then we must explain my bizarre, recurring dream every year for 60 years of the mysterious “Wrinkled Sheets”
- We will return to consider alternative memories of this event at the end of our presentation.
- Remind me if I forget
In the 1950’s Memory was the most boring topic in psychology

• Rats learning and remembering Y-maze paths
• Students remembering endless Lists of Nonsense syllables
• S-->R theory being about motivation, reward and learning -- with NO interest in memory at all.
• With no O between S and R, no cognitions !
• NOW IT IS THE MOST EXCITING
• WHY?
Why? Because Gordon Bower & Beth Loftus Revealed that:

- Content mattered, stories mattered, contexts mattered
- Point of view mattered
- Associations mattered, mnemonics mattered
- Mood mattered
- Imagination mattered
- Personal biases mattered
- Framing and semantics mattered,
- and many others showed neuro-biology mattered as part of the cognitive-neuro revolution in psychology
Gordon Bower, Zimbardo’s room mate at Yale Graduate School days. Recently won National Medal of Science.
Beth Loftis, was Stanford grad student
Lecture Overview: in 3 Acts

- Reminder that Memory is both Neuro-Biological and Cognitive
  Demo: Schema Formation in Action
- Candid Camera: Kids Try to Remember a Complex Message
- Memory is Social & Emotional
- Socially Negotiating the Past – {Movie “Gigi”}
- Test of Visual Acuity and Recall
  Demo of Rumor Transmission
- Time Perspective Biases of the Past
- Memories: Personally Experienced vs. Mediated
- Political Memory: Who Has the Power to Create the Past?
- Negative Emotional Memories of Trauma: Repressed vs. False Constructions of the Past?
- Review main points
Karl Lashley’s (1930’s) unsuccessful search for the “Engram” in the Brain -- the physical unit of memory

Modern neuroscientists are searching for locations in the brain where different types of memories are stored, where different memory processes occur -- using animal models, patients with brain lesions, brain stimulation, biochemical analyses, and fMRI (functional magnetic resonance imaging)

They use fMRI techniques to explore links between memory functions and brain structures during memory tasks
This simplified diagram shows some of the main structures of the brain that are involved in the formation, storage, and retrieval of memories.
MEMORY IS COGNITIVE

- Ebbinghaus (1885) invents a way to study “Pure Memory”, by using nonsense syllable learning and recall, eliminating prior associations and content

For decades, researchers studied every conceivable aspect of nonsense syllable learning on college students.

Result: BORING, BORING!
Cognitive Psychology to the Rescue

- 1960’s on: Information Processing Models of Memory Guide Theories and Research
- Associations are vital;
- Content, Context and Culture matter,
- as well as individual Cognitive Styles
- and understanding narratives (STORIES PEOPLE TELL AND RECALL)
- Establishing the importance of cognitive Schemas
**Figure 10.8** The Main Features of the Duplex Memory System

**Sensory Register**
- Storage: direct representation
- Capacity: large
- Duration: brief (visual 0.5 sec., auditory to 2 sec.)
- Loss due to: time decay displacement

**Short-term Memory (STM)**
- Working memory
- Conscious processing
- Chunking

**Long-term Memory (LTM)**
- Knowledge structures
- Procedural (skill)
- Declarative (fact)
- Episodic
- Semantic

- Maintenance rehearsal
- Elaborative rehearsal

**Response**
- Storage: semantic networks (organized, meaningful)
- Capacity: theoretically unlimited
- Duration: perhaps a lifetime
- Loss due to: inadequate encoding, time decay, interference, failure to consolidate, motivated forgetting, retrieval failure
People vary in their cognitive styles of gathering information, Encoding and Storing what they perceive—And then Retrieving it from memory stores.

They develop Schema for organizing information
Schema

- Stored conceptual frames,
- Knowledge units or informational clusters
- About specific events, people, places, things, processes
- That provide Expectations and guide our Predictions—
- But can lead to false recall
- Can become Biased ways of processing information
Suddenly Stored Schemas

First Men Look Up/
Woman Look Away,
then Reverse when I Ask
You.
Silently Read the Words
List

GOOSE
SWAN
D_CK

BEAR
WOLF
_OX

WAGER
GAMBLE
B_T

SINFUL
EVIL
B_D

SHOOT
KILL
H_NT

COURAGE
BRAVE
_OLD
Men try to remember...
but look down till I say UP Guys.

Now Gals UP, Guys look away
List 2

SAM
PHIL
D_CK

PACKAGE
CARTON
_OX

BASE
BALL
B_T

PILOW
SHEET
B_D

HELP
SUGGEST
H_NT

BEND
CREASE
_OLD
Now Everyone Up

- Who will remember best, the fastest?
- Why will women be over-sexed in their memory distortions?
- Let’s see. SHOUT OUT YOUR ANSWERS LOUD AND CLEAR WITH FULL GENDER PRIDE---
HOW CAN PEOPLE HAVE SUCH DIFFERENT VIEWS OF THE SAME THING?
<table>
<thead>
<tr>
<th>List 1</th>
<th>Test</th>
<th>List 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOOSE</td>
<td></td>
<td>SAM</td>
</tr>
<tr>
<td>SWAN</td>
<td></td>
<td>PHIL</td>
</tr>
<tr>
<td>D_CK</td>
<td>D_CK</td>
<td>D_CK</td>
</tr>
<tr>
<td>BEAR</td>
<td></td>
<td>PACKAGE</td>
</tr>
<tr>
<td>WOLF</td>
<td></td>
<td>CARTON</td>
</tr>
<tr>
<td>_OX</td>
<td>_OX</td>
<td>_OX</td>
</tr>
<tr>
<td>WAGER</td>
<td></td>
<td>BASE</td>
</tr>
<tr>
<td>GAMBLE</td>
<td></td>
<td>BALL</td>
</tr>
<tr>
<td>B_T</td>
<td>B_T</td>
<td>B_T</td>
</tr>
<tr>
<td>SINFUL</td>
<td></td>
<td>PILLOW</td>
</tr>
<tr>
<td>EVIL</td>
<td></td>
<td>SHEET</td>
</tr>
<tr>
<td>B_D</td>
<td>B_D</td>
<td>B_D</td>
</tr>
<tr>
<td>SHOOT</td>
<td></td>
<td>HELP</td>
</tr>
<tr>
<td>KILL</td>
<td></td>
<td>SUGGEST</td>
</tr>
<tr>
<td>H_NT</td>
<td>H_NT</td>
<td>H_NT</td>
</tr>
<tr>
<td>COURAGE</td>
<td></td>
<td>BEND</td>
</tr>
<tr>
<td>BRAVE</td>
<td></td>
<td>CREASE</td>
</tr>
<tr>
<td>OLD</td>
<td>OLD</td>
<td>OLD</td>
</tr>
</tbody>
</table>
I KNOW THE ANSWER!

BUT NOW I'VE FORGOTTEN IT..

HARD TO EXPLAIN HOW THE HUMAN MIND WORKS, HUH, MA'AM?
“REMEMBER THAT MESSAGE”
Candid Camera Kids At Work--trying hard to recall complex information
Remember That Message

3-6-66
Tampa, Florida
Many important memories are about People and social situations

Presence of people can influence attention, encoding and retrieval

People send conflicting messages, are distracting, are arousing

Our social goals, concerns for impression management can influence memory

Emotions can enhance or distort memory

Pathological emotions can exert powerful effects on memory: Rumination, obsession, revenge, prejudice, trauma, fears and more

Group pressure can make us conform to false consensus--Social Contagion of Memory (Roediger et al)
Memory is more than a tool of thought, it is a tool of communication. Remembering is a communicative act between people (actual, symbolic or imagined others). Memory involves telling personal stories to others and ourselves about actual or imagined pasts--for personal and social reasons/goals. And is influenced by the anticipated or received feedback from others--during and afterwards.

Social memory is often negotiated between people as to what they agree should be the truth about the past--Transactive Memory--[Wegner et al]

Social memory can be controlled by those in positions of Authority and Social influence.
Public Announcement

WE WILL PAY YOU $4.00 FOR ONE HOUR OF YOUR TIME

Persons Needed for a Study of Memory

*We will pay five hundred New Haven men to help us complete a scientific study of memory and learning. The study is being done at Yale University.

*Each person who participates will be paid $4.00 (plus 50c carfare) for approximately 1 hour's time. We need you for only one hour; there are no further obligations. You may choose the time you would like to come (evenings, weekdays, or weekends).

*No special training, education, or experience is needed. We want:

Factory workers                   Businessmen                   Construction workers
City employees                    Clerks                         Salespeople
Laborers                         Professional people              White-collar workers
Barbers                           Telephone workers               Others

All persons must be between the ages of 20 and 50. High school and college students cannot be used.

*If you meet these qualifications, fill out the coupon below and mail it now to Professor Stanley Milgram, Department of Psychology, Yale University, New Haven. You will be notified later of the specific time and place of the study. We reserve the right to decline any application.

*You will be paid $4.00 (plus 50c carfare) as soon as you arrive at the laboratory.

TO:

PROF. STANLEY MILGRAM, DEPARTMENT OF PSYCHOLOGY, YALE UNIVERSITY, NEW HAVEN, CONN. I want to take part in this study of memory and learning. I am between the ages of 20 and 50. I will be paid $4.00 (plus 50c carfare) if I participate.

NAME (Please Print)
“Ah Yes, I Remember it Well”

- From the movie, “Gigi”
- Maurice Chevalier and Hermione Gingold reminisce about their last rendezvous -- before he abandoned her for another women. They meet again years later on the French Riviera, still unmarried.
- An example of NEGOTIATED or TRANSACTIONAL MEMORY
How well do YOU remember it?

For each item on this quiz, indicate A or B, as you best recall what really happened: Shout out your answer

1. what time did they first meet:
   A = met at 9;                                 B = met at 8
2. A= he was on time;                       B= he was late
3. A= they dined with friends           B= dined alone
4. A= a tenor sang;                           B = a baritone
5. A= April dazzling moon;                B= no moon in June
6. A= Friday was last rendezvous;    B= Monday
7. A= took a Carriage ride;                B= walked home
8. A= she lost a glove;                       B= lost a comb
9. A= a brilliant sky;                          B= it was raining
10. A= Russian songs;                         B= not in sunny Spain
11. A= she wore a gown of gold;         B= dressed all in blue

Totals  A’s =

B’s =
What Assumptions were operating in YOUR analysis of the truth about their past?

- **AGEISM**: poorer memory in older folks -->Him
- **Confidence/ assertiveness** -->Her
- **Who makes corrections?** --> Her
- **Who accepts corrections?** -->Him

- But can we be sure of HER past without independent validation?
Test of Visual Acuity and Memory Sensitivity
“A man (or woman) receives only what he (she) is ready to receive, whether physically or intellectually or morally, as animals conceive at certain times their kind only.

We hear and apprehend only what we already half know....

The phenomenon or fact that cannot in any ways be linked with the rest of what he has observed, he does not observe.”
{and thus can’t remember it}

Henry David Thoreau
Journal
[Jan. 5, 1860]
LOOK AT THE SCREEN

• AN URBAN SCENE WILL BE SHOWN BRIEFLY (8 seconds)

• TRY TO DETECT/ WRITE DOWN AS MANY FEATURES OF THE SCENE AS YOU CAN
What did you see?

• Quickly list all the things that you recall in the scene, in about a minute, and then look up when you have finished.

• {show scene and ask class to call out if they saw each thing you mention as you move across the scene-}
Summary: Results of Failures to Perceive Across all Years and Conditions (2, 3, 4X scene exposed; 8, 12, 24 sec. total exposure)

<table>
<thead>
<tr>
<th></th>
<th>n / N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saw NO suicidal woman</td>
<td>1543/1577</td>
<td>98%</td>
</tr>
<tr>
<td>Saw NO suicidal person</td>
<td>1515/1577</td>
<td>96%</td>
</tr>
<tr>
<td><strong>Saw NO central stimulus</strong></td>
<td>667/1460</td>
<td>46%</td>
</tr>
<tr>
<td>Saw “Coffee Shop”</td>
<td>579/618</td>
<td>94%</td>
</tr>
<tr>
<td>Saw “Hotel”</td>
<td>758/913</td>
<td>83%</td>
</tr>
</tbody>
</table>
Let’s see a few of the items that were remembered as being in the scene by Stanford students with good memories.

We are interested in errors of Commission as well as errors of Omission.
New Research with Eye-Gaze Tracking Identifies Where and at What Viewers Look
### Preliminary Data, N=20

Eye Gaze Tracking of Scene with Suicidal Woman (10 sec. exposure)

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaze trail crossed woman</td>
<td>94%</td>
</tr>
<tr>
<td>Fixated on woman</td>
<td>81%</td>
</tr>
<tr>
<td>Of Those Fixated:</td>
<td></td>
</tr>
<tr>
<td>Saw NOTHING</td>
<td>20%</td>
</tr>
<tr>
<td>Saw Falling Woman</td>
<td>27%</td>
</tr>
<tr>
<td>Saw Schema-Consistent Object</td>
<td>53%</td>
</tr>
</tbody>
</table>

**Asked directly: Saw falling Woman?**

SAID “NO” 50%
Rumors are Social Memory Transactions

Distorted rumors can have serious consequences--

In Katrina disaster-- rumor that Black men at the Superdome were firing at emergency helicopters stopped their Help-- they were trying to get attention.
We will be adapting a revolutionary approach to memory by British psychologist, Sir Frederick Bartlett, for whom,

Memory is a problem-solving activity, a creative, inferential act, that is interpersonal and reconstructive.

"Remembering is NOT the re-excitation of innumerable, fixed, lifeless, and fragmentary traces. It is an imaginative reconstruction, or construction, built out of the relation of our attitude towards a whole active mass of past experiences."

SERIAL TRANSMISSION OF INFORMATION IN A UNI-DIRECTIONAL CHAIN

- SUBJECT 1 HEARS THE ORIGINAL STORY AND
- Passes it along to S#2
- Who in turn passes it to
- S#3, and then to S#4
- Who finally reports on the significant events taking place.
WHY SHOULD THE RUMOR TRANSMISSION BE ACCURATE?

1. SHORT INTERVAL BETWEEN HEARING IT AND TELLING IT
2. NO CONFLICTING RUMORS
3. MOTIVATED TO BE ACCURATE
4. EDUCATED, INFORMED PARTICIPANTS
5. CREDIBLE INITIAL SOURCE AND STORY
PARTICIPANTS LEAVE ROOM

• TO BE CALLED IN this order
• S #1 &
• S #1 DELAY control subject
• THEN S # 2 / S #3 /S#4
• AND S #1 DELAY returns
WHY SHOULD RUMOR GET DISTORTED?

- DYNAMICS OF MEMORY PROCESSES
- SOCIAL SITUATION OF GROUP SETTING -> PERFORMANCE ANXIETY
- MOTIVATION TO AVOID RACIAL ISSUE;
- -> SUPPRESSING THE RACE CONFLICT
- -> ANXIETY ABOUT ERROR OF SWITCHING THE WEAPON
- LATENT PREJUDICE
Significant Event Rumor

Procedure

• I want to report something I witnessed, but you can’t ask questions because the battery on my cell phone is low and may go out before I finish.

• Please try to remember as many details as you can,

• and pass it on as accurately as possible to the next person in this information sequence.

• It may help to try to visualize the scene as I describe it to you.
On an express train going to Van Cortland Park in the Bronx, a violent argument just broke out between two men. The train is stopped at the Dykeman Street station at 3:40 PM.

The men are standing in the center of the train. There are 6 other passengers.

To the left of them is a man reading the Boston Globe, and a middle-aged woman with eye-glasses looking at the men.

To the right of the men is a mother with a bow in her hair and a baby in her lap. A Jewish Rabbi stops reading his bible to see what is happening. A bald-headed Asian man is asleep in the corner.

The taller, better dressed man is Black. The Other is holding a box cutter in his left hand and shaking his right fist menacingly.

Two of the four ads above them are for Gosling Soap and Smoke Lucky Rakes.
WHILE PERSON #1 LISTENS, CLASS SEES THE NEXT IMAGE OF THE EVENT; IT IS ON WHILE THE RUMOR IS BEING TRANSMITTED SO CLASS CAN READILY APPRECIATE THE DISTORTIONS TAKING PLACE. BUT WHEN EACH NEW STUDENT IN THE RUMOR CHAIN ENTERS THE ROOM HAVE THE SCREEN BLANK

AFTER TRANSMITTING THE STORY, EACH STUDENT RETURNS TO HIS OR HER SEAT IN CLASS TO OBSERVE THE PROCESS
Reproductive Processes in Recall of Our Rumor

• **Leveling:** Shorten, Simplify, Omit Details, Reduce Memory Load, drop unfamiliar details-- like train station, ad names.

• **Sharpening:** Highlight, Make Salient, Enhance Specific Details-- like “box cutter” made popular since 9/11 use by terrorists.

• **Assimilating:** Interpret New Details by Old Info, Apply Schema, Values, Biases-- switching weapon from Other (White guy) to Black guy, remembering NY-related details if a New Yorker; rabbi if Jewish, etc.
Remarkable Rumor Distortion:
Police Commander of forensic unit (April 2006)

- “A large train was going from Washington DC to Manhattan, New York, at 1 PM.
- There were about 50 people on the train.
- An orthodox rabbi was shaking his right fist in a menacing position,
- toward a man reading a newspaper, who was yelling anti-Semitic remarks at the rabbi.
- The rabbi was holding a weapon in his left hand, it was a knife, or a gun, or maybe a box cutter.
- There was a lot of confusion on the train.”

- {He was S-1 Delayed w.o. rehearsal time, and with leading questions à la Loftus.}
6 Reproductive Processes in Narrative Recall

- **Leveling:** Shorten, Simplify, Omit Details, Reduce Memory Load
- **Sharpening:** Highlight, Make Salient, Enhance Specific Details
- **Assimilating:** Interpret New Details by Old Info, Apply Schema, Values, Biases
- **Blending:** Combine Diverse Elements into a Coherent Whole
- **Regularizing:** Impose Symmetry on Irregular Elements
- **Narrating:** Organize Input into a Good, Interesting Story
Time Perspective Biases Create and Distort the Realities of the Past
POSITIVE MEMORIES STORED WITH THEIR AFFECTIVE REMINDERS OF GOOD OLD TIMES
TELLING STORIES OF THE GLORIOUS PAST OF ANCESTORS, AND THE HEROES AMONG THE ELDERS
FOR SOME PEOPLE, THE PAST IS FILLED WITH NEGATIVE MEMORIES OF ABUSE, FAILURES, AND WORSE, LIKE A SMITHSONIAN MUSEUM OF PERSONAL HORRORS
ZIMBARDO TIME PERSPECTIVE INVENTORY, THE ZTPI REVEALS A PROFILE OF 5 TIME PERSPECTIVES:

FUTURE PRESENT-HEDONISM PRESENT-FATALISM PAST-POSITIVE AND PAST-NEGATIVE.

Read each item and, as honestly as you can, answer the question: "How characteristic or true is this of you?" Check the appropriate box using the scale. Please answer ALL of the following questions on both sides.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very Untrue</th>
<th>Neutral</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I believe that getting together with one's friends to party is one of life's important pleasures.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Familiar childhood sights, sounds, smells often bring back a flood of wonderful memories.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Fate determines much in my life.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I often think of what I should have done differently in my life.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. My decisions are mostly influenced by people and things around me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I believe that a person's day should be planned ahead each morning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. It gives me pleasure to think about my past.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I do things impulsively.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. If things don't get done on time, I don't worry about it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. When I want to achieve something, I set goals and consider specific means for reaching those goals.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. On balance, there is much more good to recall than bad in my past.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. When listening to my favorite music, I often lose all track of time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Meeting tomorrow's deadlines and doing other necessary work comes before tonight's play.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Since whatever will be will be, it doesn't really matter what I do.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I enjoy stories about how things used to be in the &quot;good old times.&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Painful past experiences keep being replayed in my mind.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I try to live my life as fully as possible, one day at a time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. It upsets me to be late for appointments.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Ideally, I would live each day as if it were my last.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Happy memories of good times spring readily to mind.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. I meet my obligations to friends and authorities on time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. I've taken my share of abuse and rejection in the past.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I make decisions on the spur of the moment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. I take each day as it is rather than try to plan it out.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. The past has too many unpleasant memories that I prefer not to think about.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. It is important to put excitement in my life.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. I've made mistakes in the past that I wish I could undo.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I feel that it's more important to enjoy what you're doing than to get work done on time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. I get nostalgic about my childhood.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Before making a decision, I weigh the costs against the benefits.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Time Perspective: Past-Positive

<table>
<thead>
<tr>
<th>Trait</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>How Happy</td>
<td>0.40***</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.35***</td>
</tr>
<tr>
<td>Friendliness</td>
<td>0.30***</td>
</tr>
<tr>
<td>Trait Anxiety</td>
<td>-0.30***</td>
</tr>
<tr>
<td>Depression</td>
<td>-0.20**</td>
</tr>
<tr>
<td>Aggression</td>
<td>-0.20**</td>
</tr>
</tbody>
</table>

(College of San Mateo N = 205+)
## Time Perspective: Past-Negative

<table>
<thead>
<tr>
<th>Trait</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait Anxiety</td>
<td>.75***</td>
</tr>
<tr>
<td>Depression</td>
<td>.70***</td>
</tr>
<tr>
<td>Aggression</td>
<td>.60***</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>-.60***</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>-.55***</td>
</tr>
<tr>
<td>Impulse Control</td>
<td>-.40***</td>
</tr>
<tr>
<td>How Happy</td>
<td>-.40***</td>
</tr>
</tbody>
</table>

*(College of San Mateo N = 205+)*
Hypothesis: Time Perspective Biases will influence what is remembered and forgotten about personal experiences in systematic, predictable ways.

- **Evidence?**
- **NONE!**
- **YOU will have to do the original research when you need a little study.**
2 Types of Memories

EXPERIENCED PERSONALLY

Direct Perception of an Event, Stimulus, Scene, Interaction.

MEDIATED

Indirectly experienced, read about, heard about, saw on TV, in movies, told by authorities, etc.
A MODEL OF THE HUMAN MEMORY SYSTEM

Attention and Pattern Recognition

Input matches letter A

Sensory Register

Short-term Memory

Rehearsal

The World

Alphabet

A - First letter

B -

C -

(good grade)

(is for apple)

I just saw an A.

(Stimulus Appears and Disappears)
Mediated Memory May Be Politically Controlled

- Who has the power to determine what gets reported?
- Who has the power to say that something did or did not ever happen?
- Who Creates History?
- Who Makes Memories?

Answers:
- Those who are Literate and can write history;
- Those who own the Media;
- Those with dominant social / economic / political or religious Power
Mediated Distortion of Experienced Memories: Orwell’s *1984* & *Big Brother*.

- "Who controls the Past controls the Future; Who controls the Present controls the Past."
- "History is continuously rewritten."
- "The mutability of the past is central to the Party’s stability."
- "The Ministry of Truth engages in day-to-day falsification of the past."
- "All written records must agree with the Party’s political agenda."
- "It’s necessary to re-arrange one’s memories to remember that events “really” happened in the desired manner Not in their originally experienced form. All that was needed was an unending series of victories over your own memory."
Hugo Münsterberg, one of the first research psychologists at Harvard University, provides us with this remarkable account of the different observations made by reporters who covered a speech on peace that he gave to a large audience in New York:

“The reporters sat immediately in front of the platform. One man wrote that the audience was so surprised by my speech that it received it in complete silence; another wrote that I was constantly interrupted by loud applause, and that at the end of my address the applause continued for minutes. The one wrote that during my opponent’s speech I was constantly smiling; the other noticed that my face remained grave and without a smile. The one said that I grew purple-red from excitement; and the other found that I grew white like chalk. The one told us that my critic, while speaking, walked up and down the large stage; and the other, that he stood all the while at my side and patted me in a fatherly way on the shoulder.” (1908, pp. 35-36)
The Rape of Nanking in 1937

By Iris Chang (1997)

Between 260,000 and 350,000 civilians were murdered by Japanese soldiers in a few months, more than the total deaths by Atom bombing of Japan, and civilian deaths of most European countries for the entire WW2.

Beyond the number of Chinese slaughtered, Chang says we must remember how cruelly they met their deaths. "Chinese men were used for bayonet practice and in decapitation contests. An estimated 20,000-80,000 women were raped. Many soldiers went beyond rape to disembowel women, slice off their breasts, nail them alive to walls. Fathers were forced to rape their daughters, sons their mothers, as other family members watched.

Not only did live burials, castration, the carving of organs, and the roasting of people become routine, but more diabolical tortures were practiced, such as hanging people by their tongues on iron hooks or burying people to their waists and watching them get torn apart by German shepherds."

It was called "bestial machinery," yet it all remains an obscure incident in international history. (page 6)
Did You Know That at the Start of WW 2:

- More than 100,000 Japanese-American Citizens from the West Coast
- Were forced to sell their businesses, homes, had their bank accounts frozen (for 50 years with no interest)
- And sent to Concentration Camps in remote areas for 4 years, guarded by armed soldiers and barbed wire?
OMINOUS SLOGAN
ABOVE THE THRONE
OF REV. JIM JONES
IN THE JUNGLE OF
GUYANA, SOUTH
AMERICA
I978, 912 AMERICANS COMMITTED SUICIDE OR WERE MURDERED BY FRIENDS AND FAMILY IN JONESTOWN, GUYANA BLINDLY OBEYING THE ORDER OF THEIR MINISTER, REVEREND JIM JONES.
DO YOU REMEMBER THE SAGA OF U.S. ARMY PVT. JESSICA LYNCH IN IRAQ?

HOW WELL?
HOW SURE ARE YOU THAT WHAT YOU KNOW REALLY HAPPENED?
THE SAGA OF
PVT. JESSICA LYNCH

Jessica Lynch is expected to be out of the hospital in two weeks.
THE HONORS OF U. S. HERO PVT. LYNCH

Left: Jessica Lynch near her home in Palestine, W.Va. Above: She receives a Bronze Star, Purple Heart and POW medal on July 21.
Being An American

BY JESSICA LYNCH, AS TOLD TO RICK BRAGG

captured, then rescued, during the Iraq war, she'll never forget what she learned about...
JESSICA LYNCH’S experience as a POW during the Iraq war gave her a new understanding of what it means to be an American.

‘The Pledge Will Never Be Just Words For Me’
AN ALTERNATIVE REALITY OF THE PAST

- UN-REALITY OF U. S. MEDIA IS CHALLENGED BY THE BBC INVESTIGATION OF WHAT “REALLY HAPPENED” IN THE PVT. JESSICA LYNCH SAGA IN IRAQ.

- WAS SHE A HEROINE?
- DID SHE SAVE HER FELLOW SOLDIERS?
- DID SHE KILLIRAQI TROOPS?
- WAS SHE BEATEN?
- WAS SHE RAPED?
- WAS SHE MISTREATED BY IRAQI MEDICAL STAFF?
- DID SHE DESERVE TO WIN THE BRONZE STAR?
- DID SHE DESERVE TO HAVE A NATIONAL MOVIE MADE OF HER BRAVE ESCAPE?
- DID SHE DESERVE TO MAKE A HALF MILLION DOLLARS FROM HER GLORIOUS STORY OF HEROISM IN BATTLE?
- DID HER ALLEGED IRAQI AIDE WARRANT BEING HIDDEN IN THE WITNESS PROTECTION PROGRAM BY THE FBI?

- The Answers: NO! AND NO WAY! NONE OF IT WAS TRUE!
Recently MS. Lynch admitted it was all

- False!
- Fabricated by the Military to make her a hero when she was not!
- NOW BY THAT ACT OF OPEN DEFIANCE SHE IS INDEED A CIVILIAN HEROINE!
Memories: Forgotten, Suppressed, Repressed, Imagined, Created, & Induced

- The controversy over the reality of memories of traumatic child abuse
- Recovered after many years of having been “Repressed”
- Versus
- “False Memory Syndrome”

Jennifer Freyd Vs. Beth Loftus (both Stanford Ph.D.s in Cognitive Psych.)
She accused dad of sexually abusing her 30 years ago and murdering her playmate. His life was ruined; but later proven totally false.
False Memories: Why?

- Socially influenced by therapists, counselors, social workers, lawyers
- Socially influenced by media coverage and “pop psych” trade books
- Reinforced by support groups, feminists
- “Over-heated imaginations” of accusers
- Explains, absolves person from current dysfunctional life style by blaming these past traumas for their becoming passive victims
- Memory is fallible, manipulable, pliable, in short, it is dynamic and modifiable.
SOME OF THE THINGS THAT WILL LIVE LONGEST IN MY MEMORY

NEVER REALLY HAPPENED.
For People With Alzheimer’s Disease
The Last Memory Lost

IS THEIR SELF-IDENTITY,
THEY FORGET WHO THEY ARE!
Without memory you have no Self
SO MEMORY REALLY MATTERS
Emotional Memories ~ Positively & Negatively Valenced

- LajfajfASWASWWESTTSFWFSTWF
- MYSTERIOUS
- WRINKLED SHEET
- DREAM
- 50 YEARS OR MORE, SAME DISTURBING FRAGMENT
HOSPITAL DREAM

- I WAS ISOLATED IN A CHARITY HOSPITAL IN NYC FOR ALL CHILDREN WITH CONTAGIOUS DISEASES FOR 6 MONTHS -WHEN I WAS 5 YEARS OLD. (1939-Pre-Penicilalan or Sulfa meds)

- It was really great! Heavenly!- What was great about my experience?

- Or........ Was it

- really Hell~ a Nightmare!

- Infinite capacity of the Mind to create /distort reality

105
New memories emerging

- Could not breath in hospital
- Parents rarely visited, never called or wrote/ visits were brief
- Kids died in the night – not quietly but in anguish, I could not help
- Kids alive = in beds w. wrinkled sheets, kids dead = clean sheets ready for next sufferer
- After realizing this, no more nightmares
The Seven Sins of Memory
Dan Schacter

- **Persistence**: unwanted recollections that people cannot forget
- **Transience**: decreasing accessibility over time
- **Absent-minded**: lapses of attention; forgetting to do things
- **Blocking**: temporary inaccessibility of stored information
- **Misattribution**: attributing memories to incorrect; false recognition
- **Suggestibility**: implanted memories
- **Bias**: retrospective distortions produced by current knowledge and beliefs

MEMORY RESEARCH IS NOW COMPLEX AND FASCINATING
COMPARED TO ITS BORING STATE 50 YEARS AGO IN MY STUDENT DAYS
Summary of Key Points

• Social Memory is a basic aspect of all human memory and adds a vital dimension to the traditional views of memory.

• Social Memory is a dynamic process organized by people, around people, and about people in telling life narratives.

• Social Memory can be emotional and interpersonal, as well as political.
“THANKS FOR Today’s MEMORIES”