PsychSoc

Culture and Society

Terminology

Culture: Rules, norms, and traditions passed on from one generation to the next
Society: Structures in a population including groups and institutions
Culture Shock: Feelings of uncertainty, fear, and disorientation when encountering a new or different culture
Ethnocentrism: Tendency to view your own culture as the best and judge other cultures accordingly
Cultural Relativism: Understanding there are multiple cultures and to not judge another cultures based off of your own

Types of Culture

Subculture: A culture of a meso-level (medium size) community within a larger community sharing some aspects of their culture
Micoculture: Small cultures that affect just a small part of someones life (ex: girl scouts, boarding schools...)
Counterculture: A conflict between a subculture and a dominant culture

Rules of Culture

1. People share a culture in society
2. Culture is adaptive
3. Culture builds on itself
4. Culture in transmitted from one generation to the next

Culture Lag

Often times culture is slow to catch up to technology:
Material Culture: Physical and technological aspects of our lives
Non-Material Culture: Ideas, beliefs, and values which progress slower than material culture

Evolution and Culture

Just like physical traits undergo natural selection behaviors can as well:

- Medicine
- Marriage
- Death rituals/Funerals
- Language

All groups share these behaviors so they were likely favored through natural selection

Demographics

Stucture of Society

Age

Dependency Ratio: People who are economically dependent to people to who economically independent
Life Course Theory: Aging is a biological, psychological, and social process
Age Stratification Theory: Behvior is based off of our age group
Age Activity Theory: As people age they lose social interactions which need to be replaced to maintain morale
Disengagement Theory: As you age you seperate from society
Continuity Theory: As you age you try to make changes to keep your life constant

Race and Ethnicity

Race: Socially defined category based off of physical differences
Ethnicity: Socially defined category based off of cultural factors

Sex, Gender, and Orientation

Sex: Biological characteristics
Gender: Social construction with 2 parts what someone identifies as and the gender one expresses outwardly
Orientation: Who we are attracted to both in terms of pure attraction and sexual attraction

Urbanization

Categorization

1. Rural
2. Exurbs
3. Suburbs
4. Urban
5. Metropolis
6. Megalopolis

Effects

Positives: Wide variety of culture, and anonymity
Negatives: Crowding

Categories of People

Cosmopolites: People looking for culture and utilities of the city
Single: People looking for jobs, partners, and entertainment
Deprived and Trapped: People who have no choice and cannot afford to get out

Theories

Urban Decline: As people move out of city centers buildings can start to be abandoned
Urban Renewal: Revamping older and abandoned parts of a city
Dentrification: When urban renewal caused an increase in property value pushing out the prior poorer population

Population Dynamics

Factors that determines growth rate and population size:

1. Fertility
2. Mortality
3. Migration

Demographic Transition Model

Stages of demographics:

1. High birth rate due to economic benefits and high death rate
2. High birth rate but declining death rate due to increasing health care

3. Birth rate slowly increasining due to access to contraception with still declining death rates
4. Birth and death rate are low balancing each other out
5. Speculation: there may be a resource shortage forcing stabilizing population where growth rate will stop or reverse

Globilization

Theories

World System Theory: World is divided into 3 types of countries

1. Core countries: Wealthy stable countries with diverse economies and strong governments
2. Periphery countries: Poorer countries with weak governments typically reliant on exports of raw materials and easily influences by others
3. Semi-Peripherary Countries: Countries between core and periphery countries

Modernization Theory: All countries follow a simmilar path of development and less developed countries can follow the same route developed countries had taken

Dependency Theory: 3rd world countries are integrated into the world system reliant on 1st world countries and are trapped and can't further develop

Hyperglobalist Perspective: Globalization is a legitamate process where countries grow to depend on each other (not decided if good or bad)

Skeptical Perspective: Globalization is not really happening and 3rd world countries are not actually being incorportated as 1st world countries are

Tranformational Perspective: National governments are changing (very vague)

Trade and Transnational Corportations

International Trade: Has been supported by regulatory groups and agreements often times benefitting private industries the most

Transnational Corportations: Companies that spread throughout multiple countries for access to different markets and resources

Cheap Labor: Developing nations may provide cheap labor and tax exemptions to promote companies settling in their nation to promote enconomic development

Diffusion: International trade causes culture to be spread as well

Social Movements

Activist vs Regressive Movement: Movement trying to change society vs resist the change in society

Mass Society Theory: People join social movements for a sense of community

Relative Depravation Theory: Response to perceived inequality in rights or oppertunities and the beleif conventional methods will not help

Resource Mobilization Theory: Social movement succeed and happen based off of availability and quality of resources and leadership.

Rational Choice Theory: People make rational choices weighing all available options and choosing the best

Social Strucutre Theories

Macro vs Micro Sociology: Looking at how the big picture affects the individual and vice versa

Functionalism: Society is heading towards an equilibrium where all parts play a role: social facts (norms, laws, etc...) and institutions balance each other out as population grows and society changes

Manifest vs Latent Functions: Manifest functions are the intended concequences of an institution and latent are the unintended concequences

Conflict Theory: Associated with theories of Karl Marx where society is fighting over limited resources and that naturally society would change from feudelism to capitalism to socialism. Every society will have a norm of power (the thesis) and another side looking to change it (the anti-thesis) constantly in conflict

Feminist Theories: Focus on gender inequalities against woman due to the patriarchy.

Social Constructionism

Weak: Most things have meanings because we gave it to them and are based off of our interactions with them ex: money, countries, borders, cultures however brute facts (laws of physics, biology...) still exist

Strong: Everything is based off of social interactions there are no brute facts we created the idea of every fact

Symbolic Interactionism

Looks at the a small scale view of society looking at individual interactions. The theory states that people assign meaning to things based off of interactions through 3 main tenants:

1. We act based off the meaning we have given something
2. We give meanings to things based off out social interactions
3. The meaning we give something is not permanent but can change

Rational Choice-Exchange Theory

Rational Choice Theory: Every action is based off of rational choices and can be used to explain society and its changes. We rank every choice and pick the best one for us based off 3 assumptions:

1. Completeness: Every action can be ranked and one is always better
2. Transitivity: If choice A > B and B > C then A > C
3. Independence of relevant alternatives: If A>B>C introducing X will not change the order of the other variables so A>B>X>C

Exchange Theory: Applying rational choice theory to interactions where we make interactions by weighing the pros and cons and choosing the best choice.

Social Inequality

Social Mobility

Systems

Cast System: System where you can only experience horizontal social movement

Class System: A system where people can experience vertical social movement but starting in a certain class

Meritocracy: A system where everyone stars as equals and experiences social movement purely based off of merit

Generational Mobility

Intragenerational: Mobility one experiences in their own lifetime

Intergenerational: Social mobility changes accross generation for a group or family

Social Reproduction: Social Inequalities tends to reproduce accross generations

Poverty

Absolute Poverty Line: Income required in order to survive

Relative Poverty: Varying lined that is based as some value below the median income of a country where they can survive but not actively partake in society

Segregation

Concentration: When a group is clustered to one area

Centralization: A group clustered in the middle

Politics: Segregated communities are politically weak posessing less voting power

Consciousness

Concerning Marxist theories

Class Consciousness: Working class realizing they have solidarity with one another and they can seize the means of production.

False Consciousness: Working class is unable to see that they are being exploited

Self and Society

Kohlberg Stages of Moral Development

3 Stages in Morality:

1. Pre-Moral (Focus on Self)
   (a) Obedience vs Punishment
   (b) Individualism and Exchange
2. Conventional (Focus on Society)
   (a) Good boy and Good Girl
   (b) Law and Order
3. Post-Conventional (Focus on the Individual)
   (a) Social Contract
   (b) Universal Ethical Principle

Social Influences

Imitation: The act of copying another individual

Roles: We act to fulfill a role that follows social norms

Reference Groups: Groups that individuals refer when evaluating oneself

Culture and Socialization: Contributions of our society, culture, and enviroment

Theories

I and Me

I: Our views on society

Me: Societies view

We exist as a pairing of the I and Me. We go through stages before we get their however:

1. Prepatory Stage: Imitate other
2. Play Stage: Takes on roles by pretending and playing games understanding their views in that role
3. Game stage: Final stage, understands that people have multiple roles and opinions

Looking Glass Self

How we view ourselves is determined through 3 steps:

1. Imagine how we appear to others
2. Thing what other must thing of our appearence
3. Revise our opinions of ourselves

Dramaturgical Approach

Fronst Stage: The impression we give off to people and how we act in public

Back Stage: Our private lives, how we act in close communities and in private

Perception

Social Perception

Just World Phenomenon: People think universe is fair so people get what they deserve. People use this to justify their actions.

Self-serving bias: Our success is due to internal factors while our failures are due to external factors.

Fundamental Attribution Error: Failure of others are due to internal factors while our failures are due to our situation.

Basic Covariation Model: If someone does something consistently we think it to be an internal reason while if something is done rarely or by a large amount of people it is due to a situational reason.

Primacy Bias: First impression weighed more than other impressions

Recency Bias: More recent impressions are weighed more than other ones

Halo Effect: Tendency for positive impressions to cause us to perceive their other traits to be better than they actually are. The opposite can happen with negative impressions (Devil Effect).

Stereotype

Stereotyping: Attributing a certain trait to a group of individuals (Cognition)

Prejudice: An opinion about a group formed to due to a sterotype (affective)

Discriminion: Acting in a certain way due to a prejudice (behavior)

Self-Fulfilling Prophecy: Something becoming true due to a belief

What causes Prejudice?

Cognition: Some personality traits can be more vulnerable for example authoritarian personality type

Emotion:

1. Frustration-Aggresion Hypothesis: People misplacing frustration towards minority group to avoid targeting it towards people that can be problematic for them
2. Hypothesis of Relative Depravation: Prejudice is caused by people being discontent is comparing their current situation to where they expected their situation to be
2. Psychological: Frustration aggresion principle where the more frustrated someone is the more likely they are to be aggressive, reinforcement-model as a child where if a child is rewarded for being aggressive or views aggresiveness they tend to be more aggressive
3. Social-Cultural: Deindividuation and social scripts (following a role) can lead to people acting more aggressive

Stigma

Social Stigma: Disproval or discrimination of a group or individual by society

Self Stigma: Internalizing the stereotypes, prejudice, and discrimination due to a stigma about them leading to individual shame

Social Behavior

Attraction

Proximity Effect: We are more likely to be attracted to people in close proximity to one another

Mere Exposue Effect: Being exposed to something/someone more often increases our attraction to them

Average: Studies show we are attracted to more average appearing traits than unique ones

Similarity Affect: We are more likely to be attracted to people simmilar to us in terms of both physical and behavioral traits

Attachment:

Secure: Sense of safety, authenticity, and reciprocity

Insecure: Attachment is filled with fear and sense of survival

Aggression:

Physical or verbal behavior intend to harm or destroy based off of 3 infuences:

1. Biology: Genes, Impact of brain structure, testosterone

Social Interactions

Terms

Status: Your role in society

Ascribed vs Achieved Status: A status you were born with versus one you had to earn

Role Strain: A specific role that is providing difficulty or increased stress on an individual

Role Conflict: A conflict between multiple roles an individual holds

Primary vs Secondary Group: People who are close to one another sharing affection vs people who are together to achieve a shared short term goal

Altruism

Acting good when expecting nothing in return however most behavior viewed as altruistic tend to have alterior motives.

Kin Selection: We are more likely to help our kin

Reciprocal: More likely to help someone if we are likely to interact with them in the future

Cost Signaling: As a method to show that you have resources to spare

Empathy-Altruism Hypothesis: More empathetical people are more likely to engage in altruistic behavior

Social Support

1. Emotional Support: Affection, trust, love, caring
2. Esteem Support: Expressions of confidence and encouragement
3. Informational Support: Sharing information or wisdom
4. Tangible (Instrumental) Support: Money, items or responsibilities
5. Companionship Support: People who make you feel like you are part of a community

Norms

Types

Folkways: Common courtesies, being polite

Mores: Morally right and wrong choices without serious concequences

Laws: Rules with punishments

Taboos: Extremely forbidden behaviors viewed as disgusting or wrong

Deviance

Behavior that differs from the norm explained by different theories:

1. Theories of Differential Association: Being surrounded by other deviants
2. Labeling Theory: A behavior is deviant if it was judged that way so some people may take part in deviant behavior without judging it that way themselves. Primary deviance is less severe, secondary deviance are severe with a heavy negative stigma.
3. Strain Theory: Deviant behavior to achieve a socially acceptable goal that the individual is having difficulty achieving.

Collective Behavior

Short social interactions of groups deviating from social norms:

1. Fads: short trends perceived as cool
2. Mass Hysteria: large groups experiencing axiety or fear
3. Riots: collective act of defiance or disapproval

Social Psychology

Group Think

Informative vs Normative Influence: Informative influence means are influenced due to beleiving as the group

does while normative influence means you are influence to not be an outcast

Privately vs Publicly Conform: If you privately conform you change your beliefs to align with the groups, but if you publicly conform you only do it for show while maintaining your actual beliefs in private.

Group Think: Individuals will suppress differences of opinions to maintain group unity.

Group Polarization: Groups tend to make more extreme decisions than any individual would make.

Conforimity:

Group Size: People are more likely to conform if in groups of 3-5

Unaniminity: People are more likely to conform if group is unanimous.

Group Cohesion: We are more likley to conform if we are more cohesion with the group.

Group Status: If we admire the members of the group we are more likely to conform (ex: trusting a group of doctors)

Observed behavior: More likely to conform if people are observing you vs if you can remain anonymous.

Prior commitment: If people commit to the group they are more likely to conform, but if they denounce it they are less likely to.

Feeling of insecurity: More likely to conform if made to feel insecure.

Obedience

Factors that tend to make us obey:

1. Closeness to authority
2. Physical proximity to figure of authority
3. Apparent legitamecy of figure of authority
4. Distance to victim
5. Depersonalization of victim
6. No role model of defiance (everyone else is obeying)

Group Effects

Bystander effect: In the presence of others people are less likely to aid when help is needed due to the diffusion of responsibility theory.

Deindividuality: Individuals in a group are more likely to act impulsively because the presence of the croud conceals the individual's identity.

Social Facilition: Most dominant response is most likely while observed by a group. Improve simple tasks but worsen complex tasks

Social Loafing: People will contribute less to task when in a group.

Agents of Socialization: People or institutions that can impress social norms upon an individual.

Identity and Personality

Evaluation of Self

Self-concept: Sum of factors in which we describe ourselves (exisential + categorical)

Self-esteem: evaulation of ourselves

Self-efficacy: evalation of ourself to complete a specific task

Locus of control: either internal (our choices matter) or external (outside factors matter)

Carl Rogers beleived that self-concept is made up of self-image, self-esteem, and ideal-self and incongruence is the feeling when your self image does not match your ideal self

Social Identity Theory: People's personal identity is formed partially from their social identity

Theories of Development

Freud's Stages of Psychosexual Development

Stage	Age	Focus of Libido	Development	Adult Fixation
Oral	0-1	Mouth	Feeding	Smoke, Bite-nails, Over-eat...
Anal	1-3	Anus	Toilet Training	Orderliness and Messiness
Phallic	3-6	Genital	Oedipus/Electra	Sexual Problems
Latent	6-12	N/A	Social Skills	N/A
Genital	12+	Genital	Sexual Maturity	Mentally Healthy

Old Ass People Love Grapefruit

Erikson's Stages of Psychosocial Development

Stage	Age	Crisis	Virtue	(-) Outcome
1	1	Trust vs Mistrust	Hope	Fear, Suspicion
2	2	Autonomy vs Doubt	Will	Shame
3	3-5	Initiative vs Guilt	Purpose	Inadequacy
4	6-12	Industry vs Inferiority	Competence	Inferiority
5	12-18	Identity vs Role Confusion	Fidelity	Rebellion
6	18-40	Intimacy vs Isolation	Love	Isolation
7	40-65	Generativity vs Stagnation	Care	Unproductive
8	65+	Integrity vs Despair	Wisdom	Dissatisfaction

Theories of Personality

Psychoanalytic: The cumulation of the id (pleasure seeking impulses), the superego (moral conscious), and ego (the conscious mind trying to gratify the id while satisfying the demands of the id and the moral compass of the super ego).
Humanistic: Personality comes from free will and personal growth as people try to reach self actualization.
Trait: Determined by measuring certain traits
Social-Cognitive: Formed through a mixture of our trait, our interactions with others, and our enviroment
Biological: Determined by genetics and other biological attributes
Behavioral: Learned through stimuli and responses (operant and classical conditioning)
Cattell 5 Traits: Personality is composed of 5 broad factors: conscientiousness, extraversion, neuroticism, openness, and agreeableness

Psychotherapeutic Approaches

Cognitive-behavioral therapy: View person as a whole and change their thoughts (cognition) in general
Psychoanalytic therapy: Bring up and resolve unconsious thoughts from the id, ego, superego struggle
Humanistic therapy Help people achieve self actualization, achieve their ideal self

Defence Mechanisms

Pathological: Distort reality ex: denial
Immature: Acting in a socially unacceptable way ex: lashing out
Neurotic: Can lead to anxiety or depression ex: Repression
Mature: Healthy ways to deal with problems ex: humor, altruism...

Freud Terms

Gratification

Pleasure Princaple: When we are young or immature we want instant gratification
Reality Principle: Replacing immediate gratification with long term rewards and gratification

Drives

Eros: Life drive for health, safety, sex ...
Thanatos: Death drive for fear, anger, hate, selfishness

Learning

Classical Conditioning

Unconditioned Stimulus: A stimulus that triggers a physiologic/unconditioned response
Neutral Stimulus: An unpaired stimulus **Conditioned Stimulus:** A previously neutral stimulus that has now been paired with a unconditioned response (now a conditioned response)
Generalization: Responding in the same way to different but simmilar stimuli
Discrimination: Responding differently to different stimuli
Extinction: When a conditioned stimulus can no longer stimulate the conditioned response
Spontaneous Recovery: Re-emergence of previously extinct conditioned response

Operant Conditioning

Terminology

Reinforcement: Increase the tendency of a goal behavior
Punishment: Decrease the tendency of a behavior occuring again
Shaping: Gradually reinforcing behaviors that comes close to the target behavior
Aversive Control:

- Escape Learning: Type of negative reinforcement to distancing oneself from an unpleasent stimulus
- Avoidance Learning: Escaping an unpleasent stimulus in response to a conditioned stimulus

Reinforcement and Punishment

	Positive	Negative
Reinforcement	Give Something Good	Take Away Something Bad
Punishment	Add Something Bad	Take Something Good

Schedules of Reiforcement

Partial reiforcement is the when behavior is reinforced only some of the time which is more resilient to extinction then continual reiforcement.

- Fixed ratio: Get a reinforcement after a fixed number of behaviors

- Variable ratio: Get a reinforcement after a random number of behaviors that averages to a fixed ratio
- Fixed interval schedule: Reinforce a behavior after a fixed number of times
- Variable interval schedule: Reinforcea behavior after a random number of times that averages to a fixed interval schedule

Variable reinforcement is more affective than fixed and ratio reinforcement is more affective than interval

Non-Associative Learning

What is it: Learning that is not associated with a stimulus, reward, or punishment.
Sensitization: Becoming increasingly sensitive to a stimuli heightening the response over time
Habituation: Becoming decreasingly sensitive to a stimuli decreasining the response over time

Theories of Learning

Learning-Performance Distintion: Having learned something is different to perforiming it
Bandura's Social Cognitive Theory

1. Attention: Did I pay attention to the lesson
2. Memory: Did I remember the lesson
3. Imitation: Can I imitate the lesson
4. Motivated: Am I motivated to repeat the lesson

Behavior

Innate: Behavior that you know since birth being simple (reflex) or complex (circadian rhythm)
Learned: Behavior that is aquired through habituation, conditioning or insight

Motivation

Theories

Evolutionary: We do what is needed to survivce
Drive-Reduction: We do what is needed to fulfill our needs
Optimum Arousal (incentive): We do what is needed to be aroused
Cognitive Approach: Our thought process drives behavior
Maslow's Hierarchy of Needs: physiological, safety, love, self-esteem, self-actualization

Eating

Ghrelin and Orexin: Makes you hungry
Leptin: Stops your appetite

Attitude

What is it?

An attitude is a learned tendancy composed of three parts:

1. Affective: How we feel
2. Behavior: How we behave
3. Cognitive: What we think of something

Theories

How do our attitudes influence our behavior?
Theory of Planned Behavior: We consider our implications and intentions
Attitude to Behavior Process Model: An event triggers an attitude
Prototype Willigness Model: Our behavior is created by our attitudes, our past, our willingness, social norms, our intentions, and our models
Elaboration Likelihood Model for Persuasion (ELM): We get influenced to act certain ways based off of two criteria:

1. Central route: How good of a reason/argument
2. Peripheral route: superficial reasons ex: attractiveness

Reciprocal Determinism: Cognition, enviroment, and behavior are all entertwined and lead to one another.

Behavior influencing Attitude

Foot in the door phenomenon: tendency to agree to small actions first and will soon comply to do larger actions
Role playing: As we act to fulfill a role it will change our attitude to match it

Cognitive Dissonance

Discomfort experienced when holding conflicting feeling or opnions we handle the situation in 4 ways, people are more likely to change their attitudes than their behaviors.

1. Modify: Change your opinion on the topic
2. Trivialize: Change the importance of certain evidence
3. Add: Add additional information to counteract evidence
4. Deny: Deny the evidence entirely

Persuasion

Message characteristics: What are the contents of the message
Source characteristics: Is the person delivering the message a good source?
Target characteristics: How are you personally feeling?

Control

Locus of Control:

1. Internal: We are responsible for our actions
2. Behavior: External forces are responsible for our actions

Learned helplessness: Becoming helpless as a result of prior experiences out of the individuals control
Tyranny of Choice: Too many choices will lead to decesion paralysis, doubt, and decreased satisfaction in the individuals choice

Self Control

Temptation: A desire that conflicts with long term goals
Ego Depletion: Self control is a limited resource

Cognition

Piaget

Stages of Cognitive Development

Stage	Age	Skill
Sensorimotor	0-2	object permanence
Preoperational	2-7	pretend play, egocentric
Concrete operational	7-11	Conservation, math
Formal	12+	Abstract moral reasoning

Some People Can Fly

Vygostky Theory of Sociocultural Development

Children develop as a result of social interactions. Starting with 4 elementary functions:

1. Attention
2. Sensation
3. Perception
4. Memory

More Knowledgable Other: Individual we learn from to cultivate elementary skills

Zone of Proximal Development: Cognitive area that individual is most sensitive to guidance and when it will be the most effective

Theories

Schema's: Experiences, lessons, information...

Assimilation: How we interpret new experiences based off of our schemas

Accomadation: Adapting our schemas to interpret a new one

Methods of Problem Solving

Trial and Error: Guess password randomly 234,537,852

Algorithm Approach: Try in order 111,112,113 ...

Heuristic: More complex approach

1. Means-End analysis
2. Working Backwards

Decision Making

Heuristics

Availability: Real examples that come to mind

Representativeness: Matching stereotypes or prototypes

Bias

Overconfidence: Things may have felt easy, but you never did it in practice

Belief perseverence: Ignore facts you don't like

Confirmation Bias: Seeking facts that agree with your POV

Framing Effect: Opinion changes based how the problem is framed

Intelligence

General Intelligence: One type of intelligence that encompasses all

Primal mental abilities: Made up of 7 factors

Multiple Intelligences: 7-9 independent intelligences

Three Type of Intelligence: Analytical, creative, practical

Emotional Intelligence: Existence of an emotional intelligence vs a general one

Fluid vs Crystalized: Quick and abstract vs accumulated knowledge

Language

Neuroanatomy

Hemisphere: For most people language centers are in the left hemisphere of the brain

Broca's Area: In the left frontal lobe which assists with speech

Wernicke's area: Area of understanding language

Arcuate fasciculus: Links the two area

Theories

Universalism: Thought determines language, we can say what we can think

Piaget: Thought influences language, as we learn our language increases

Vygotsky: Language and thought are independent

Linguistic Determinism Weak: Language influences thought

Linguistic Determinism Strong (Whorfian): Language determines thought

Language Development

Nativist/Innatist: We have a language aquisition device that attunes to a language

Learning: We learn through reinforcement (behaviorist)

Interactionist: Biological + Social factors interact

Emotions

Limbic system

Limbic system deals with emotional responses and sits on top of the brainstem, HATH

Hypothalmus: Regulates autonomic nervous system

Amygdala: Controls emotions, fear, anxiety, and anger

Thalamus: Sensory relay station

Hippocampus: Forms short term memories into long term memories

Parts of Emotion

Three components: Cognitive, behavioral, and physiological

6 Universal Emotions: Happiness, sadness, fear, disgust, anger, suprise

Theories

James-Lange: Event → Physiologic response → Emotion

Cannon-Bard: Event → Emotion + Physiologic response

Shakhtar Singer: Event → Physiologic response → Interpretation → Emotion

Lazarus Theory: Event → Interpretation → Emotion + Physiological response

Stress

Appraisal of Stress

Primary: What threat am I experiencing right now which can be irrelevent, benign, or stressful

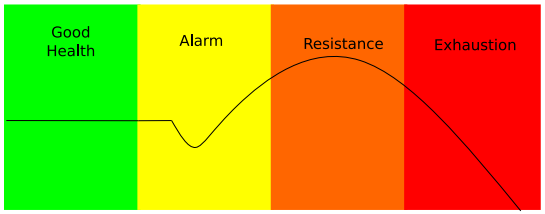
Secondary: If primary is stressful then move to secondary which encompasses an evaluation of threat (how dangerous is it and what can the individual do)

Human's response to stress

4 Major types of stressors: Significant life change, catastrophe, daily hassles, ambient (not currently significant but long term stress like debt)

Two Responces to Stress: Fight or Flight vs Tend and Befriend

General Adaptation Syndrome



Senses

Visual Cues

Depth: Perceived through retinal disparity and convergence (angling of the eyes), relative size, and interposition

Form: Shading and contours

Motion: Motion parallax (relative motion of objects changing with distance)

Constancy: size, shape, and color

Threshholds

Weber's Law: $\frac{\Delta I}{I} = K$

Absolute Threshold: Minimum intensity of a stimulus needeeded for it to be detected 50% of the time

Subliminal Stimuli: Stimuli below absolute threshold of detection

Signal detection theory: The detection of a stimulus depends on both the intensity and traits of the individual. Answer yes a lot is a liberal strategy , while answering no a lot is a conservative strategy.

Somatosensation

Types: Thermoception (Temperature), Mechanoception (Pressure), Nociception (Pain), Proprioception (Position)

Timing: Non-adapting (constant signal), Slow-adapting (Decreasing signal), Fast-adapting (Signal at start and end only)

Vestibular System

Semicircular Canals: Composed of three orthogonal canals (anterior, lateral, and posterior) containing endolymph fluid

Otolithic organs: Composed of two organs (utricle and saccule) containing calcium deposits attached to hairs suspended in a fluid

Processing

Bottom-up: Stimulus influences our perception, data drivent

Top-Down: Uses background knowledge to influence perception, theory driven

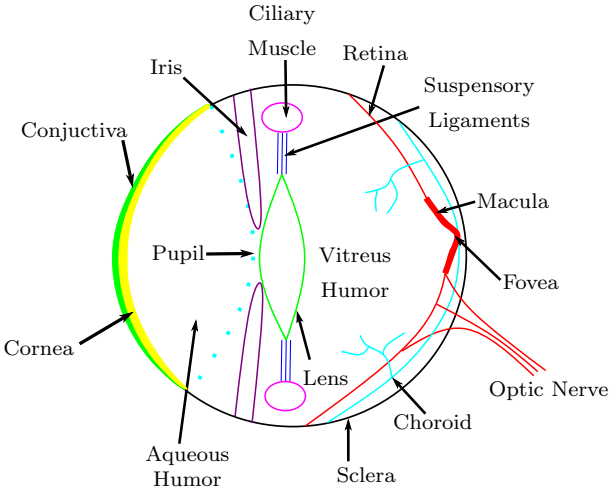
Gestalt's Principles

Law	Definition
Similarity	Similar items are grouped together
Pragnanz	Reality is reduced to simplest form
Proximity	Objects that are close to one another are grouped together
Continuity	Lines are seen following the smoothest path
Closure	Objects grouped together to complete a known shape

We tend to view things as a whole rather than individuals.

Vision

Anatomy



Physiology of Vision

Rods: 120 Million, Allows for night vision, Focused around periphery, slow recovery time

Cones: 6-7 Million, Allows to see color, Focused around the fovea, fast recovery time, RGB 60 30 10

Feature Detection

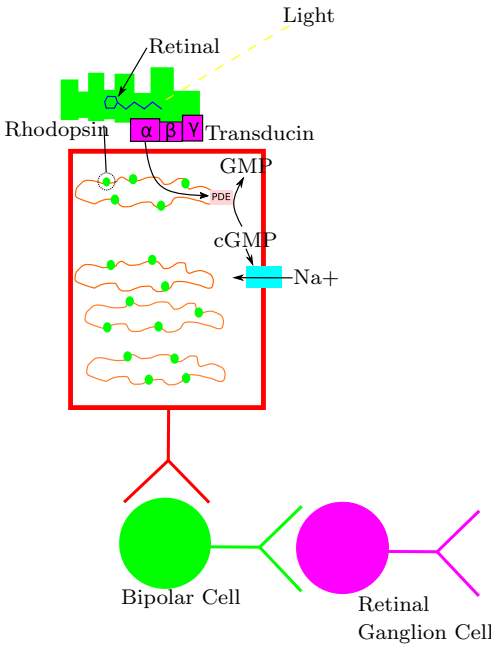
Color: Use cones to determine percentage of RGB

Form: Uses the Parvo pathway which has high spatial resolution (stationary) but low temporal resolution (motion)

Motion: Uses Magno pathway which has high temporal resolution but low spatial resolution, lets us see objects in motion

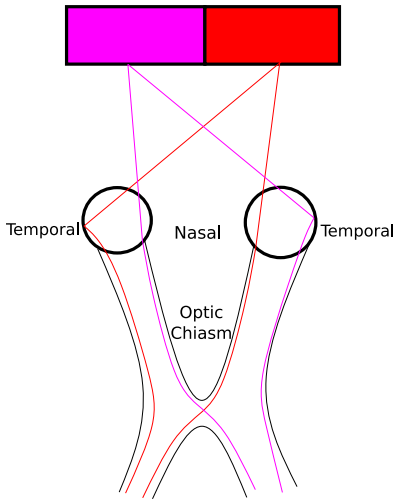
Parallel Processing: The process of using the three prior pathways at the same time

Phototransduction



Light causes a conformational change in retinal resulting it the α subunit of Transducin being released. The α factor activates phosphodiesterase which turns cGMP into GMP. With cGMP no longer available to activate the Na^+ channels the cell hyperpolarizes.

Visual Field Processing



Audition

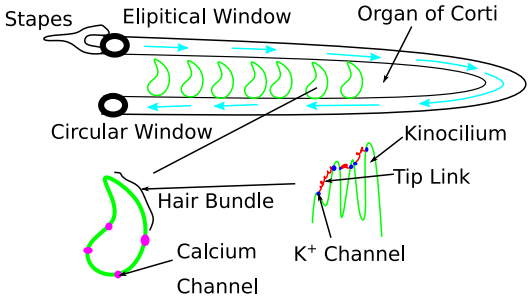
Anatomy

External Ear: Pinna, auditory canal, tympanic membrane (eardrum)

Middle Ear: Malleus, incus, and stapes

Inner Ear: Eliptical (oval) window, cochlea, circular (round) window

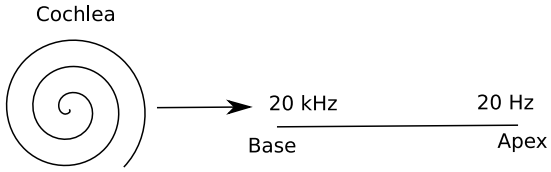
Cochlea in Depth



Basilar Tuning

Place Theory: Theory that basilar tuning causes that different parts of the basilar membrane respond to difference frequencies

Tonotopical Mapping: Different parts of the primary cortex respond to different frequencies.



Somatosensation

Proprioception: Physicially being able to sense how much each muscle is stretched or relaxed allowing us to know the position of our body in space.

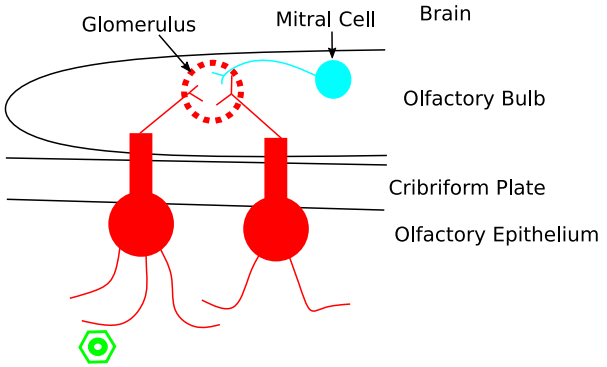
Kinesthesia: Awareness of movement of muscles, for example learning the muscle movements to swing a golf club.

Somatosensory homunculus: Map of the body on the brain in a region called the sensory strip.

Adaptation: The act of down-regulating a signal, for example while your arm is resting on an object don't keep firing action potentials after the arm is at rest since there is no longer a change in pressure.

Amplification: The act of up-regulating a signal, for example when you burn your hand by having one neuron trigger more neurons starting a cascade event.

Olfaction



Sleep and Conciousness

Brainwaves

State of Consciousness	Wave
Alterness	Beta
Daydreaming	Alpha
Drowsiness	Theta
N1	Theta
N2	Theta + K Complexes + Sleep Spindles
N3	Delta
REM	Beta

Sleep Order: N1 → N2 → N3 → N2 → REM → Repeat

Dreams

Theory	Description
Freud	Dream's have a meaning and are our unconcious urges
Activation Synthesis	Cerebral cortex making sense of random activity from our brain stem
Evolutionary	Threat simulation, problem solving, or no purpose at all

Drugs

Types

Drug	Description	Examples
Depressants	↓CNS, ↓HR, ↓BP, ↓Processing Speed	Barbituates, Benzodiazepines, Alcohol
Stimulants	↑CNS, ↑HR, ↑BP, ↑Alert	Caffeines, Amphetamines, Nicotine, Cocaine
Hallucinogens	↑Sensations, ↑↓Energy, ↑↓Mood, hallucinations	LSD, PCP, Psilocybin
Opiates	↓CNS, ↓HR, ↓BP, Analgesic (Pain killer)	Morphine, Heroin, Vicodin

Reward Pathway

Ventral Tegmental Area: Located in the midbrain and responsible for producing dopamine

Hippocampus: Memory center, will remember the emotion

Amygdala: Processes emotions, will sense that dopamine was positive

Prefrontal Cortex: Processes the experience to help you understand what is happening and what you are enjoying

Nucleus Acumbens: Helps control motor functions, will help you repeat movement to achieve dopamine again

Mesolimbic pathway: The reward pathways including the regions discussed above HAPN

Attention

Types

Selective: Focusing on a single topic

Divided: Trying to focus on mutiple topics at once

Spotlight Model: We focus on one task and do not pay attention to other stuff in the enviroment

Resource Model: We have finite resources availble to commit to paying attention to different things.

Theories

Broadbent's Early Selection: Data goes from sensory register, through a selective filter, then through perceptual processes which assigns meaning. This theory does not explain the cocktail party effect.

Deutsch and Deutsch's Late Selection: Sensory → perceptual process → selective filter → cognitive. This theory claims we perceive everything we sense which is excessive.

Treisman's Attentuation Theory: Sensory → attenuator → perceptual process → cognitive.

Memory

Information Processing Model

1. Sensory memory or register: Composed of iconic (0.5 seconds) and echoic memory (3-4 seconds)

2. Working Memory: Can hold 7±2 pieces of information, composed of visual-spatial sketch pad (visual and spatial information) and Phonological loop (verbal information). Central executive coordiates two other components, and when they are combined together they are stored in the episodic buffer.

3. Long term memory: Two main types: explicit and implicit. Explicit memories composed of: semantic (dates) and episodic (birthday party) facts. Implicit memories are composed of procedural (how to ride a bike) and priming (previous experiences that will influence future events) memories.

Encoding Strategies

Rote Rehearsal: Repition

Chunking: Put items of simmilar categories together

Mnemonic Devices: Imagery, pegward (verbal anchors in an order), method of loci (location anchors in order)

Acronym: HAPN (hippocampus, amygdala, pre frontal, nucleus)

Self referencing: Relating new information to you personally

Spacing: Structure studying over time

Retrieval and Memories

Cues: State (depressed), context (based off of enviroment), priming

Free Recall: Recalling with no cues and just remembering

Primacy and Recency effect: Remembering first and last items on a list respectively

Serial Position Effect: Remembering first and last items well but middle items poorly.

Recognition: Saying an item on a list to see if the person can recognize it

Source Memories: People have difficulty remembering a source of information

Flashbulb memory: Emotional and vivid memories, but still suceptible to reconstruction

Cognitive Abilities

Longterm Potentiaion: Synaptic plasticity makes that some signals become stronger as it repeats, over time process makes it easier to remember some facts

Decay: If a memory is not used over time you will start to forget it

Savings: Makes it easier to relearn something if forgotten

Interfence: Retroactive (new piece of learning interferes with old knowledge) proactive (old piece of knowledge interferes with learning new one) **Semantic Network Hierarchy:** We organize things in a logical hierarchy

Modified Semantic Network: We organize things in a experience based hierarchy

Aging

Decline: Recall, episodic memory, processing speed, divided attention

Stable: Implicit memory, recognition

Improve: Semantic memory (until 60), crystallized IQ (using knowledge + experience), emotional reasoning

Biological Basis

Structure of the Brain

Structure of the Nervous System

Central Nervous System: Brain and Spinal Chord

Peripheral Nervous System: Cranial nerves (nerves that exit the skull), spinal nerverse (nerves that exit the spine)

Afferent Neurons: Bring information to the CNS

Efferent Neurons: Bring information from the CNS

Upper vs Lower Motor Neurons: Upper motor neurons originate in the brain and cross over to the other side of the brain stem around the brain stem then synapse with lower motor neurons in the ventral horn.

Autonomic Nervous System

Sympathetic Nervous System

- Starts near the middle of the spinal chord
- Short axon on first neuron which synapses to a second long neuron
- Will activate fight of flight

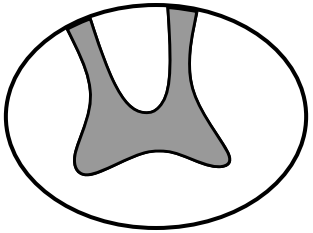
Parasympathetic Nervous System

- Starts near the brain stem or bottom of spinal chord
- Long axon on first neuron which synapses to second short neuron
- Will activate rest and digest

Grey and White Matter

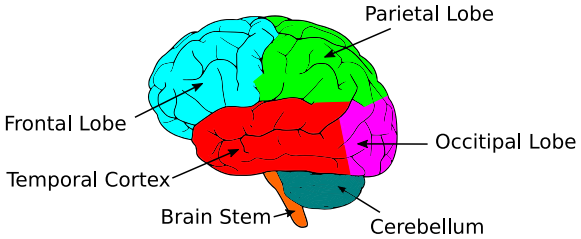
Grey Matter: Consisting mainly of neuron somas

White Matter: Consisting mainly of mylenated axons



In the spinal chord grey matter is located in the middle surround by white matter which is flipped in the brain.

Parts of the Brain



Frontal Lobe: Motor, prefrontal, Broca's (speech)

Parietal Love: Somatosensory, spatial processing

Occipital Lobe: Vision

Temporal Cortex: Wernicke's area (language), auditory processing

Brain Stem: Made up of midbrain (relay infor for hearing and vision), pons (sleep-wake, breathing), and medulla (vital processes)

Cerebellum: Coordinates movement

Corpus Callosum: Connects left and right hemisphere

Hippocampus: Forms long term memories

Thalamus: Sesnory relay station

Hypothalamus: Keeps body in homeostasis and manages pituitary gland

Basal Ganglia: Motor control

Amygdala: Process emotions

Neurotransmitters

Glutamate: Released throughout NS, exitatory NT

Gamma-Aminobutyric acid: Released throughout the brain, inhibitory NT

Glycine-Aminobutyric acid: Released throughout the spine, inhibitory NT

Acetycholine: Released throughout lower motor neurons and autonomic nervous sytem

Norepinephrine: Released from the pons and found throughout the brain and autonomic nervous system

Histamine: Released from the hypothalamus

Seratonin: Released throughout the brain

Dopamine: Released from ventral tegmental area and other areas throughout the brain

Ways of Studying the Brain

CAT Scan: Only shows brain structure using xrays

MRI: Only shows brain structure using magnetic fields

EEG: Places electrodes on scalp to read electrical fields giving information on brain function

MEG (SQUIDS): Reads magnetic fields caused by brain, costly expensive machinery

fMRI: Shows MRI image and a heat map showing which parts of brain are active

PET Scan: Combined w/ CAT scan or MRI to create heat map of brain

Mental Disorders

Anxiety Disorders

Disorder	Description
General Anxiety Disorder	Stress and worry caused by an unclear source relating to more overarching concerns
Panic Disorder	Sudden bursts of panic or fear leading to short bursts of high stress
Phobias	Irrationally afraid of a specific thing or action
Obsessive Compulsive Disorder	Obsession over certain concerns or needs that limit their normal lives
PTSD	Lingering memories or nightmares of a past event which is affecting their current life

Medical Symptom Disorders

Disorder	Description
Somatic Symptom Disorder	Extreme concern relating to one or more physical conditions
Conversion Disorder	Neurological symtoms (paralysis, blindness...) that are not explainable by a medical condition
Illness Anxiety Disorder	Concern with having a serious disease (cancer, HIV...)
Factitious Disorder	Symptoms or illnesses fabricated withouit obvious external gain