MEMORY, TRAUMA, DISSOCIATION AND AMNESIA

OLLI AT ILLINOIS

SPRING SEMESTER 2020



WHY THIS COURSE

• THIS COURSE IS AN EXPLORATION OF THE HUMAN EXPERIENCE OF MEMORY, TRAUMA, DISSOCIATION, AND AMNESIA. IT IS ALSO ABOUT THE WAY IN WHICH WE TALK ABOUT THESE EXPERIENCES AND HOW WE CREATE NARRATIVES THAT MAKE SENSE OF AND ALLOW US TO SHARE THE EXPERIENCE.



- THE PRINCE OF TIDES / 1991
- THREE FACES OF EVE / 1957
- SYBIL / 1976
- FRANKIE AND ALICE / 2010
- COLLATERAL BEAUTY / 2016



THE CREATION OF NARRATIVE

LET ME TELL YOU WHAT I WISH I'D KNOWN
WHEN I WAS YOUNG AND DREAMED OF GLORY
YOU HAVE NO CONTROL
WHO LIVES, WHO DIES, WHO TELLS YOUR STORY?

AND WHEN YOU'RE GONE, WHO REMEMBERS YOUR NAME? WHO KEEPS YOUR FLAME? WHO TELLS YOUR STORY?

LYRICS FROM THE MUSICAL HAMILTON



- THE SUBJECT
- THE OBSERVER / PSYCHIATRIST (IN MOST OF THE STORIES WE EXPLORE
- THE INTERPRETER
- THE RECORDER

DEFINE

- A. MEMORY
- B. TRAUMA
- C. DISSOCIATION
- D. AMNESIA

THE USEFULNESS OF MODELS

ESSENTIALLY, ALL MODELS ARE WRONG,

BUT SOME ARE USEFUL.

GEORGE E. P. BOX

THEORIES ARE NOT TRUE OR FALSE;

THEY ARE USEFUL OR NOT USEFUL.

- CLAUDE BERNARD



A. MEMORY

- WHAT IS IT?
- HOW IS IT CREATED?
- WHAT PARTS OF THE BRAIN AND CENTRAL NERVOUS SYSTEM ARE INVOLVED?
- IS IT PERMANENT?
- CAN IT BE CHANGED?



WHAT IS IT?

MEMORY IS A COLLECTION OF INFORMATION THAT IS ENCODED IN THE BRAIN IN SUCH A WAY THAT IT CAN BE ACTIVATED TO ALLOW RECALL OF A PERSON, PLACE, EVENT, ETC.

WHERE IS THE INFORMATION STORED

- IT IS NOT STORED IN ONE PARTICULAR PLACE. IT INVOLVES A NETWORK OF NEURONS THAT CAN BE ACTIVATED AND ALL FIRE AT THE SAME TIME.
- THE ONE PART OF THE BRAIN THAT WE THINK IS MOST RESPONSIBLE FOR ACTIVATING THE NETWORK IS THE HIPPOCAMPUS, A PART OF THE LIMBIC SYSTEM.
- THE HIPPOCAMPUS CREATES A MAP OF THE MEMORY THAT THEN ACTIVATES ALL THE NEURONS NEEDED TO RECREATE WHAT IS REMEMBERED.



MEMORY

• A BRIEF INTRODUCTION TO THE NEUROBIOLOGY OF MEMORY:

- THE BRAIN
- NEURONS
- SYNAPSES
- NEURAL NETWORKS



NERVOUS SYSTEM

THE **NERVOUS SYSTEM**. IT ALLOWS THEM TO COLLECT INFORMATION (**SENSORY SYSTEM**), ACT ON THAT INFORMATION (**MOTOR SYSTEM**) AND STORE THE RESULT FOR FUTURE REFERENCE (**MEMORY**), THUS EFFECTIVELY MAKING LIFE POSSIBLE.



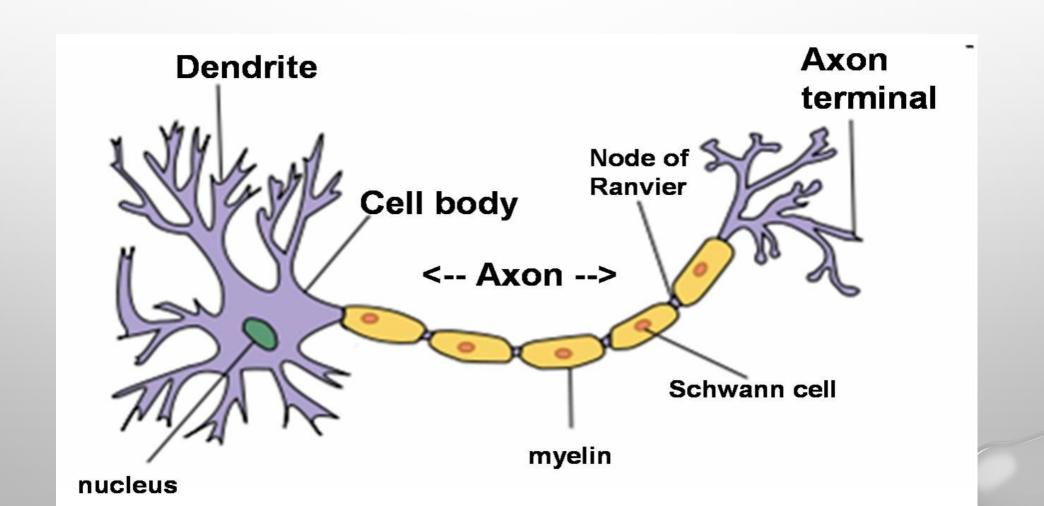
• IT IS A HUGELY COMPLEX ORGAN, WITH AN ESTIMATED 100 BILLION NEURONS PASSING SIGNALS TO EACH OTHER VIA AS MANY AS 1,000 TRILLION SYNAPTIC CONNECTIONS. IT CONTINUOUSLY RECEIVES AND ANALYZES SENSORY INFORMATION, RESPONDING BY CONTROLLING ALL BODILY ACTIONS AND FUNCTIONS. IT IS ALSO THE CENTER OF HIGHER-ORDER THINKING, LEARNING AND MEMORY, AND GIVES US THE POWER TO THINK, PLAN, SPEAK, IMAGINE, DREAM, REASON AND EXPERIENCE EMOTIONS

NEURONS

- A NEURON IS A <u>CELL</u> THAT CARRIES ELECTRICAL IMPULSES. THEY ARE THE BASIC (FUNCTIONAL & STRUCTURAL) UNITS OF OUR <u>NERVOUS SYSTEM</u>.
- EVERY NEURON IS MADE OF A CELL BODY, DENDRITES AND AN AXON. DENDRITES AND AXONS ARE NERVE FIBERS. THERE ARE ABOUT 86 BILLION NEURONS IN THE HUMAN BRAIN. NEURONS ARE SUPPORTED BY GLIAL CELLS AND ASTROCYTES.
- NEURONS ARE CONNECTED TO ONE ANOTHER AND TISSUES.
 THEY DO NOT TOUCH EACH OTHER, INSTEAD THEY FORM TINY
 GAPS CALLED SYNAPSES. THESE GAPS CAN BE CHEMICAL
 SYNAPSES OR ELECTRICAL SYNAPSES AND PASS THE SIGNAL
 FROM ONE NEURON TO THE NEXT.



NEURONS





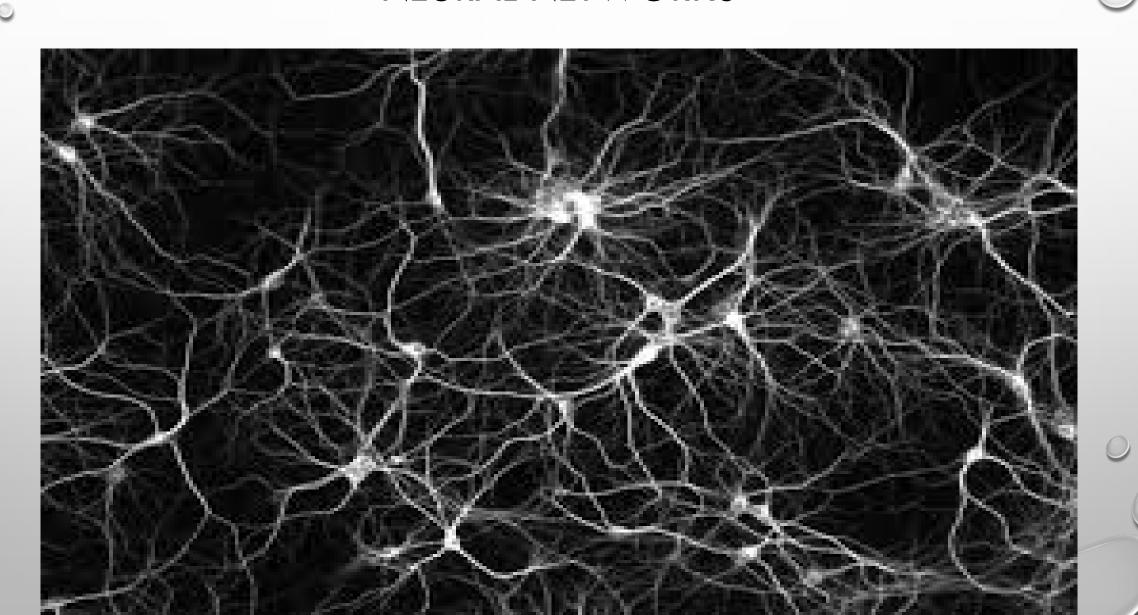
SYNAPSES

• YOUTUBE:

V=RCU9W9AOFIC

• TEACHER'S PET / SYNNPSES

NEURAL NETWORKS





NEURAL NETWORKS









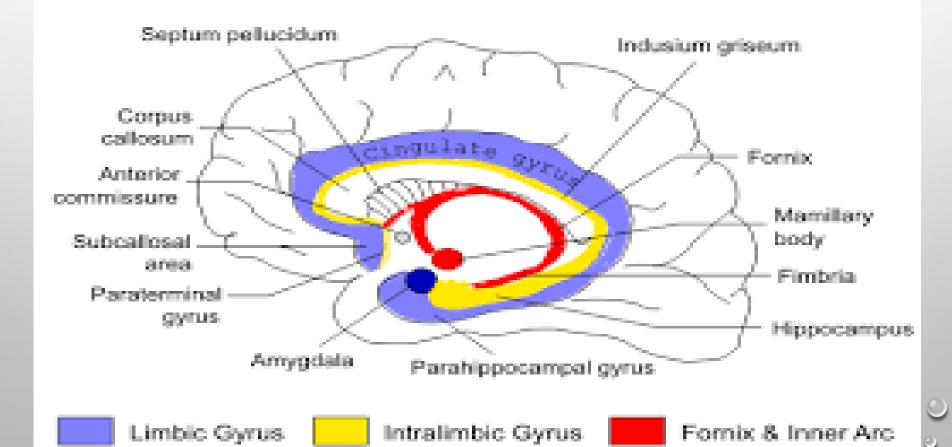
HIPPOCAMPUS

• THE HIPPOCAMPUS IS A SMALL, CURVED FORMATION IN THE BRAIN THAT PLAYS AN IMPORTANT ROLE IN THE LIMBIC SYSTEM.
THE HIPPOCAMPUS IS INVOLVED IN THE FORMATION OF NEW MEMORIES AND IS ALSO ASSOCIATED WITH LEARNING AND EMOTIONS.

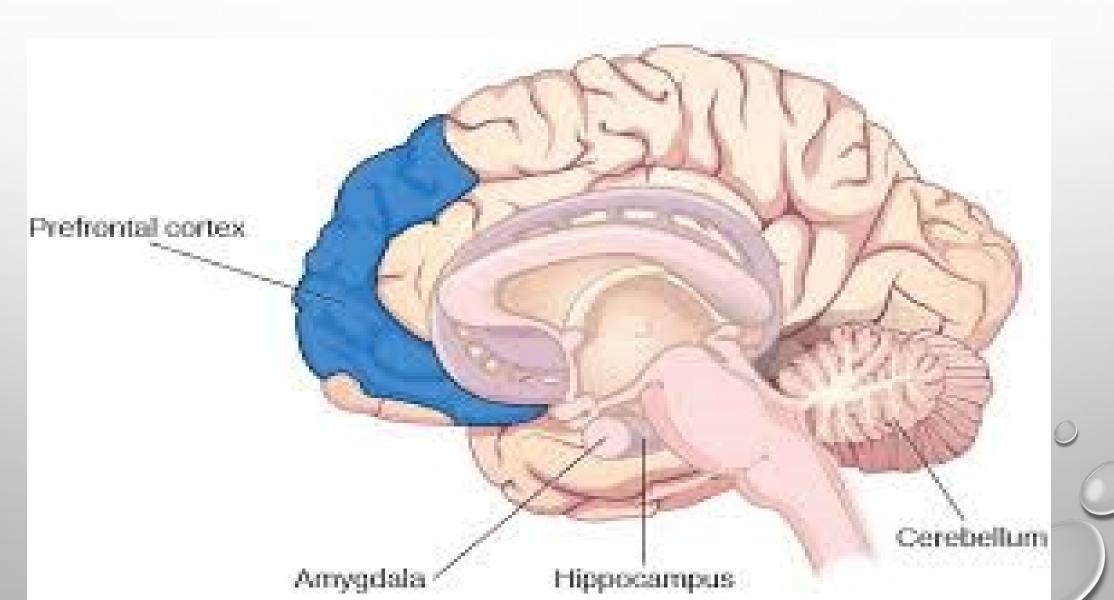


HIPPOCAMPUS LOCATION

The Limbic System



LOCATION OF HIPPOCAMPUS





VALENCE

VALENCE, AS USED IN PSYCHOLOGY, ESPECIALLY IN DISCUSSING EMOTIONS, MEANS THE INTRINSIC ATTRACTIVENESS/"GOOD"-NESS (POSITIVE VALENCE) OR AVERSENESS/"BAD"-NESS (NEGATIVE VALENCE) OF AN EVENT, OBJECT, OR SITUATION. ... FOR EXAMPLE, EMOTIONS POPULARLY REFERRED TO AS "NEGATIVE", SUCH AS ANGER AND FEAR, HAVE NEGATIVE VALENCE

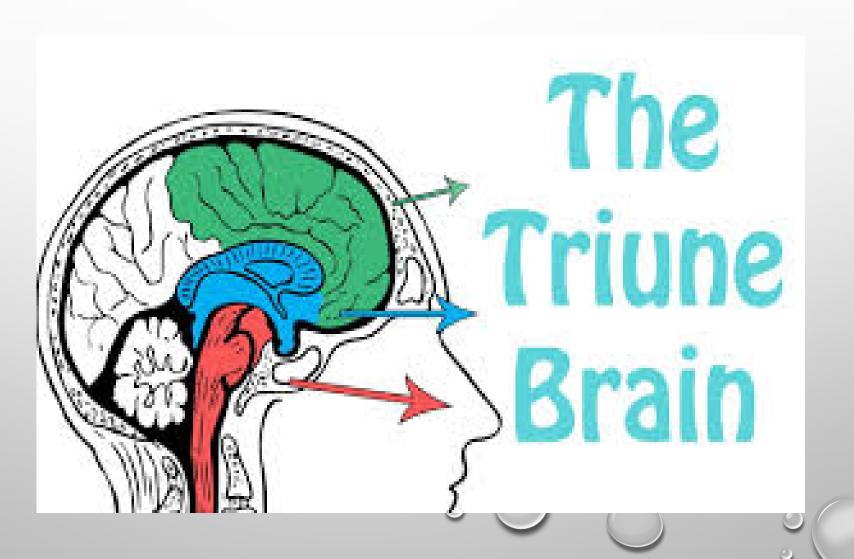


TRIGGERS

- ANY INFORMATION THAT REMINDS THE HIPPOCAMPUS OF INFORMATION STORED IN A NEURAL NETWORK CAN ACTIVATE THE NETWORK AND BRING THE MEMORY TO AWARENESS.
- UNLESS THERE IS STRONG DISSOCIATION WHICH BLOCKS THE ACTIVATION



BRAIN STRUCTURE SIMPLIFIED



DANIEL SIEGAL MODEL OF BRAIN (WITH CENTRAL NERVOUS SYSTEM ADDED)

WORKING FROM THE BOTTOM UP:

BASE OF HAND AT WRIST - BRAIN STEM

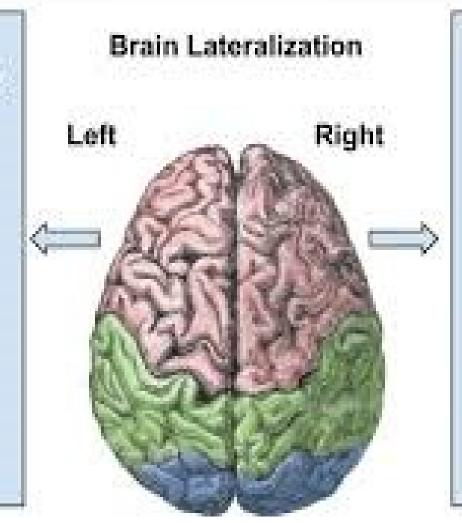
THUMB - LIMBIC SYSTEM

FINGERS CLOSED - CEREBRAL CORTICES

◆FOREARM – SPINAL COLUMN AND PERIPHERAL NERVES / SOMETIMES REFERRED TO AS THE SENSORIMOTOR SYSTEM BECAUSE IT BRING IN INFORMATION AND DIRECTS ACTION.

BRAIN HEMISPHERES

- Analytical thought
- Detail Oriented Perception
- Ordered Sequencing
- Rational Thought
- Verbal
- Cautious
- · Planning
- Math/Science
- Logic
- Right Field Vision
- Right Side Motor Skills



- Intuitive Thought
- Holistic perception
- Random Sequencing
- Emotional Thought
- Non-verbal.
- Adventurous
- Impulse
- Creative Writing/Art
- Imagination
- Left Field Vision
- Left Side Motor Skills

RIGHT BRAIN / LEFT BRAIN DIFFERENCES

- RIGHT BRAIN THINKS IN PICTURES / SENSORY INFORMATION
- STORES THAT INFORMATION WITHOUT A LINKING THEM INTO A STORY
- MEMORY FRAGMENTS CAN BE RETRIEVED WITHOUT A CONTEXT
- LEFT BRAIN THINKS IN WORDS
- PROCESSES IN LINEAR FASHION AND ANALYSES INFORMATION
- TELLS STORIES, CREATES NARRATIVES
- STORES THE NARRATIVE IN VARIOUS FORMS OF MEMORY

TYPES OF MEMORY

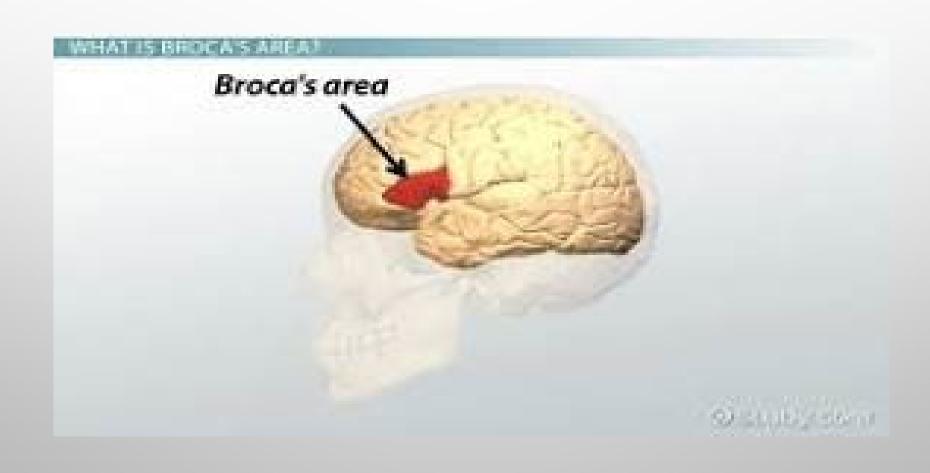
- ◆IMPLICIT / IN THE BODY / RIGHT BRAIN CODED (GENERALLY)
- PROCEDURAL / BODY MEMORIES
- EMOTIONAL / LIMBIC AROUSAL

- ◆EXPLICIT / IN THE CEREBRAL CORTEXT / MORE LEFT BRAIN CODED
- EPISODIC / STILL FRAGMENTED BUT CAN BE DESCRIBE IN WORDS
- DECLARATIVE / NARRATIVE / A COMPLETE STORY

THE CREATION OF NARRATIVE MEMORY

- PRIMARILY A LEFT BRAIN FUNCTION
- USES THE BRAIN'S MASTERY OF LANGUAGE
- NARRATIVE MEMORY IS COMPROMISED IF THE LEFT BRAIN IS NOT FUNCTIONING
- AN AREA IN THE LEFT BRAIN CALLED BROCA'S AREA CREATES WORDS AND CONTROLS OUR ABILITY TO SPEAK
- SCARED SPEECHLESS IS LITERALLY TRUE / TRAUMA CAN SHUT DOWN BROCA'S AREA

BROCA'S AREA



THE IMPORTANCE OF LANGUAGE

- ◆ LANGUAGE AS VEHICLE FOR NARRATIVE
- WHEN WE HAVE AN EXPLICIT NARRATIVE, WE HAVE POWER OVER THE EXPERIENCE THAT IS LACKING WHEN THE MEMORY IS ONLY IMPLICIT.

- ◆THE POWER OF NAMING
- BIBLICAL PRECEDENTS
- PERSONAL EXPERIENCE



CAN MEMORIES BE STRENGTHENED

EVERY TIME ONE NEURON FIRES WITH ANOTHER, THE SYNAPTIC CONNECTION IS STRENGTHENED. WITH EACH FIRING, THE MYELIN SHEATH (SEE SLIDE 10) GETS THICKER, THEREBY CREATING A KIND OF INSULATION THAT REDUCED THE CHANCE THAT ACTION POTENTIAL WILL BE LOST.

THE NEUROLOGISTS SAY, NEURONS THAT FIRE TOGETHER, WIRE TOGETHER

THIS IS WHY REPETITION IS NECESSARY FOR LEARNING. PRACTICE MAKES PERFECT.

MEMORIES THAT ARE RECALLED OFTEN CAN ACTUALLY GET STRONGER. HAVING A COHESIVE NARRATIVE AROUND THE MEMORY HELPS.



IS MEMORY PERMANENT

- THE LONGEVITY OF A MEMORY DEPENDS ON HOW REGULARLY IT IS ACTIVATED BY RECALL
- WITH TIME AND NO ACTIVATION, THE NEURAL NETWORK WEAKENS AND CAN NOT LONGER BE ACTIVATED, OR ONLY ACTIVATED PARTIALLY.
- IN BEHAVIORS, THIS IS THE PROCESS BY WHICH A HABIT IS CHANGED OR EXTINGUISHED.



CAN MEMORY BE CHANGED

- YES. EVERY TIME A NEURAL NETWORK IS ACTIVATED INFORMATION CAN BE ADDED OR SUBTRACTED.
- THIS CAN BE ACCOMPLISHED BY SUGGESTION OR BY COGNITIVE REFRAMING OF THE BELIEFS
 ASSOCIATED WITH THE MEMORY
- THE EMOTIONAL VALENCE OF THE MEMORY CAN BE CHANGED.
- THIS IS WHAT MAKES MEMORY AN ELUSIVE SUBJECT AND WHY MANY MEMORIES ARE CALLED INTO QUESTION



B. TRAUMA COMMON USAGE

- A. AN INJURY (SUCH AS A WOUND) TO LIVING TISSUE CAUSED BY AN EXTRINSIC AGENT
 B. A DISORDERED PSYCHIC OR BEHAVIORAL STATE RESULTING FROM SEVERE MENTAL OR
- **EMOTIONAL STRESS OF PHYSICAL INJURY**
 - C. AN EMOTIONAL UPSET

- 2. AN AGENT, FORCE, OR MECHANISM THAT CAUSES TRAUMA
 - MIRIAM WEBSTER DICTIONARY

TRAUMA IN PSYCHOLOGICAL CONTEXT

AN EVENT OR EXPERIENCE THAT OVERPOWERS THE CAPACITY OF A SYSTEM OR ORGANISM TO CONTINUE FUNCTIONING FULLY AND EFFICIENTLY.

IN HUMANS, TRAUMA IMPACTS US ON A PHYSICAL, EMOTIONAL, COGNITIVE, OR EVEN SPIRITUAL LEVEL.

THESE EXPERIENCES LEAVE AN IMPRINT ON OUR BRAINS THAT LASTS A LIFETIME AND CAN DESTROY QUALITY OF LIFE FOR YEARS. THE TEMPLATE OR TRAUMA DOESN'T GO AWAY EVEN IF WE LEARN TO MITIGATE ITS EFFECT ON US

DEVELOPMENTAL TRAUMA

- CHRONIC PATTERNS OF NEGLECT, ABUSE, AND LACK OF SECURE ATTACHMENT THAT LEAD TO
 CHRONIC IMPAIRMENT OF THE CHILD'S ABILITY TO FUNCTION FULLY AND EFFICIENTLY.
- THE DEVELOPMENTAL TRAUMA MAKES A **MULTI-DIMENTIONAL IMPACT**, INCLUDING THE PHYSICAL, EMOTIONAL, COGNITIVE, AND SPIRITUAL LEVELS OF HUMAN EXPERIENCE.
- THE CHRONIC PATTERNS OF INADEQUATE NURTURE LEAVE AN **IMPACT** ON OUR BRAINS THAT LASTS A LIFETIME AND CAN DESTROY QUALITY OF LIFE FOR YEARS. THE **TEMPLATE** OF DEVELOPMENTAL TRAUMA DOESN'T GO AWAY EVEN IF WE LEARN TO MITIGATE IT'S EFFECTS ON US.

TRIUNE BRAIN MODEL

PREFRONTAL CORTEX

- UPPER BRAIN

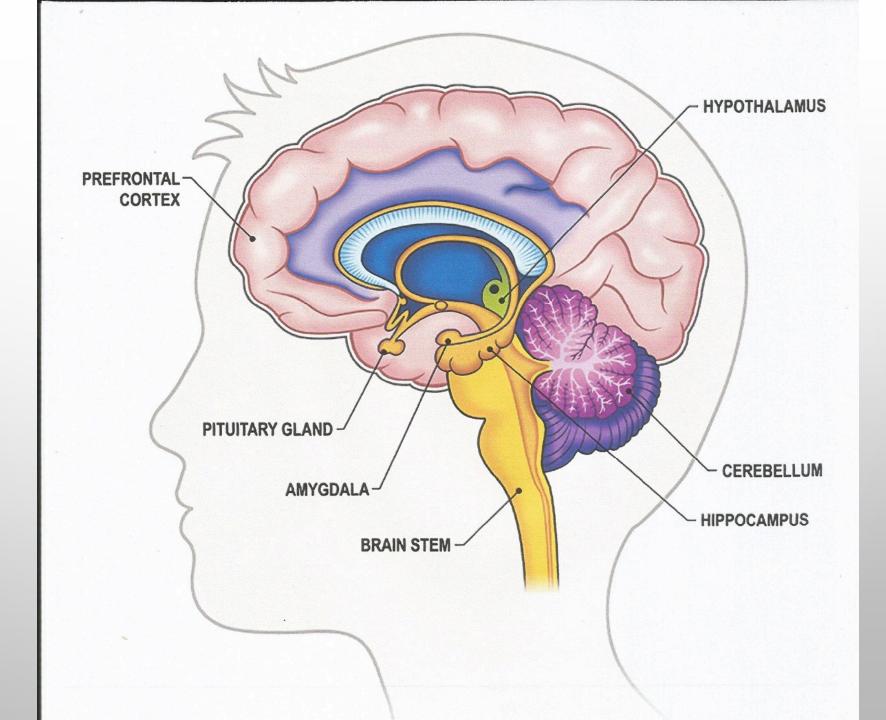
LIMBIC AREA

- MIDDLE BRAIN

BRAIN STEM

- LOWER BRAIN
- CONNECTS TO SPINAL CORD

WE DOWNSHIFT AND UPSHIFT BETWEEN THESE AREAS DEPENDING ON CONDITIONS.



Hyperarousal

Hyperaware or vigilant
Overly quick or intense reactions
Feeling a lack of emotional safety
Overwhelming emotions

Window of tolerance

Able to think and feel at the same time

Hypoarousal

Shut down, flat or numb Hard to think, disconnected Feeling shame, can't say 'no'

BRAIN SYSTEMS DOWNSHIFTING: LIMBIC / AMYGDALA HIJACKING AND BRAIN STEM FALLBACK

- THE AMYGDALA DETECTS DANGER SOONER THAN PREFRONTAL CORTEX DOES/ SEE BKS P 61
- SENSORY INFORMATION TAKES ONE SYNAPSE TO GET TO THE AMYGDALA, SEVERAL SYNAPSES TO GET HIGHER INTO THE BRAIN. EVEN THOUGH IT IS ONLY MILLISECONDS, THAT DELAY IS SIGNIFICANT
- AMYGDALA ACTIVATES SYMPATHETIC FIGHT OR FLIGHT SYSTEM
- BY THEN THE PREFRONTAL CORTEX / EXECUTIVE CENTER IS PREEMPTED
 - -THE SYSTEM HAS DOWNSHIFTED
- WE ACT INSTINCTIVELY WITHOUT CAREFUL REFLECTION

- ONLY WHEN THE DANGER IS GONE CAN WE RATIONALLY EVALUATE
- SLOWLY THE PARASYPATHETIC RELAXATION RESPONSE KICKS IN
- WE RETURN TO NORMAL FUNCTIONING SLOWLY, OR
- IF THE DANGER DOES NOT PASS, WE CAN GO INTO FREEZE / DORSAL VAGAL STATE
- RECOVERY FROM A FREEZE STATE INVOLVES REACTIVATION OF VARIOUS SYSTEMS
- THERE MAY BE POST TRAUMATIC STRESS IF CONDITIONS ARE RIGHT

TRIUNE BRAIN MODEL

PREFRONTAL CORTEX

- UPPER BRAIN

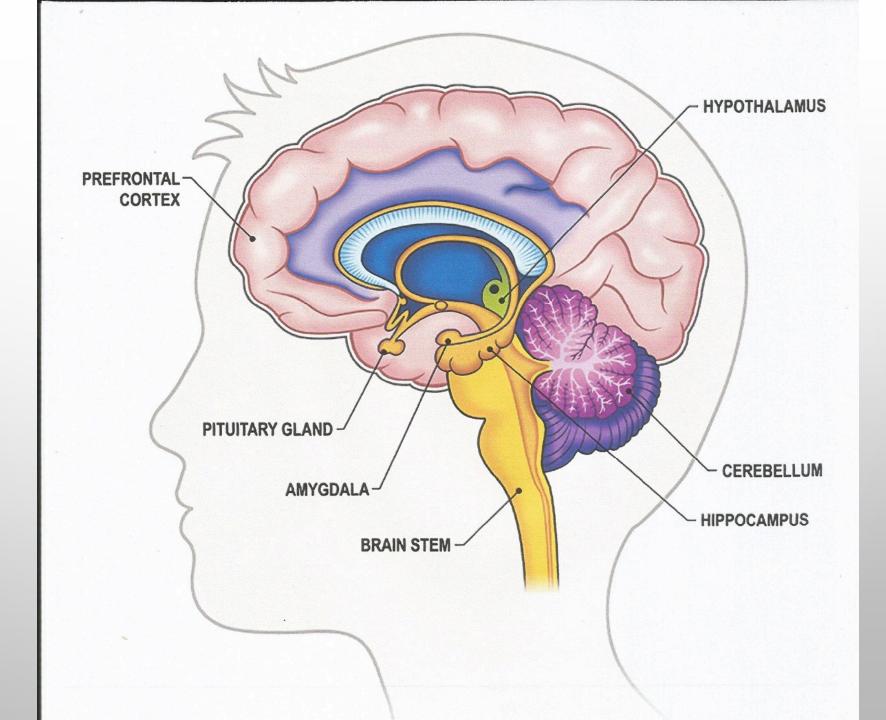
LIMBIC AREA

- MIDDLE BRAIN

BRAIN STEM

- LOWER BRAIN
- CONNECTS TO SPINAL CORD

WE DOWNSHIFT AND UPSHIFT BETWEEN THESE AREAS DEPENDING ON CONDITIONS.



TRIUNE BRAIN

Window of Tolerance

- MIDDLE BRAIN MODE

Hyperarousal Zone

2. Sympathetic "Fight or Flight" Response Increased sensations, flooded Emotional reactivity, hypervigilant Intrusive imagery, Flashbacks Disorganised cognitive processing

FRONTAL LOBE
EXECUTIVE CENTER
- UPPER BRAIN
MODE

Window of Tolerance Optimal Arousal Zone 1. Ventral Vagal "Social Engagement" Response

State where emotions can be tolerated and information integrated

BRAIN STEM
SURVIVAL MODE

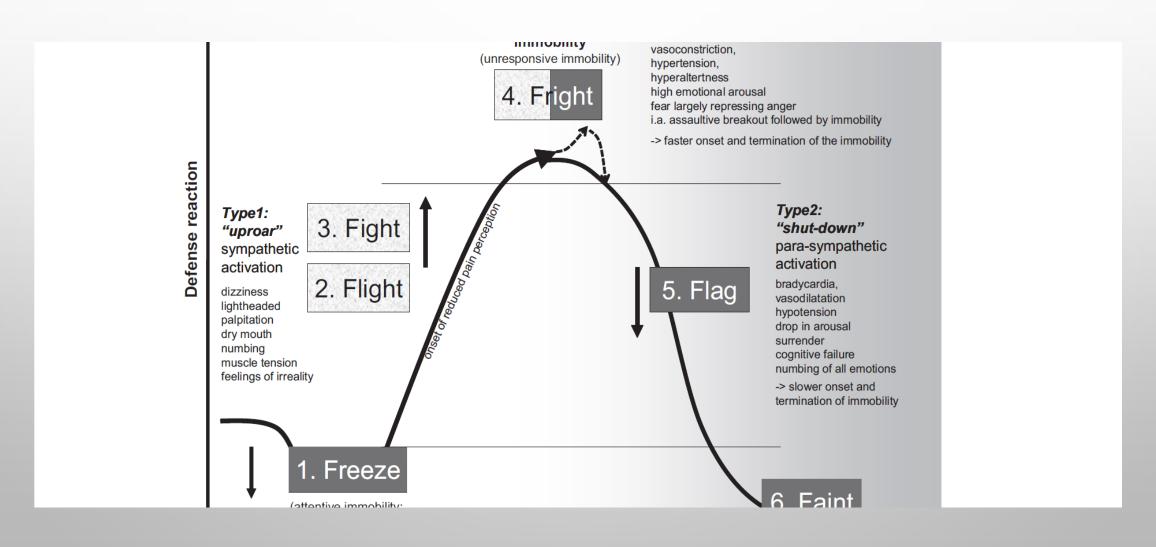
Hypoarousal Zone

3. Dorsal Vagal "Immobilisation" Response

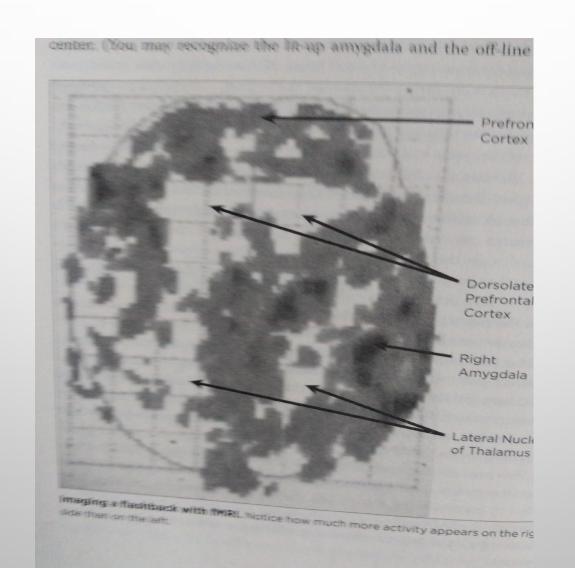
Relative absence of sensation Numbing of emotions Disabled cognitive processing Reduced physical movement

Adapted from Ogden, Minton, & Pain. 2006, p. 27, 32; Corrigan, Fisher, & Nutt. 2010, p. 2

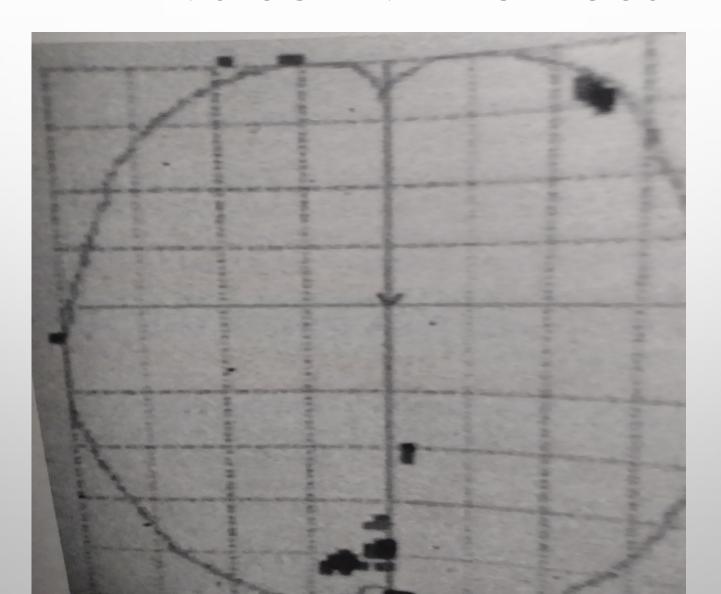
DEFENSE REACTION CASCADE



BRAIN IN HYPERAROUSAL



BRAIN STUCK IN HYPOAROUSAL



THE LONG TERM EFFECTS OF TRAUMA ON MEMORY

- POST TRAUMATIC STRESS IS A CONDITION WHERE THE INITIAL RESPONSE TO THE TRAUMA KEEPS GETTING ACTIVATED BY TRIGGERS.
- WITH TIME THAT RESPONSE CAN BE EXTINGUISHED, PARTICULARLY IF THE PERSON IS ABLE TO TALK ABOUT IT AND FEELS SUPPORTED
- THE EXPERIENCE FADES INTO PAST MEMORY AND DOES NOT ACTIVATE WITH THE TRAUMATIC RESPONSE, A PROCESS CALLED DESENSITIZATION
- IF DESENSITIZATION DOES NOT TAKE PLACE THE TRAUMATIC STRESS CONDITION CAN PERSIST AND IT BECOMES A POST TRAUMATIC STRESS DISORDER (PTSD)



CRITERION A: STRESSOR (ONE REQUIRED)

- THE PERSON WAS EXPOSED TO: DEATH, THREATENED DEATH, ACTUAL OR THREATENED SERIOUS INJURY, OR ACTUAL OR THREATENED SEXUAL VIOLENCE, IN THE FOLLOWING WAY(S):
- DIRECT EXPOSURE
- WITNESSING THE TRAUMA
- LEARNING THAT A RELATIVE OR CLOSE FRIEND WAS EXPOSED TO A TRAUMA
- INDIRECT EXPOSURE TO AVERSIVE DETAILS OF THE TRAUMA, USUALLY IN THE COURSE OF PROFESSIONAL DUTIES (E.G., FIRST RESPONDERS, MEDICS)



• CRITERION B: INTRUSION SYMPTOMS (ONE REQUIRED)

- THE TRAUMATIC EVENT IS PERSISTENTLY RE-EXPERIENCED IN THE FOLLOWING WAY(S):
- UNWANTED UPSETTING MEMORIES
- NIGHTMARES
- FLASHBACKS
- EMOTIONAL DISTRESS AFTER EXPOSURE TO TRAUMATIC REMINDERS.
- PHYSICAL REACTIVITY AFTER EXPOSURE TO TRAUMATIC REMINDERS



PTSD CRITERIA

CRITERION C: AVOIDANCE (ONE REQUIRED)

- AVOIDANCE OF TRAUMA-RELATED STIMULI AFTER THE TRAUMA, IN THE FOLLOWING WAY(S):
- TRAUMA-RELATED THOUGHTS OR FEELINGS
- TRAUMA-RELATED EXTERNAL REMINDERS



PTSD CRITERIA

- CRITERION D: NEGATIVE ALTERATIONS IN COGNITIONS AND MOOD (TWO REQUIRED)
- NEGATIVE THOUGHTS OR FEELINGS THAT BEGAN OR WORSENED AFTER THE TRAUMA, IN THE FOLLOWING WAY(S):
- INABILITY TO RECALL KEY FEATURES OF THE TRAUMA
- OVERLY NEGATIVE THOUGHTS AND ASSUMPTIONS ABOUT ONESELF OR THE WORLD
- EXAGGERATED BLAME OF SELF OR OTHERS FOR CAUSING THE TRAUMA
- NEGATIVE AFFECT
- DECREASED INTEREST IN ACTIVITIES
- FEELING ISOLATED
- DIFFICULTY EXPERIENCING POSITIVE AFFECT



PTDS CRITERIA

CRITERION E: ALTERATIONS IN AROUSAL AND REACTIVITY

- TRAUMA-RELATED AROUSAL AND REACTIVITY THAT BEGAN OR WORSENED AFTER THE TRAUMA, IN THE FOLLOWING WAY(S):
- IRRITABILITY OR AGGRESSION
- RISKY OR DESTRUCTIVE BEHAVIOR
- HYPERVIGILANCE
- HEIGHTENED STARTLE REACTION
- DIFFICULTY CONCENTRATING
- DIFFICULTY SLEEPING



• CRITERION F: DURATION (REQUIRED)

SYMPTOMS LAST FOR MORE THAN 1 MONTH.

- CRITERION G: FUNCTIONAL SIGNIFICANCE (REQUIRED)
- SYMPTOMS CREATE DISTRESS OR FUNCTIONAL IMPAIRMENT (E.G., SOCIAL, OCCUPATIONAL).

- CRITERION H: EXCLUSION (REQUIRED)
- SYMPTOMS ARE NOT DUE TO MEDICATION, SUBSTANCE USE, OR OTHER ILLNESS.



SUMMARY OF PTSD CRITERIA

- TRAUMATIC EVENT
- INTRUSIVE RE-EXPERIENCING
- PATTERN OF AVOIDANCE OF TRAUMA RELATED STIMULI
- NEGATIVE ALTERATIONS OF THOUGHT AND MOOD
- ALTERATIONS IN AROUSAL OR REACTIVITY



BREAK TIME

- STRETCH
- COME ASK ME QUESTIONS
- GET SOMETHING TO DRINK

C. DISSOCIATION

GENERIC: THE DISCONNECTION OR SEPARATION OF SOMETHING FROM SOMETHING ELSE OR A STATE OF BEING DISCONNECTED.

WIKIPEDIA: IN PSYCHOLOGY, DISSOCIATION IS ANY OF A WIDE ARRAY OF EXPERIENCES FROM MILD DETACHMENT FROM IMMEDIATE SURROUNDINGS TO MORE SEVERE DETACHMENT FROM PHYSICAL AND EMOTIONAL EXPERIENCES. THE MAJOR CHARACTERISTIC OF ALL DISSOCIATIVE PHENOMENA INVOLVES A DETACHMENT FROM REALITY, RATHER THAN A LOSS OF REALITY AS IN PSYCHOSIS.

SENSORIMOTOR PSYCHOTHERAPY: THE NARROWING OF THE FOCUS OF CONSCIOUSNESS TO EXCLUDE DISTRACTING OR DISTURBING INFORMATION, THEREBY LEADING TO A COMPARTMENTALIZATION OF AWARENESS AND MEMORY.

LEVELS OF DISSOCIATIVE PHENOMENA

BASED ON A LIST BY MARTHA STOUT IN THE MYTH OF SANITY, PAGES 217-221

- 1. DAYDREAMING
- 2. LOSING ONESELF IN A STORY, BOOK, OR MOVIE
- 3. BRIEF PHASING OUT / SUCH AS STAGE FRIGHT OR ANXIETY RESULTING IN MOMENTARY AMNESIA
- DISTRACTION FROM PRESENT REALITY, USUALLY INVOLVING SOME EMOTIONAL STATE
- 4. HABITUAL DISSOCIATIVE REACTIONS
- BEING ABSENTMINDED, IN YOUR OWN WORLD
- 5, DISSOCIATION FROM FEELING STATES
- NOT BEING AWARE OF EMOTIONS THAT MAY OCCURRING IN THE PRESENT / FOR INSTANCE,

7. DEMIFUGUE

- FEELING ABSENT FROM SELF OR PRESENT REALITY
- MARKED BY A SENSE OF DEREALIZATION OR DEPERSONALIZATION
- 8. TRAUMATIC AMNESIA
- INABILITY TO RECALL THE CIRCUMSTANCES AND/OR DETAILS OF A TRAUMATIC EXPERIENCE, LIKE AN INJURY, A MOMENT OF OVERWHELMING EMOTION, THE EXPERIENCE OF CHILDHOOD ABUSE, ETC.
- 9. FUGUE STATE
- TOTAL LACK OF RECALL FOR EVENTS FROM A PARTICULAR PERIOD OF TIME
- RELATED TO TRAUMATIC AMNESIA BUT OCCURRING IN THE PRESENT / FOR INSTANC

BESSEL VAN DER KOLK ON DISSOCIATION BODY KEEPS THE SCORE / P. 121

DISSOCIATION IS KNOWING AND NOT KNOWING AT THE SAME TIME.

HOW CAN THIS HAPPEN?

- ISOLATED NEURAL NETWORKS / HUGE SPIDER WEBS IN THE BRAIN WITH NO CONNECTING LINKS
- ISOLATED MEMORY NETWORKS / LIKE ROOMS IN A BUILDING WITH NO OPENINGS BETWEEN THEM / IF YOU ARE IN ONE ROOM, YOU CAN'T KNOW WHAT'S GOING ON IN ANOTHER ROOM.

ADVANTAGES OF DISSOCIATION

STRUCTURAL DISSOCIATION MODEL

- BASED ON THE WORK OF CHARLES MYERS IN ENGLAND WITH WW1 VETERANS.
- MODEL WAS NEGLECTED UNTIL TRAUMA AND DISSOCIATION WENT MAINSTREAM IN THE 80S AND 90S
- NOW USED EXTENSIVELY IN RESEARCH PRESENTED AT THE INTERNATIONAL SOCIETY FOR THE STUDY
 OF TRAUMA AND DISSOCIATION
- THE MODEL POSITS THE EXISTENCE OF AN **APPARANTLY NORMAL PERSONALITY** (ANP) AND VARIOUS **EMOTIONAL PERSONALITIES** (EPS) IN THE POST TRAUMATIC STRUCTURE OF THE SELF.

STRUCTURAL DISSOCIATION / BASIC THEORY

MYERS POSTULATED THAT AS THE RESULT OF OVERWHELMING TRAUMA, THE PERSONALITY CAN DEVELOP PARTS THAT DEAL WITH THE EXPERIENCE IN DIFFERENT WAYS:

- •
- 1. THE **EMOTIONAL PART** OF THE PERSONALITY (EP)
- ENCODES AND STORES THE TRAUMA
- RELIVES THE TRAUMA IN EMOTIONAL AND SENSORIMOTOR WAYS
- IS OFTEN DISORIENTED IN TIME, SITUATION, AND IDENTITY
- IS FIXATED ON THE MEMORY OF THE TRAUMATIC EXPERIENCE

- 2. THE APPARENTLY NORMAL PART OF THE PERSONALITY (ANP)
- IS AVOIDANT OF THE TRAUMATIC MEMORY AND KEEPS THE TRAUMA FROM BEING INTEGRATED
- HAS PARTIAL TO COMPLETE AMNESIA OF THE TRAUMA
- MAY HAVE EMOTIONAL AND BODILY ANESTHESIA
- IS CAPABLE OF APPEARING AND FUNCTIONING NORMALLY

INTERNAL FAMILY SYSTEMS THEORY A

PARTS

IFS SEES CONSCIOUSNESS AS COMPOSED OF VARIOUS "PARTS" OR SUBPERSONALITIES, EACH WITH ITS OWN PERSPECTIVE, INTERESTS, MEMORIES, AND VIEWPOINT. A CORE TENET OF IFS IS THAT EVERY PART HAS A POSITIVE INTENT FOR THE PERSON, EVEN IF ITS ACTIONS OR EFFECTS ARE COUNTERPRODUCTIVE OR CAUSE DYSFUNCTION.

THIS MEANS THAT THERE IS NEVER ANY REASON TO FIGHT WITH, COERCE, OR TRY TO ELIMINATE A PART; THE IFS METHOD PROMOTES INTERNAL CONNECTION AND HARMONY.

PARTS CAN HAVE EITHER "EXTREME ROLES" OR HEALTHY ROLES. IFS FOCUSES ON PARTS IN EXTREME ROLES BECAUSE THEY ARE IN NEED OF TRANSFORMATION THROUGH THERAPY. IFS DIVIDES THESE PARTS INTO THREE TYPES—MANAGERS, EXILES, AND FIREFIGHTERS.

INTERNAL FAMILY SYSTEMS MODEL

MANAGERS

MANAGERS ARE PARTS WITH PREEMPTIVE PROTECTIVE ROLES. THEY HANDLE THE WAY A PERSON INTERACTS WITH THE EXTERNAL WORLD TO PROTECT THEM FROM BEING HURT BY OTHERS AND TRY TO PREVENT PAINFUL OR TRAUMATIC FEELINGS AND EXPERIENCES FROM FLOODING A PERSON'S AWARENESS.

EXILES

EXILES ARE PARTS THAT ARE IN PAIN, SHAME, FEAR, OR TRAUMA, USUALLY FROM CHILDHOOD. MANAGERS AND FIREFIGHTERS TRY TO EXILE THESE PARTS FROM CONSCIOUSNESS, TO PREVENT THIS PAIN FROM COMING TO THE SURFACE.

FIREFIGHTERS

FIREFIGHTERS ARE PARTS THAT EMERGE WHEN EXILES BREAK OUT AND DEMAND ATTENTION. THESE PARTS WORK TO DISTRACT A PERSON'S ATTENTION FROM THE HURT OR SHAME EXPERIENCED BY THE EXILE BY LEADING THEM TO ENGAGE IN IMPULSIVE BEHAVIORS LIKE OVEREATING, DRUG USE, VIOLENCE, OR HAVING INAPPROPRIATE SEX. THEY CAN ALSO DISTRACT FROM THE PAIN BY CAUSING A PERSON TO FOCUS EXCESSIVELY ON MORE SUBTLE ACTIVITIES SUCH AS OVERWORKING, OVER-MEDICATING.

INTERNAL FAMILY SYSTEMS THEORY B

THE INTERNAL SYSTEM

IFS FOCUSES ON THE RELATIONSHIPS BETWEEN PARTS AND BETWEEN THE SELF. THE GOAL OF IFS IS TO HAVE A COOPERATIVE AND TRUSTING RELATIONSHIP BETWEEN THE SELF AND EACH PART. THERE ARE THREE PRIMARY TYPES OF RELATIONSHIPS BETWEEN PARTS:

PROTECTION

MANAGERS AND FIREFIGHTERS PROTECT EXILES FROM HARM AND PROTECT THE PERSON FROM THE PAIN OF EXILES.

POLARIZATION

TWO PARTS ARE POLARIZED WHEN THEY ARE BATTLING EACH OTHER TO DETERMINE HOW A PERSON FEELS OR BEHAVES IN A CERTAIN SITUATION. EACH PART BELIEVES THAT IT MUST ACT AS IT DOES IN ORDER TO COUNTER THE EXTREME BEHAVIOR OF THE OTHER PART. IFS HAS A METHOD FOR WORKING WITH POLARIZED PARTS.

ALLIANCE

TWO PARTS MAY BE ALLIED WITH EACH OTHER IF THEY ARE WORKING TOGETHER TO ACCOMPLISH THE SAME AIM.

INTERNAL FAMILY SYSTEMS MODEL

SELF

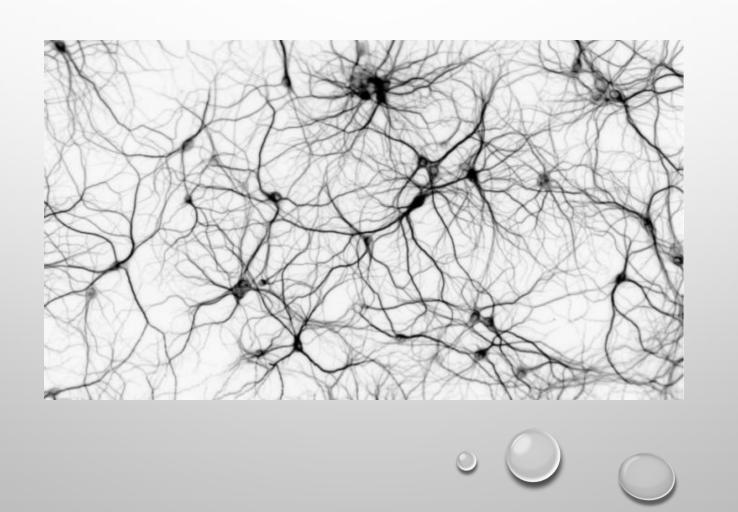
IFS ALSO SEES PEOPLE AS BEING WHOLE, UNDERNEATH THIS COLLECTION OF PARTS. EVERYONE HAS A **TRUE SELF OR SPIRITUAL CENTER**, **KNOWN AS THE SELF** TO DISTINGUISH IT FROM THE PARTS.

EVEN PEOPLE WHOSE EXPERIENCE IS DOMINATED BY PARTS HAVE ACCESS TO THIS SELF AND ITS HEALING QUALITIES OF CURIOSITY, CONNECTEDNESS, COMPASSION, AND CALMNESS. IFS SEES THE THERAPIST'S JOB AS HELPING THE CLIENT TO DISENTANGLE THEMSELVES FROM THEIR PARTS AND ACCESS THE SELF, WHICH CAN THEN CONNECT WITH EACH PART AND HEAL IT.

THEN THE PARTS CAN LET GO OF THEIR DESTRUCTIVE ROLES AND ENTER INTO A HARMONIOUS COLLABORATION, LED BY THE SELF. IFS EXPLICITLY RECOGNIZES THE SPIRITUAL NATURE OF THE SELF, ALLOWING THE MODEL TO BE HELPFUL IN SPIRITUAL DEVELOPMENT AS WELL AS PSYCHOLOGICAL HEALING



THE CIRCUIT BOARD MODEL

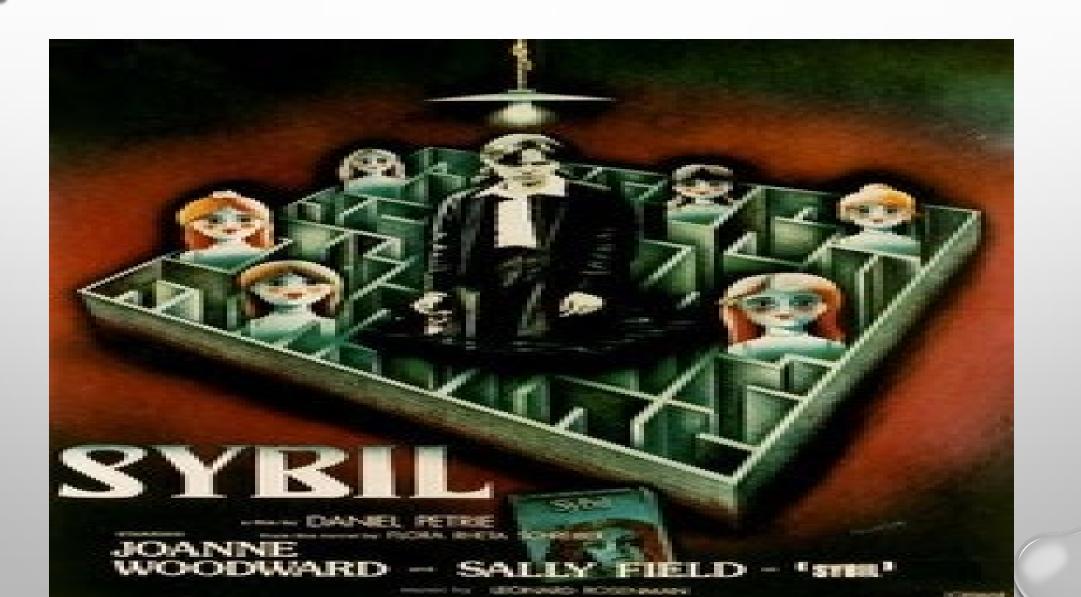




THE CIRCUIT BOARD MODEL



ONE METAPHOR



STATE SPECIFIC PROCESSING

WHEN A NEURAL NETWORK IS TURNED ON, IT CONTROLS THE WAY WE:

- THINK
- FEEL
- BEHAVE
- USE OUR BODIES
- RELATE TO THE WORLD AND OTHER PEOPLE

UNDERSTANDING STATE SPECIFIC PROCESSING / EXERCISE IN ALTERNATE HAND WRITING



4. AMNESIA

- WHILE AMNESIA MAY APPEAR TO BE CAUSED BY EXTINGUISHING THE NEURAL NETWORK, IT IS A VERY DIFFERENT PROCESS.
- SINCE PEOPLE WITH AMNESIA CAN RECOVER MEMORIES THAT SEEM TO BE LOST, WE KNOW
 THAT THE NEURAL NETWORK HAS REMAINED INTACT.
- WHAT HAS HAPPENED IS THAT IT IS UNAVAILABLE DUE TO DISSOCIATIVE PROCESSES.



MECHANISMS OF AMNESIA

- IS AMNESIA CAUSED BY DISSOCIATION, SUPPRESSION, OR REPRESSION?
- HOW ARE THEY SIMILAR?
- WHAT ARE THE DIFFERENCES?



SUPPRESSION AND REPRESSION

- THOUGH THESE TERMS ARE USED SYNONYMOUSLY, THEY DO NOT MEAN THE SAME THING. REPRESSION AND SUPPRESSION ARE DIFFERENT CONCEPTS ALTOGETHER.
- BOTH ARE DEFENSE MECHANISM OF THE PSYCHE. THEY PREVENT US FROM HAVING TO ACKNOWLEDGE PAINFUL EXPERIENCES AND EMOTIONS. BUT THERE IS A DIFFERENCE.

SUPPRESSION

- SUPPRESSION REFERS TO THE ACT OF CONSCIOUSLY SUPPRESSING ONE'S FEELINGS,
 THOUGHTS, AND WANTS. THIS MEANS THAT ONE IS AWARE THAT A PARTICULAR FEELING,
 THOUGHT, OR WANT HAS IS PRESENT AND ONE IS MAKING A DELIBERATE EFFORT TO NOT
 DWELL ON IT—ONE, BY NOT THINKING ABOUT IT (INTERNALLY) AND TWO, BY NOT ACTING
 ON IT (EXTERNALLY).
- THE REASONS FOR WHY THIS IS DONE COULD BE MANY—EITHER THE IMPULSE IS INAPPROPRIATE AND WRONG OR THERE MAY BE TIME CONSTRAINTS AT PLAY.
- WHATEVER THE CASE MAY BE, ONE YIELDS CONTROL OVER THEIR IMPULSES, AND FORCES THOSE IMPULSES TO LIE DORMANT. THUS, ONE IS ALSO AWARE OF THE POSSIBILITY THAT THESE IMPULSES AND THOUGHTS MIGHT BE PRESENT AGAIN, AND THAT THEY WILL NEED TO BE DEALT WITH AT THE TIME THAT THEY DO.



EXAMPLE OF SUPPRESSION

I suddenly realize that I'm hungry, but because I'm in class and can't do anything about it, I suppress the hunger pangs and concentrate on the remainder of the lecture.

REPRESSION

- REPRESSION REFERS TO THE **SUBCONSCIOUS** ACT OF NOT ACKNOWLEDGING OR ACTING UPON ONE'S FEELINGS, THOUGHTS, AND WANTS' SO MUCH SO THAT ONE DENIES THEIR VERY EXISTENCE.
- IN TERMS OF REPRESSION, THE PERSON IS NOT EVEN AWARE THAT THESE IMPULSES ARE PRESENT. THIS BECOMES POSSIBLE EITHER BECAUSE OF THE FORM THAT THEY TAKE MAKE WHICH CAN'T BE RECOGNIZED, OR BECAUSE THEY ARE COMPLETELY PROHIBITED FROM OUR AWARENESS BY THE SUBCONSCIOUS MIND. THE SUBCONSCIOUS MIND WILL BLOCK THESE IMPULSES BECAUSE THEY ARE VIEWED AS POTENTIALLY HARMFUL AND DISRUPTIVE TO ONE'S PSYCHOLOGICAL WELL-BEING, STABILITY, AND SELF-IMAGE.



EXAMPLE OF REPRESSION

Towards the end of the day, I suddenly start losing my temper and getting agitated and irritated about small things, getting into arguments with my co workers, and making silly mistakes at work. This is happening because I'm hungry and have nothing to eat. I am not even aware that this is the real reason and keep blaming 'the horrible day I'm having.



SUMMARY

- DISSOCIATION CAN LOOK LIKE AND/OR BE CAUSED BY SUPPRESSION OR REPRESSION
- BUT IT IS STILL DISSOCIATION

WHERE IS THE MIND?

MOST PEOPLE THINK OF THE MIND AS BEING LOCATED IN THE HEAD, BUT THE LATEST FINDINGS IN PHYSIOLOGY SUGGEST THAT THE MIND DOESN'T REALLY DWELL IN THE BRAIN BUT TRAVELS THE WHOLE BODY ON CARAVAN OF HORMONE AND ENZYME, BUSILY MAKING SENSE OF THE COMPOUND WONDERS WE CATALOGUE AS TOUCH, TASTE, SMELL.

DIANE ACKERMAN IN <u>A NATURAL HISTORY OF THE SENSES</u>



THE PRINCE OF TIDES (PREVIEW OF NEXT WEEK)

- BASED ON A BOOK BY PAT CONROY
- FILM CREDITS SCREENPLAY TO PAT CONROY AND BECKY JOHNSON
- DIRECTED BY BARBRA STRIESAND
- RELEASED IN 1991
- DESCRIBED IN WIKIPEDIA AS "AN AMERICAN ROMANTIC COMEDY" (HAH!!!!)
- NO ACADEMY AWARDS BUT NICK NOLTE RECEIVED THREE BEST ACTOR AWARDS FROM OTHER SOURCES



WHOSE WHO

SUBJECT

OBSERVER

INTERPRETER

RECORDER



CONROY OR STRIESAND?

- BARBRA STRISAND CONSULTED WITH DOCTORS AND THERAPIST FOR APPROXIMATELY SIX
 MONTH TO HELP CREATE A SENSE OF AUTHENTICITY FOR THE FILM.
- ALTHOUGH SHE DIDN'T RECEIVE ON-SCREEN CREDIT FOR IT, BARBRA STREISAND WAS ONE OF THE SCREENWRITERS OF THE FILM. IN AN ARTICLE IN US MAGAZINE IN 1992, PAT CONROY SAID" IT WAS THAT KIND OF AMAZING ATTENTION BARBRA GAVE TO DETAIL. SHE PUT HER MARK ON EVERYTHING . . . I'VE NEVER SEEN ANYONE GO THROUGH A TOTAL IMMERSION IN A PROJECT LIKE SHE DOES. . . I MEAN, HERE IS HOW MUCH INPUT I HAD ON THE SCRIPT---I THINK BARBRA ACTUALLY WROTE IT. SHE CERTAINLY WROTE MORE OF IT THAN I DID. . . SHE SHOULD HAVE TAKEN A SCREENWRITING CREDIT ON IT?



THE END

SEE YOU NEXT WEEK