

**UNDERSTANDING LIFE BACKWARD
BUT LIVING IT FORWARD:
Analyzing to Understand
but Envisioning Possibilities
to Incentivize Action**

MODEL 5 OF MY PSYCHODYNAMIC SYNERGY PARADIGM

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**LIFE CAN ONLY BE UNDERSTOOD BACKWARDS
– MODELS 1 – 4 –
BUT IT MUST BE LIVED FORWARDS
– MODEL 5 –**

SOREN KIERKEGAARD (1996)

**MY PSYCHODYNAMIC SYNERGY PARADIGM IS AN
INTEGRATIVE APPROACH TO HEALING, FEATURING FIVE
INTERDEPENDENT “MODES OF THERAPEUTIC ACTION”**

**CLASSICAL PSYCHOANALYTIC (MODEL 1)
SELF PSYCHOLOGICAL (MODEL 2)
CONTEMPORARY RELATIONAL (MODEL 3)
EXISTENTIAL – HUMANISTIC (MODEL 4)
QUANTUM – NEUROSCIENTIFIC (MODEL 5)**

**– ALL OF WHICH ARE DESIGNED TO ADVANCE THE PATIENT
FROM RIGID DEFENSE TO MORE FLEXIBLE ADAPTATION –**

THE FIVE MODELS ARE MUTUALLY ENHANCING (NOT MUTUALLY EXCLUSIVE)

**IN FACT, OVER THE COURSE OF A SESSION, ALL FIVE WILL MOST
LIKELY COME INTO PLAY (AT SOME POINT OR OTHER)**

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OUR FOCUS THIS MORNING WILL BE ON MODEL 5
WHEN THE PATIENT HAS ADVANCED TO GREATER

AWARENESS (MODEL 1)
ACCEPTANCE (MODEL 2)
ACCOUNTABILITY (MODEL 3)
AUTHENTICITY (MODEL 4)

BUT IS ENTRENCHED IN “ANALYSIS PARALYSIS”

MODEL 5 IS ABOUT ADVANCING THE “STUCK” PATIENT
FROM “INACTION” AND “THWARTED POTENTIAL”
TO “ACTION” AND “ACTUALIZATION OF POTENTIAL”

SUCH THAT THE PATIENT WILL NOW BE ABLE, FINALLY, TO

START HER OWN BUSINESS
MOVE FROM A HOMELESS SHELTER TO AN APARTMENT
GET OUT OF AN ABUSIVE RELATIONSHIP
LOSE THOSE LAST 10 POUNDS
ASK HIS BOSS FOR A RAISE
FINISH WRITING HER DISSERTATION

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WHEREAS THE PSYCHODYNAMICALLY INFORMED
MODELS 1–4 FOCUS ON THE RELATIONSHIP
BETWEEN THE PAST AND THE PRESENT,

MODEL 5

IN THE TRADITION OF SHORT-TERM INTENSIVE TREATMENTS
LIKE IFS, ACT, EMDR, ISTDP, AND AEDP
FOCUSES ON THE RELATIONSHIP
BETWEEN THE PRESENT AND THE FUTURE

MORE SPECIFICALLY

MODEL 5 ENCOURAGES THE PATIENT
TO “LEAN INTO THE EDGE”
BETWEEN THE PRESENT AND THE FUTURE

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WHEREAS MODELS 1 – 4
FOCUS ON OUR HISTORY AS OUR DESTINY
– WHICH WE ARE CONDEMNED TO REPEAT IF WE CANNOT REMEMBER IT –
MODEL 5 FOCUSES ON OUR DESTINY AS OUR CHOICE
IF WE CAN BUT
(1) ENVISION “SOMETHING NEW AND BETTER” FOR OUR FUTURE,
(2) OWN OUR NEED THEREFORE TO CHANGE, AND
(3) COMMIT TO ACTING IN ALIGNMENT WITH
WHAT MOST MATTERS TO US GOING FORWARD
ACT REFERS TO “CHOICE POINTS”
THAT IS, MOMENTS IN TIME WHEN WE CAN
CHOOSE ACTIONS THAT MOVE US EITHER
TOWARD OUR VALUES OR AWAY FROM THEM
INDEED, MODEL 5 IS ABOUT CHOOSING ACTIONS
THAT MOVE US TOWARD WHAT MOST MATTERS TO US
IN THE WORDS OF THE CULTURAL ICON YOGI BERRA
“WHEN YOU COME TO A FORK IN THE ROAD, TAKE IT!”

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WHEREAS MODELS 1 – 4 FOCUS
ON “DON’T RECREATE *OLD BAD*” IN THE PRESENT
MODEL 5 FOCUSES
ON “DO CREATE *NEW GOOD*” IN THE FUTURE
I AM HERE REMINDED OF THE STORY ABOUT
A QUICK – WITTED DENTAL HYGIENIST WHO, WHEN ASKED,
“DO YOU REALLY NEED TO FLOSS ALL YOUR TEETH?”
PROMPTLY QUIPPED,
“ONLY FLOSS THE ONES YOU WANT TO KEEP”
BY THE SAME TOKEN
ONLY TAKE RESPONSIBILITY FOR YOUR DESTINY
IF YOU WANT TO GET SOMEWHERE IN YOUR LIFE
BECAUSE IF YOU DON’T,
IT’S LIKE GETTING INTO YOUR CAR AND JUST DRIVING,
WITH NO PARTICULAR DESTINATION IN MIND

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THE RECENT ADDITION OF THE BRAIN – BASED MODEL 5
TO MY PSYCHODYNAMIC SYNERGY PARADIGM
WAS INSPIRED BY MY DEEP – DIVE IMMERSION
IN THE CUTTING – EDGE RESEARCH NOW BEING DONE
ON “THERAPEUTIC MEMORY RECONSOLIDATION”
AND “NEUROPLASTICITY”

IN FACT, OVER THE COURSE OF THE PAST TWO DECADES,
COGNITIVE NEUROSCIENTISTS
HAVE DISCOVERED THAT
– UNDER CERTAIN CIRCUMSTANCES –
A BRIEF “WINDOW OF OPPORTUNITY”
WILL OPEN UP IN THE BRAIN
DURING WHICH TIME NEURAL SYNAPSES
– ENCODING DEEPLY EMBEDDED TRAUMATIC MEMORIES –
WILL BECOME TEMPORARILY
“UNLOCKED” OR “DECONSOLIDATED”

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MODEL 5 CAPITALIZES UPON THIS TRANSIENT
“RECONSOLIDATION WINDOW”
TO EXPEDITE REPLACEMENT OF OUTDATED,
MALADAPTIVE, FEAR – INFUSED, PAST – FOCUSED,
IMMOBILIZING TRAUMATIC NARRATIVES THAT
“LIMIT POSSIBILITIES” AND “RESTRICT ACTION”
WITH UPDATED, MORE REALITY – BASED,
MORE HOPEFUL, FUTURE – ORIENTED,
INCENTIVIZING NARRATIVES THAT
“OFFER LIMITLESS POSSIBILITIES” AND “INSPIRE ACTION”
MORE SPECIFICALLY
AT VARIOUS POINTS DURING THE TREATMENT
WHEN THE PATIENT HAS COME TO
“UNDERSTAND HER LIFE BACKWARD”
BUT IS STILL “STUCK” IN HER LIFE
– “ANALYSIS PARALYSIS” –
MODEL 5 AND “LIVING LIFE FORWARD”
CAN BE INTRODUCED IN ORDER TO JUMPSTART ACTION

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MODEL 5 INVOLVES THE CO – CONSTRUCTION
– BY BOTH PATIENT AND THERAPIST –
OF A SERIES OF “QUANTUM DISENTANGLEMENT STATEMENTS”
– OFTEN WRITTEN DOWN AND EVEN RECORDED FOR LATER USE –
STATEMENTS
– AND VARIATIONS THEREOF –
THAT THE PATIENT REPEATS OVER AND OVER AGAIN
– WITH EMBODIED EMOTION AND IN RAPID – FIRE SUCCESSION –
THESE STATEMENTS
ARE STRATEGICALLY DESIGNED TO JUXTAPOSE
– REPEATEDLY AND DRAMATICALLY –
THE PATIENT’S *OLD BAD* LEARNED EXPECTATIONS
OF “SAME OLD SAME OLD”
WITH *NEW GOOD* ENVISIONED POSSIBILITIES
OF “SOMETHING NEW AND BETTER”
IN THE SERVICE OF CREATING
JOLTING “MISMATCH EXPERIENCES”
– “VIOLATIONS OF EXPECTATION” –

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EMDR IS A BRAIN – BASED STRATEGY THAT IS USED
TO DESENSITIZE AND REPROCESS TRAUMATIC MEMORIES
IT CAPITALIZES UPON THE USE OF
“BILATERAL ALTERNATING STIMULATION”
TO ENGAGE BOTH SIDES OF THE BRAIN
THEREBY BRINGING TO BEAR THE RATIONALITY AND PERSPECTIVE
OF THE PRESENT – FOCUSED LEFT BRAIN
ON TRAUMATIC MEMORIES STORED, UNPROCESSED,
IN THE PAST – FOCUSED RIGHT BRAIN
EMDR INVOLVES
ALTERNATELY, REPETITIVELY, AND RHYTHMICALLY
STIMULATING BOTH SIDES OF THE PATIENT’S BRAIN
– PAST – FOCUSED *OLD BAD* / PRESENT – FOCUSED *NEW GOOD* –
SIMILARLY
MODEL 5 “QUANTUM DISENTANGLEMENT STATEMENTS”
ALTERNATELY, REPETITIVELY, AND RHYTHMICALLY
JUXTAPOSE “OLD BAD” AND “NEW GOOD”
EXCEPT THAT NOW THE JUXTAPOSITION IS OF
PAST – FOCUSED *OLD BAD* / FUTURE – FOCUSED *NEW GOOD*

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IN ESSENCE
AGAINST THE BACKDROP OF RE – EXPERIENCING
– IN A COGNITIVE – EXPERIENTIAL – VISCERAL FASHION –
REACTIVATED *OLD BAD*
THE PATIENT
(1) ENVISIONS, (2) REPOSITIONS, AND (3) COMMITS
IT IS FOR THIS REASON
THAT I DESCRIBE MODEL 5 AS
A QUANTUM – NEUROSCIENTIFIC APPROACH
TO HEALING TRAUMA
BECAUSE IT INVOLVES THE QUANTUM CONCEPTS OF
“QUANTUM DISENTANGLEMENT”
AND “LIMITLESS POSSIBILITIES”
AND THE NEUROSCIENTIFIC CONCEPTS OF
“THERAPEUTIC MEMORY RECONSOLIDATION”
AND “SYNAPTIC PLASTICITY”

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IN THE 1960s, RICHARD RUBIN – RUBIN, FRIED, AND FRANKS (1969) –
CONDUCTED A CLEVER EXPERIMENT DESIGNED
TO CHALLENGE THE TIME – HONORED BELIEF THAT MEMORIES
– ONCE CONSOLIDATED IN LONG – TERM MEMORY –
WERE INDELIBLE
RUBIN CAME UP WITH THE INGENIOUS IDEA OF
CAPITALIZING UPON THE WELL – KNOWN “RETROGRADE AMNESIA”
CAUSED BY ELECTROCONVULSIVE THERAPY (ECT)
– DIFFICULTY RECALLING MEMORIES THAT HAD BEEN FORMED
IMMEDIATELY PRIOR TO THE EVENT CAUSING THE AMNESIA –
ORDINARILY, WHEN ECT IS BEING ADMINISTERED,
PATIENTS ARE ANESTHETIZED AND, THEREFORE, UNCONSCIOUS
BUT RUBIN DECIDED TO CONDUCT HIS EXPERIMENT ON PATIENTS
– WITH LONGSTANDING OBSESSIONS, DELUSIONS, AND HALLUCINATIONS –
WHO WOULD RECEIVE ECT WHILE AWAKE AND WHILE FOCUSING
THEIR ATTENTION ON THEIR “MOST DISTURBING FEELINGS AND IMAGERY”
DURING THEIR TREATMENTS
HE HYPOTHEZIZED THAT HAVING THE PATIENTS HOLD IN MIND
THEIR DISTRESSING SYMPTOMS WOULD RETURN THE NEURAL NETWORKS
ENCODING THOSE SYMPTOMS TO A MALLEABLE STATE
– WHICH WOULD THEN RENDER THE CIRCUITS VULNERABLE TO BEING DISRUPTED –

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OF THE 15 PATIENTS IN RUBIN'S STUDY,
SEVEN HAD BEEN PREVIOUSLY TREATED UNSUCCESSFULLY WITH ECT
- SO THOSE SEVEN PATIENTS SERVED AS THEIR OWN CONTROLS -
AFTER A SINGLE TREATMENT WITH ECT (WHILE AWAKE),
ALL 15 OF THE PATIENTS "IMPROVED DRAMATICALLY"
FOR ANYWHERE FROM THREE MONTHS TO THREE YEARS
- THE DURATION OF THE STUDY -
RUBIN CONCLUDED THAT HIS STUDY WAS PROOF THAT,
AT LEAST IN PRINCIPLE, THE MENTAL SCHEMAS ENCODING
THE SYMPTOMS MUST HAVE BEEN ENTIRELY ERADICATED
BECAUSE TREATMENT WITH ECT
PROMPTED COMPLETE REMISSION OF SYMPTOMS
ONLY WHEN THOSE MENTAL SCHEMAS
WERE BEING REACTIVATED IN PATIENTS
WHO WERE AWAKE DURING THE ECT
- AND NOT WHEN THEY WERE UNCONSCIOUS -
ALTHOUGH PUBLISHED IN A PEER-REVIEWED JOURNAL
RUBIN'S TRAILBLAZING STUDY WAS UNFORTUNATELY IGNORED
BY THE SCIENTIFIC COMMUNITY AND NOT APPRECIATED
AT THE TIME FOR THE SIGNIFICANCE IT WAS LATER TO ASSUME

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PARENTHETICALLY
ALTHOUGH RUBIN'S BRILLIANTLY CONCEIVED STUDY
APPEARED TO DEMONSTRATE THE OBLITERATION OF *OLD BAD*,
IT DID NOT SPECIFICALLY ADDRESS THE INTRODUCTION OF *NEW GOOD*
IN OTHER WORDS
ALTHOUGH THE PATIENTS APPEARED TO BE RELEASED FROM THE
TYRANNY OF THEIR OBSESSIONS, DELUSIONS, AND HALLUCINATIONS,
IT WAS NOT CLEAR WHAT
- IF ANYTHING -
GOT LOCKED IN, OR RECONSOLIDATED, IN THE PLACE OF
THOSE DISTORTED PERCEPTIONS OF REALITY
A SIDE NOTE
I HAVE A FRIEND WHO HAS SUFFERED FOR A LONG TIME FROM PERIODIC BOUTS
OF SEVERE DEPRESSION AND OBSESSIVE THOUGHTS ABOUT SUICIDE
SOMEWHAT IN DESPERATION, SHE AND HER THERAPIST
DECIDED TO TRY HER ON KETAMINE-ASSISTED INJECTIONS
- ULTIMATELY, SIX TREATMENTS OVER THE COURSE OF THREE WEEKS -
I SUGGESTED THAT SHE CONSIDER SUMMONING TO MIND HER DARK THOUGHTS
AND SUICIDAL IDEATION JUST PRIOR TO RECEIVING THE INJECTIONS
WE DON'T KNOW IF THAT IS WHAT MADE THE DIFFERENCE, BUT I AM PLEASED
TO REPORT THAT BOTH SHE AND HER THERAPIST HAVE BEEN SHOCKED
TO SEE HOW WELL SHE - THESE SOME MONTHS LATER - IS DOING

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AS NOTED EARLIER, RUBIN'S PIONEERING STUDY WAS PRETTY MUCH IGNORED AT THE TIME – AND, FOR THE MOST PART, NEUROSCIENTISTS CONTINUED TO BELIEVE THAT ONCE A NEW EXPERIENCE – ESPECIALLY A TRAUMATIC ONE – HAD BEEN STORED IN LONG – TERM MEMORY, IT WOULD BE PERMANENTLY INSTALLED PERHAPS IT COULD THEN BE MODIFIED BY SUBSEQUENT EXPERIENCES, BUT ITS ESSENCE WOULD NONETHELESS REMAIN INTACT, LURKING JUST BENEATH THE SURFACE AS A SOMATIC MEMORY EVER VULNERABLE TO BEING REACTIVATED AND RE – EXPERIENCED – THEREBY REINFORCING ITS INTENSITY – BEFORE ONCE AGAIN RETURNING TO BODY CONSCIOUSNESS

“NEURONS THAT FIRE TOGETHER, WIRE TOGETHER”
DONALD HEBB (1949)

REACTIVATED AND RE – EXPERIENCED MEMORIES ARE REINFORCED THROUGH REPETITION – NOT RESOLVED

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BUT IF WE ARE EVER BUSY “RESONATING EMPATHICALLY” WITH THE PATIENT AS SHE REMEMBERS AND RELIVES TRAUMATIC EXPERIENCES, THEN DO WE NOT RUN THE RISK OF INADVERTENTLY REINFORCING THOSE EXPERIENCES WITHOUT ACTUALLY RESOLVING THEM?

IN OTHER WORDS

IF ALL WE DO IS TO “SUPPORT” THE PATIENT AS SHE REMEMBERS AND RELIVES HER EARLY – ON TRAUMAS, THEN ARE WE NOT POTENTIALLY CREATING A SITUATION – OVER THE LONG TERM – OF “ANALYSIS PARALYSIS”?

WHEREBY THE PATIENT WILL FEEL WONDERFULLY “SUPPORTED” BUT WILL BECOME EVER – MORE ENTRENCHED IN HER TRAUMAS AND THE MALADAPTIVE, DISEMPowering NARRATIVES TO WHICH THOSE TRAUMAS HAVE GIVEN RISE

BECAUSE THERE WILL BE NO “CHALLENGE” TO THOSE *OLD BAD* NARRATIVES WITH *NEW GOOD* ANTIDOTES OFFERED AS POSSIBLE ALTERNATIVES

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BUT THANKS TO THE
DETERMINED RESEARCH EFFORTS
OF CUTTING – EDGE NEUROSCIENTISTS
OVER THE COURSE OF THE PAST TWO DECADES
WE NOW KNOW THAT HEBB’S POSTULATE
– “NEURONS THAT FIRE TOGETHER, WIRE TOGETHER” –
DOES NOT TELL THE WHOLE STORY
AND THAT “CHALLENGE”
IN COMBINATION WITH “SUPPORT”
WILL CREATE
BOTH “IMPETUS” AND “OPPORTUNITY”
FOR THE “LOCKING IN”
– OR “RECONSOLIDATION” –
OF UPDATED, MORE ADAPTIVE,
AND MORE EMPOWERING NARRATIVES
– IN THE PLACE OF THE OUTDATED,
MALADAPTIVE, AND DISEMPowering NARRATIVES –

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INDEED
THE THERAPEUTIC ACTION
IN MY NEWLY MINTED MODEL 5
INSPIRED AS IT WAS BY POWERFULLY IMPACTFUL,
SHORT – TERM, TARGETED TREATMENTS
– LIKE IFS, ACT, EMDR, ISTDP, AND AEDP –
INVOLVES THE
REPEATED AND DECISIVE CHALLENGING
OF *OLD BAD* TRAUMATIC MEMORIES
WITH *NEW GOOD* ENVISIONED POSSIBILITIES
SUCH THAT JOLTING
“MISMATCH EXPERIENCES”
WILL BE CREATED THAT
INCENTIVIZE ACTION

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OVER THE COURSE OF THE PAST 20 YEARS
A DEDICATED GROUP OF TRAILBLAZING
COGNITIVE NEUROSCIENTISTS
– DISSATISFIED WITH THE DETERMINISTIC IDEA
THAT MEMORIES ARE FOREVER –
HAVE BEEN USING ADVANCED NEUROIMAGING TECHNIQUES
– INCLUDING FUNCTIONAL MRIs, SCANNING MICROSCOPY,
AND AN AMAZING NEW TECHNOLOGY CALLED OPTOGENETICS –
TO MAP OUT WHAT HAPPENS IN THE BRAIN
WHEN A THOUGHT IS BEING THOUGHT, A FEELING FELT,
OR A MEMORY REMEMBERED
THEIR FOCUS HAS BEEN ON HOW OLD MEMORIES
CONSOLIDATED IN LONG – TERM MEMORY AND DISTRIBUTED
IN NETWORKS THROUGHOUT THE CORTEX AND THE LIMBIC SYSTEM
INCLUDING THE DORSOLATERAL PREFRONTAL CORTEX,
HIPPOCAMPUS, AND AMYGDALAE
CAN BE UPDATED AND RECONSOLIDATED

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INDEED
THESE RESEARCHERS ARE DISCOVERING THAT THE BRAIN
– IN RESPONSE TO NEW EXPERIENCE
AND IN ORDER TO STAY CURRENT AND RELEVANT –
IS CONTINUOUSLY ADAPTING
BY MODIFYING ITSELF
AT THE LEVEL
OF THE NEURAL SYNAPSE
THIS LEARNING PROCESS
– INVOLVING BOTH THE DESTRUCTION OF OLD NEURAL NETWORKS
AND THE CONSTRUCTION OF NEW ONES –
SPEAKS TO THE ADAPTIVE CAPACITY OF THE BRAIN
AND THE DYNAMIC NATURE OF MEMORY
IN ESSENCE
THE BRAIN'S REMARKABLE NEUROPLASTICITY
... APTLY DESCRIBED BY THE PSYCHIATRIST NORMAN DOIDGE AS
"THE BRAIN THAT CHANGES ITSELF"

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MORE SPECIFICALLY
NEUROSCIENTISTS HAVE RECENTLY MADE
THE GROUNDBREAKING DISCOVERY
THAT WHEN MEMORIES ARE
REACTIVATED AND RE – EXPERIENCED,
THE NETWORK OF SYNAPSES
ENCODING THOSE MEMORIES
WILL BECOME “UNLOCKED”
FOR A TIME – LIMITED PERIOD
THIS “UNLOCKING” – OR “DECONSOLIDATION” – SIGNALS
THE OPENING UP OF A “RECONSOLIDATION WINDOW”
A BRIEF WINDOW OF OPPORTUNITY
WHEN MEMORIES BECOME
TRANSIENTLY FRAGILE
AND SENSITIVE TO MODIFICATION
BY ENVIRONMENTAL INPUT

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BOTH THIS DEDICATED GROUP
OF COGNITIVE NEUROSCIENTISTS
WHO STUDY MEMORY RECONSOLIDATION
IN THEIR LABORATORIES
AND THE SIMILARLY IMPASSIONED GROUP
– SPEARHEADED BY BRUCE ECKER AND DAVID FEINSTEIN –
OF NEUROSCIENTIFICALLY INCLINED CLINICIANS
WHO STUDY IT IN THEIR OFFICES
AGREE THAT 4 – 6 HOURS IS THE CRITICAL TIME FRAME
FOR THE DESTABILIZED SYNAPSES
ENCODING TRAUMATIC MEMORIES
TO REMAIN MALLEABLE
AND, THEREFORE, OPEN TO BEING UPDATED BY
EITHER THE ACTUAL EXPERIENCE OF SOMETHING NEW
OR SIMPLY THE ENVISIONING OF IT
SUCH THAT
– WHEN CERTAIN CONDITIONS ARE MET –
THOSE SYNAPSES CAN BE REWIRED
AND THE TRAUMATIC MEMORIES THEY ENCODE REPROGRAMMED

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INDEED
NEUROIMAGING STUDIES DEMONSTRATE
THAT OPENING THE TRANSIENT
4 – 6 HOUR RECONSOLIDATION WINDOW
IS INITIATED BY THE ACTION
OF SEVERAL TYPES OF GLIAL CELLS
RESIDING IN THE BRAIN'S EXTRACELLULAR MATRIX

THESE NEUROIMMUNE CELLS
– PRIMARILY ASTROCYTES AND MICROGLIA –
ARE NOW KNOWN TO PLAY THE CRITICALLY IMPORTANT ROLE
OF REGULATING SYNAPTIC CONNECTIVITY

THEY DO THIS BY WAY OF
ALTERNATELY CONTRACTING AND EXPANDING

SO, WHEN A MEMORY IS REACTIVATED,
THE GLIAL CELLS SURROUNDING THE SYNAPTIC JUNCTION
WILL CONTRACT AND THE COMPLEX WEB OF SYNAPSES
ENCODING THE REACTIVATED MEMORY WILL BECOME
TEMPORARILY “UNLOCKED” – OR “DECONSOLIDATED” –
SUCH THAT SOMETHING NEW CAN BE INTRODUCED

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IF THAT SOMETHING NEW IS A POSITIVE EXPERIENCE
THAT DISCONFIRMS THE CONDITIONED EXPECTATION
OF SOMETHING NEGATIVE

AND IF THAT MISMATCH IS PRESENTED REPEATEDLY ENOUGH,
ABRUPTLY ENOUGH, AND FORCEFULLY ENOUGH
WITHIN THE TIME – LIMITED PERIOD OF 4 – 6 HOURS,

THEN THE NEW EXPERIENCE
– AND THE FRESH PERSPECTIVES TO WHICH IT GIVES RISE –

WILL ULTIMATELY OVERRIDE
THE TEMPORARILY DESTABILIZED SYNAPSES

AND PROMPT, IN THEIR PLACE,
THE “LOCKING IN” – OR “RECONSOLIDATION” – OF
NEW SYNAPSES ENCODING UPDATED NARRATIVES

AS THE GLIAL CELLS EXPAND
– THEREBY RETURNING TO THEIR ORIGINAL (SWOLLEN) STATE –

... SO NAMED BECAUSE GLIA
DERIVES FROM THE GREEK WORD FOR “GLUE”

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BUT FOR THIS “LOCKING IN” – OR “RECONSOLIDATION” – TO OCCUR
THERE MUST BE REPEATED AND DRAMATIC JUXTAPOSITION
OF *OLD BAD* LEARNED EXPECTATIONS
WITH *NEW GOOD* ENVISIONED POSSIBILITIES,
SUCH THAT THERE WILL BE JOLTING
– AND TRANSFORMATIONAL –
“VIOLATIONS OF EXPECTATION”
IN THE NEUROSCIENTIFIC LITERATURE
“VIOLATIONS OF EXPECTATION” ARE REFERRED TO
AS “PREDICTION ERRORS” OR “NOVELTY DETECTION”
IN THE CLINICAL LITERATURE
THEY ARE REFERRED TO AS “JUXTAPOSITION EXPERIENCES”
OR “DISCONFIRMATORY MISMATCHES”
THE IDEA THAT ABRUPTLY, RAPIDLY, UNEXPECTEDLY, AND DECISIVELY
INTRODUCING AN ELEMENT OF SURPRISE IN ORDER TO PROVOKE CHANGE
CERTAINLY MAKES INTUITIVE SENSE, AS DOES THE IDEA THAT WHEN NEW
INFORMATION DIRECTLY CONTRADICTING A PREVIOUS LEARNING IS
REPEATEDLY JUXTAPOSED WITH WHAT HAD COME TO BE EXPECTED, THE
OLD MEMORY WILL EVENTUALLY BE FORCED ADAPTIVELY TO UPDATE ITSELF

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IN ESSENCE
THERAPEUTIC MEMORY RECONSOLIDATION
WILL BE TAKING PLACE
ONCE THE GLIAL CELLS
RETURN TO THEIR SWOLLEN STATE
AND “LOCK IN” – OR “RECONSOLIDATE” –
A MORE RELEVANT NARRATIVE
THAT REFLECTS A FRESH, MORE ADAPTIVE,
MORE REALITY – BASED PERSPECTIVE
A NARRATIVE THAT WILL THEN BECOME INCORPORATED
INTO THE INTRINSIC FABRIC OF THE PATIENT’S LIFE
AND, GOING FORWARD, BECOME THE NEW FILTER
THROUGH WHICH THE PATIENT
WILL EXPERIENCE SELF, OTHERS, AND THE WORLD
BUT THIS NEW DOOR CAN OPEN
ONLY ONCE AN OLD ONE CLOSES
“TO LEARN WE MUST FIRST FORGET”
IRYNA ETHELL (2018)

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PARENTHETICALLY
THINK ABOUT WHAT MIGHT HAPPEN
WERE THE NEW EXPERIENCE BEING INTRODUCED
TO BE “NOT POSITIVE” BUT “NEGATIVE”
AND WERE IT TO BE REPEATEDLY
AND FORCEFULLY PRESENTED
DURING THE CRITICAL PERIOD OF 4–6 HOURS
THE NARRATIVE REPLACING THE ORIGINAL NARRATIVE
WOULD BE CALLED, OF COURSE, A “FALSE MEMORY”
– IN ESSENCE, A FALSE (NEGATIVE) MEMORY –

DECADES AGO
THE PSYCHOLOGIST AND MEMORY EXPERT SAUL KASSIN
INVESTIGATED THE REACTIONS OF SUBJECTS
FALSELY ACCUSED OF HAVING DAMAGED
A COMPUTER BY PRESSING THE WRONG KEY

THE PARTICIPANTS
– ALL OF WHOM WERE INDEED INNOCENT –
INITIALLY DENIED THE CHARGE ...

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... BUT WHEN THE EXPERIMENTER’S ACCOMPLICE
ALLEGED THAT SHE HAD WITNESSED
THEIR PRESSING OF THE WRONG KEY,
MANY OF THE HAPLESS PARTICIPANTS
SIGNED A WRITTEN CONFESSION
AND PROCEEDED TO CONFABULATE DETAILS
CORROBORATING THEIR INTERNALIZED GUILT

APPARENTLY
FALSE CONFESSIONS ARE NOT ALL THAT RARE

IN FACT, KASSIN
– WHO HAS STUDIED POLICE INTERROGATIONS FOR DECADES
AND IS AN ADVOCATE FOR OVERTURNING WRONGFUL CONVICTIONS –
HYPOTHESIZES THAT MORE THAN 25%
OF THE 365 (INNOCENT) PEOPLE
EXONERATED IN THE LAST SOME YEARS
BY THE INNOCENCE PROJECT
HAD ACTUALLY CONFESSED TO THEIR ALLEGED CRIMES
SO, THE “RECONSOLIDATION WINDOW” CREATES OPPORTUNITY FOR THE
INTRODUCTION OF BOTH “POSITIVE” AND “NEGATIVE” MEMORIES

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ON A RELATED VEIN
THE BRAIN CAN CHANGE ITSELF IN RESPONSE
NOT ONLY TO EXPERIENCING SOMETHING NEW
BUT ALSO TO IMAGINING SOMETHING NEW

IN FACT
A GROWING BODY OF EVIDENCE SUPPORTS THE FINDING
THAT SIMPLY VISUALIZING (OR ENVISIONING) SOMETHING
– EVEN THOUGH IT OCCURS ENTIRELY IN THE MIND –
IS SOMETIMES ALMOST AS EFFECTIVE AS ACTUALLY DOING IT
ACCORDING TO RESEARCH BEING DONE AT THE CLEVELAND CLINIC
RANGANATHAN et al. (2004)
PARTICIPANTS WERE ABLE TO STRENGTHEN MUSCLES
JUST BY VISUALIZING PHYSICAL MOVEMENT

THIS IMPACT SIMPLY REQUIRED CONCENTRATED “MENTAL PRACTICE”
– THE COGNITIVE REHEARSAL OF A PHYSICAL ACTIVITY WITHOUT MOVEMENT –
ONE STUDY DEMONSTRATED THAT IF SUBJECTS WANTING TO MASTER
A PARTICULAR SKILL WERE ABLE TO VISUALIZE MASTERY OF IT
THEY WOULD BE ABLE TO DECREASE BY 50%
THE NUMBER OF ACTUAL PRACTICE HOURS REQUIRED

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WHEN THERAPEUTIC MEMORY RECONSOLIDATION
UPDATES A TRAUMATIC MEMORY,
WHAT IS IT THAT CHANGES?
AND WHAT IS IT THAT REMAINS THE SAME?

IMPORTANTLY
THE FACT OF THE EVENT UNDERLYING
THE TRAUMATIC MEMORY WILL NOT CHANGE

THAT IS
THE EPISODIC MEMORY ITSELF WILL REMAIN INTACT

WHAT WILL CHANGE, HOWEVER, WILL BE
THE BODY’S MEMORY OF THE TRAUMA,
ITS EMOTIONAL CHARGE, AND THE NARRATIVES
TO WHICH THE TRAUMA HAS GIVEN RISE

IN OTHER WORDS
HOW THE PATIENT POSITIONS HERSELF
IN RELATION TO THE TRAUMATIC EXPERIENCE
– HOW SHE CONTEXTUALIZES IT –
WILL CHANGE

FROM TRAUMA VICTIM TO TRAUMA SURVIVOR

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IMPORTANTLY
WHEREAS REFINEMENT OF ALREADY EXISTING NEURAL NETWORKS
- REFERRED TO AS "MEMORY INTEGRATION" IN THE SCIENTIFIC LITERATURE -
DOES NOT REQUIRE THE SYNTHESIS OF NEW PROTEINS (MODELS 1 - 4),
ERASURE OF OUTDATED MEMORIES AND THEIR REPLACEMENT
WITH NEW, MORE UPDATED MEMORIES
- "MEMORY RECONSOLIDATION" -
DOES APPEAR TO INVOLVE DE NOVO PROTEIN SYNTHESIS (MODEL 5)
BACKING UP FOR A MOMENT
THE CONSOLIDATION OF LABILE, SHORT - TERM MEMORY
INTO MORE STABLE, LONG - TERM MEMORY
- THAT IS, LONG - TERM POTENTIATION -
REQUIRES THE SYNTHESIS OF NEW PROTEINS
ON THE POSTSYNAPTIC MEMBRANES OF THE DOWNSTREAM NEURONS
IN ORDER BOTH TO REINFORCE THE FRAGILE MEMORY TRACES
- OR ENGRAMS -
AND TO FACILITATE THEIR TRANSFER
FROM SHORT - TERM STORAGE IN THE HIPPOCAMPUS
TO LONG - TERM STORAGE IN DISTRIBUTED NETWORKS IN THE NEOCORTEX
ALBERINI (2005); GOLD (2008); GISQUET - VERRIER et al. (2015)

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SO, TOO, MEMORY RECONSOLIDATION
INVOLVES DE NOVO SYNTHESIS
OF RECEPTOR PROTEINS
ON THE POSTSYNAPTIC MEMBRANES
OF THE TARGET CELLS IN THE CORTICOLIMBIC SYSTEM
RESPONSIBLE FOR LEARNING AND MEMORY
NOT SURPRISINGLY
STUDIES HAVE CONFIRMED THAT MEMORY RECONSOLIDATION
- LIKE MEMORY CONSOLIDATION -
IS BLOCKED BY PROTEIN SYNTHESIS INHIBITORS
- SUCH AS THE ANTIBIOTIC ANISOMYCIN -
MORE SPECIFICALLY
IF PROTEIN SYNTHESIS IS INHIBITED WITHIN A FEW HOURS
AFTER A NEW LEARNING HAS OCCURRED,
THEN WHAT HAD BEEN NEWLY LEARNED
NEVER ACTUALLY GETS "LOCKED IN"
- THAT IS, NEITHER CONSOLIDATED NOR RECONSOLIDATED -
AND IS ESSENTIALLY FORGOTTEN
NADER et al. (2000); ALBERINI et al. (2006)

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THIS DISCOVERY THAT PROTEIN SYNTHESIS
IS REQUIRED FOR THE FORMATION OF MEMORIES
WAS THE RESULT OF LABORATORY EXPERIMENTS
CONDUCTED IN THE 1990s ON RODENTS THAT
DID NOT THEN REINTEGRATE A LEARNED FEAR
- WHEN EXPOSED TO CHEMICAL AGENTS THAT DISRUPTED PROTEIN SYNTHESIS -
UNFORTUNATELY
BECAUSE ANISOMYCIN IS TOXIC IN HUMANS,
IT HAS ONLY LIMITED USEFULNESS IN STUDIES ON PEOPLE
EVEN SO
INJECTING ANISOMYCIN INTO THE HIPPOCAMPUS
- WHICH PLAYS SUCH AN IMPORTANT ROLE IN THE CONSOLIDATION
OF INFORMATION FROM SHORT - TERM MEMORY TO LONG - TERM MEMORY -
HAS BEEN RATHER BOLDLY PROPOSED
BY SEVERAL INVESTIGATORS
FOR SELECTIVE REMOVAL OF TRAUMATIC MEMORIES

WANG et al. (2005)

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IN THE TRADITION OF OTHER ACTION - BASED, SOLUTION - FOCUSED,
GOAL - DIRECTED, FUTURE - ORIENTED MODELS
MODEL 5 FOCUSES ON
ENVISIONED POSSIBILITIES
TAKING OWNERSHIP OF THE NEED TO CHANGE
SETTING COHERENT AND EMBODIED INTENTION
COMMITTING TO ACTION
SELF - EMPOWERMENT
PERSONAL AGENCY
FREEDOM / CHOICE
CREATING ONE'S DESTINY
REALIZING ONE'S DREAMS
ACTUALIZING ONE'S POTENTIAL
MODEL 5 IS NOT DETERMINISTIC -
IT IS A CONSTRUCTIVIST MODEL
EMPOWERING AND INSPIRING OF HOPE
THE THERAPIST LEADS AND THE PATIENT FOLLOWS
BUT, TOGETHER, THEY ARE CO - CREATING THE PATIENT'S FUTURE
AND IT TAKES A LOT OF CONCENTRATED EFFORT AND HARD WORK

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IN ESSENCE
IN MODEL 5 THE ADAPTIVE UPDATING OF NARRATIVES
RESULTS FROM ONGOING, DRAMATIC, AND EMBODIED
CHALLENGING OF PRECONCEIVED, ILL – FOUNDED ASSUMPTIONS
WITH NEW, MORE RELEVANT EXPERIENCES
– WHETHER REAL OR SIMPLY ENVISIONED –
THAT VIOLATE THOSE EXPECTATIONS
SUCH THAT THE OUTDATED, CONDITIONED RESPONSES
WILL BE DISCONFIRMED AND OVERRIDDEN
BY FRESH, MORE REALITY – BASED, SOLUTION – FOCUSED,
AND FUTURE – ORIENTED PERSPECTIVES

AS A THERAPIST,
I FOLLOW THE TRAIL OF TEARS TO HEALING
– MODELS 1 – 4 –
AS A COACH,
I FOLLOW THE TRAIL OF DREAMS TO ACTUALIZATION
– MODEL 5 –

CAROL KAUFFMAN (2006)

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LIFE CAN ONLY BE UNDERSTOOD BACKWARDS
– MODELS 1 – 4 –
BUT IT MUST BE LIVED FORWARDS
– MODEL 5 –

SOREN KIERKEGAARD (1996)

THE RECENT ADDITION OF MODEL 5
TO MY PSYCHODYNAMIC SYNERGY PARADIGM
– ALMOST 30 YEARS AFTER THE FIRST MODELS WERE CONCEIVED –
IS INDEED IN THE TRADITION OF
FREUD'S EVENTUAL (1919) ACKNOWLEDGEMENT
THAT, IN ORDER TO BROADEN
ITS RANGE OF APPLICABILITY,
THE "PURE GOLD OF ANALYSIS"
MIGHT WELL NEED TO BE "ALLOYED"
WITH THE "COPPER OF DIRECT
SUGGESTION ... AND HYPNOTIC INFLUENCE"

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CO – CREATED BY PATIENT AND THERAPIST IN THE SESSION
AND WRITTEN DOWN FOR LATER REFERENCE AS WELL

**MODEL 5 “QUANTUM DISENTANGLEMENT STATEMENTS”
ARE STRATEGICALLY DESIGNED
TO GENERATE “OPTIMALLY STRESSFUL”
COGNITIVE – EXPERIENTIAL – SOMATIC DISSONANCE
BY INSISTING THAT THE PATIENT HOLD IN MIND
– SIMULTANEOUSLY –
BOTH THE MEMORY OF *OLD BAD*
– ALL THE THOUGHTS, FEELINGS, AND BODILY SENSATIONS
THAT EMERGE WHEN THOSE MEMORIES ARE REAWAKENED –
AND THE ENVISIONING OF ALTERNATIVE *NEW GOOD* POSSIBILITIES
– TAKING OWNERSHIP OF THE NEED THEREFORE TO CHANGE
AND COMMITTING TO ACTION IN ALIGNMENT WITH THAT GOING FORWARD –
THEREBY CREATING JOLTING AND DECISIVE
“MISMATCH EXPERIENCES”
BETWEEN *OLD BAD* LEARNED EXPECTATIONS
AND *NEW GOOD* ENVISIONED POSSIBILITIES**

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MODEL 5 “QUANTUM DISENTANGLEMENT STATEMENT”

**“I HAVE SO MUCH SHAME ABOUT MY BODY
AND FEEL SO MUCH PAIN IN MY HEART
WHENEVER I THINK ABOUT HOW MY FATHER
WOULD LOOK AT ME – ALWAYS WITH SUCH
CONTEMPT AND DISGUST. I FEEL DEEPLY DESPAIRING
ABOUT EVER BEING ABLE TO FEEL AT HOME IN MY BODY.
BUT I CAN IMAGINE THAT SOMEDAY I MIGHT BE ABLE
TO GO OUT INTO THE WORLD LOOKING GOOD,
CARRYING MYSELF WITH DIGNITY AND PRIDE,
AND NO LONGER NEEDING TO KEEP MYSELF HIDDEN.
I KNOW THAT I WILL NEED TO CHANGE HOW I POSITION
MYSELF IN RELATION TO EATING, AND I AM DETERMINED
TO DO THAT. I AM HEREBY COMMITTING TO GETTING
SERIOUS ABOUT INTERMITTENT FASTING ON A MORE
CONSISTENT BASIS BECAUSE I KNOW THAT EMBRACING
A MORE RESPONSIBLE WAY OF EATING
WILL MAKE ALL THE DIFFERENCE IN THE WORLD.”**

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OVER AND OVER AGAIN
IN RAPID – FIRE SUCCESSION AND WITH
EVER MORE DETERMINED AND EMBODIED COMMITMENT
THE PATIENT REPEATS THIS STATEMENT
AND VARIATIONS OF IT
ALTERNATELY VERBALIZING
FIRST THE MINDFULLY RETRIEVED *OLD BAD*
AND THEN THE INTENTIONALLY INTRODUCED *NEW GOOD*
THE THERAPIST ENCOURAGES THE PATIENT
TO MAKE EXPLICIT THE SOMATIC ELEMENTS,
PHYSICAL SENSATIONS, VISCERAL REACTIVITY,
AND SENSORIMOTOR PERCEPTIONS
THAT ARE BEING EVOKED
AS SHE BEGINS TO REMEMBER
WHAT HER BODY HAS NEVER FORGOTTEN

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MODEL 5 “QUANTUM DISENTANGLEMENT STATEMENT”

“I ALWAYS WORRY THAT NO ONE WILL LISTEN TO ME.
I DON’T FEEL THAT I HAVE A RIGHT TO SPEAK MY TRUTH.
I WAS NEVER ALLOWED TO SPEAK UP IN MY FAMILY
AND WAS ALWAYS SILENCED. I WAS MADE TO FEEL
INVISIBLE – AND SO IRRELEVANT. I REMEMBER HOW
AWFUL IT FELT TO BE SO IGNORED ALL THE TIME.
MY BODY TREMBLES AS I REMEMBER – AND I FEEL TENSION
IN MY CHEST. I JUST HATED BEING PUSHED TO THE SIDE
AND BEING TOLD THAT I DID NOT MATTER. IT BROKE MY HEART.

BUT I CAN ENVISION THE POSSIBILITY OF SOMEDAY FEELING
GOOD ENOUGH ABOUT WHO I AM THAT I WILL BE ABLE TO
PRESENT MYSELF TO THE WORLD WITHOUT APOLOGY AND
WITHOUT SELF – CONSCIOUSNESS. I WILL HAVE A VOICE AND
WILL USE IT TO EXPRESS HOW I REALLY FEEL. I KNOW THAT
I WILL NEED TO START TAKING RISKS THAT, TO THIS POINT,
I HAVE AVOIDED TAKING BECAUSE I WAS SO AFRAID. I HAVE
BEEN SO CONTROLLED BY MY FEAR, BUT I KNOW THAT I NEED
TO SPEAK UP AND LET MY VOICE BE HEARD. I AM SO TIRED OF
HOLDING MYSELF BACK AND BEING ALWAYS IN THE SHADOWS.” 40

"I WANT TO CURL UP AND DIE WHEN I THINK ABOUT HOW MY MOTHER NEVER PAID ATTENTION TO ME, NEVER LOVED ME, AND SIMPLY THOUGHT OF ME AS AN OBJECT IN HER WAY. AND NOW I FIND MYSELF SO OFTEN FEELING INSIGNIFICANT AND UNCARED FOR AND KEEPING MYSELF DISTANT FROM OTHERS. IT PAINS ME SO MUCH TO REALIZE HOW MUCH I HAVE MISSED OUT ON BECAUSE OF HOW AFRAID I AM OF BEING UNLOVABLE AND REJECTED. I FEEL SUCH SADNESS AND GRIEF AND ANGER AND PAIN IN MY HEART WHEN I REMEMBER MY FRIGHTENED AND LONELY SELF, IGNORED BY MY MOTHER AND WANTING TO DIE. BUT I AM BEGINNING TO SEE THE POSSIBILITY THAT SOMEDAY I MIGHT FEEL LESS AFRAID, LESS ALONE, LESS SAD, AND MORE HOPEFUL ABOUT FEELING CONNECTED TO THE WORLD. AFTER ALL, IT IS NOT AS COLD AND LONELY AND DANGEROUS AS THE WORLD I KNEW WHEN I WAS GROWING UP. I HAVE BEEN TAKING SOME DIFFICULT STEPS TO REACH OUT. AND I KNOW I MUST CONTINUE TO DO SO, DESPITE MY FEARS. I SO WANT MY LIFE TO FEEL MORE COMFORTABLE, WARMER, AND MUCH MORE UNDER MY CONTROL."

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MODELS 5 CONCEIVES OF THE NARRATIVES THAT THE PATIENT HAD CONSTRUCTED AS A YOUNG CHILD IN A DESPERATE ATTEMPT TO MAKE SENSE OF HER WORLD AS POTENTIALLY ABLE TO BE REWRITTEN, INTERPRETED ANEW, AND COMPLETELY REDONE ONCE UPDATED THESE TRANSCRIPTS NEED NO LONGER SEAL THE PATIENT'S FATE RATHER THEY HOLD THE POTENTIAL FOR RECONFIGURING HER FUTURE AND ADVANCING HER FROM REFRACTORY INERTIA AND THWARTED POTENTIAL TO ACTION AND ACTUALIZATION OF HER DREAMS ANN LANDERS'S (1996) SIMPLE BUT PROFOUND ADVICE "NOBODY GETS TO LIVE LIFE BACKWARD. LOOK AHEAD, THAT IS WHERE YOUR FUTURE LIES."

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**IF YOU WOULD
LIKE TO BE
ON MY MAILING LIST,
PLEASE EMAIL ME AT
MarthaStarkMD @
HMS.Harvard.edu**

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