<u>Creativity from the</u> <u>Inside-Out **</u>

"<u>MIND-SPLIT</u>"

a creative event.

*** *** Sourced from original experiences.

ABSTRACT: THE COMPLETE NATURAL PROCESS: This is about a <u>VERY SPECIAL AND VERY</u> <u>RARE CREATIVE EVENT</u>. "<u>MIND-SPLIT</u>" traces the personal circumstances that led up to this special event and suggests new fields of study clued to the <u>BIOLOGY of the CREATIVE PROCESS</u>.

By: Norris Martin Evans

Text/figures/artwork/plus FAST-FOOTBALL by N. M. Evans, 2014-19

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DEDICATED TO:

<u>Idamay</u>

(1900 – 1993) A farm girl, Nebraska. Married in a "soddy", Colorado. Always on stage, Always with paint and canvas.

All contents of this paper are free for all to use.

INTRODUCTION

<u>"MIND-SPLIT</u>" documents the biological underpinnings of the creative process. These, of course, are my words. <u>They have their origins only in my own personal experiences.</u>

"<u>MIND-SPLIT</u>" really started about 80 years ago. It was grammar school. I was the school artist. Years later, the teen years, I designed and made model airplanes in my Dad's garage. This included the scrounging of balsa wood from trash barrels found behind local hobby shops, a common depression era tactic. From here on, my life was the usual --- education in the sciences, several years in the military service, jobs (aerospace + tech.) and family. Sounds normal, but not normal, somewhere in my brain there persisted a hyper-suppressed desire to express myself in the creative arts. This led me to the garage, again, and to paint and canvas.

In my garage, strange things happened quickly and intensely. I was overwhelmed with the actions of my own body. I wasn't there. Somebody else was there, holding the brush.

After,,, I sat on the garage floor, bewildered, shaken, and stunned. I reached for words, they turned scribbly, mostly naïve, but they were true words. I kept them. They recorded my first impressions of what had just happened. It wasn't until after completing the first draft of this paper that I looked, with intense and curious interest, toward what other people thought. No problem. Views were everywhere. All over the map. As expected, I found that the most reliable information came from academic sources, mostly from peer reviewed papers produced by scholars in psychology --- as they endeavored to make sense out of this strange mental behavior called "creativity"--- the mental process that people use to make things that, prior, did not exist.

Later-than-sooner, I learned that most of these studies centered around the significance of the final <u>creative product</u>. I did not want that. What I really wanted was <u>BIOLOGY</u> --- or, what is in the head that leads to and/or causes the creative experience. So here I am, and, as an artist/science guy, I did what I do best, I drew a picture, a model: fig. (1) and (2) pg. 8.

My model is simple. It stands for "us", a person. It's your brain. The large oval (its' area) stands for all the information/experiences that the brain has absorbed over a lifetime. The area of the small oval stands for the amount of this information that we actually use. This is the information that we use every day, all the time; it's rote. Keep in mind that the oval boundaries, as shown explicitly in the model, don't really exist, or, at best, are just nebulas areas. The ovals just stand for a collection of information stored, <u>somewhere</u>, in the brain. That little back-and-forth arrow that inter-connects the large oval to the small oval stands for the possible sharing of information between ovals. In my view, this act of sharing is the <u>seat of the creative process</u>. It may not appear so, but that little two-sided arrow is in a world of hurt. It has BVSR. BVSR is short for Blind Variation and Selective-Retention. BVSR is a theory (Campbell, D. T., 1960) about which there is a constant, on-going, debate between Theoretical Psychologists. Their question: How does the brain select information to create meaningful answers of qualified surprise, or how do we mix or match information from the oval reservoirs to make meaningful creative solutions ?

Be-it-as-it-may, let's go back to that simple model (.. remember ?). What makes this model tick is that it stands for all of our personal knowledge --- all the good things plus all the bad, plus all that we can't remember. It's simple. At the beginning of life, the brain's content is open (we start, as babies, at near zero). We then freely fill it --- but, for this model, we have ground rules. These are:

- First: The biology of the brain is the same for all of us.
- Second: We are all lazy.
- Third: Only a small portion of the brain is used (because we are lazy).
- Fourth: "Creativity" mostly evolves by accessing that portion of the brain that we normally do not use and conjoins same with that portion of the brain that we do use.

Done . . . The rest is up to you.

One more thing: Please be aware that this highly charged creative event, as detailed on page 15, was certainly novel, but ---

in no way is it a requirement for accessing a meaningful degree of creative output.

What this episode did, was to open my eyes (and hopefully yours) to the <u>biological</u> <u>underpinnings of the creative process.</u>

I plead, with due modesty, that the few opinions that I carry, are born in reality and should be noted. My views --- on the definition of creativity --- on the biological evolution of the creative process --- on what constitutes art --- and on all other comments that I might have made and can't remember --- are freely liberal. <u>This means we are all freely capable of success</u> . . ! "Liberal" doesn't mean that my views are not based on solid ground.

Consider the following sources:

- My views, on the peripheral conjoining between the two parts of the brain, the passive part, and the active part, as mentioned on page 7, share the same concept as detailed in <u>COMBINATORY PLAY</u>, by Albert Einstein, page 10.
- Clinical observations show that the similarities between the wave functions of <u>resting</u> <u>states</u> and that of <u>creative activity</u>, are shown to be, via EEG measure, a <u>coherent property</u> (Norbert and Ksenija Jausovec, 2000). This clinical result seems to solidify the inference between the "mantra" of RELAX-YOUR-MIND, a perceived resting state, and measured EEG data,

For more documented examples, see <u>CONNECTIONS</u>, starting on Page 24.

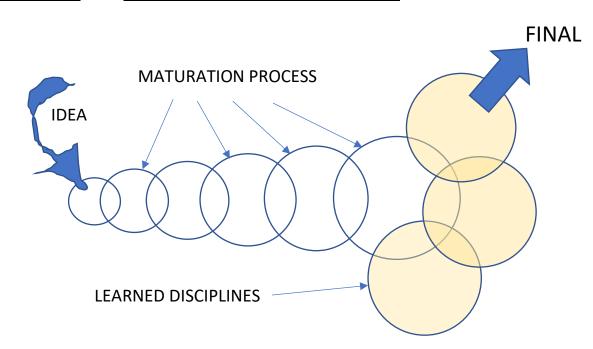


DIAGRAM ONE: THE COMPLETE NATURAL PROCESS.

The IDEA comes in as a ragged something. The MATURATION PROCESS takes places in your head and grows with the help of your <u>two wily friends: the conscious and unconscious minds</u>.

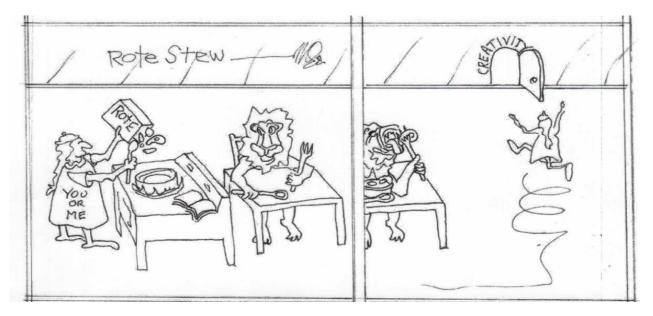
When all is satisfied, then choose a LEARNED DISCIPLINE --- such as the processing of words, sound, color, odor, or other --- and then, finalize your cognitive output --- FINAL.

My last comment: "<u>MIND-SPLIT</u>" is meant for no-one, except young people or students of all ages who wish to achieve the most out of life and possess or wish to possess that most important word in the "creative language" --- enthusiasm --- Don't keep it to yourself.

"<u>MIND-SPLIT</u>"

Creativity from the Inside-Out **

... with a <u>Cookbook</u>...a <u>Lion</u>...and <u>Dancing with a Relaxed Mind</u>.



The <u>Cookbook</u>:

Text/figures/art plus FAST-FOOTBALL by N. M. Evans, 2014-19

Years ago, Psychologists gave us a new way to think. Let's call it a "cookbook". It told us how to make new ideas. The business community wanted it. They wanted something that was intuitive, credible, and something that everyone could easily understand and use. This "cookbook" pictured our memory as being divided into <u>two parts</u>, <u>one active</u>, and <u>one passive</u>... this is the "<u>MIND-SPLIT</u>".

The <u>active</u> part of memory is the one that we use every day, let's call it our <u>ROTE MEMORY</u>. It contains all of the things and actions that we use all the time. "ROTE" is defined as a mechanical way of doing something without understanding or thought. It's fixed. It's mechanical. It's everyday-automatic.

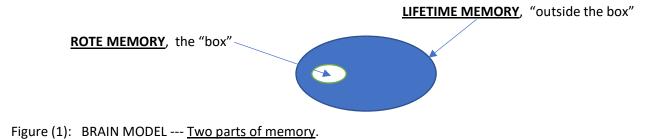
The *passive* part of memory consists of the vast remainder. It's our <u>LIFETIME MEMORY</u>. It contains everything --- known, unknown, forgotten, or suppressed. <u>It's our gold-mine for creativity</u>.

Today --- for creative thought --- our society has simplified this "cookbook" into the phrase: "<u>thinking</u> <u>outside the box</u>" --- whereas the "<u>box</u>" part is our <u>ROTE MEMORY</u> and the "<u>outside the box</u>" part is our <u>LIFETIME MEMORY</u>.

**

Sourced from original experiences ... plus <u>scribbling for your brain</u> ... <u>FAST-FOOTBALL (pg</u>.20)

TIME-OUT: (1 of 5) Let's draw a picture .



The Lion: (?)

For creative thinking, psychologists visualized that all we had to do was to slip out of our **<u>ROTE</u>** <u>**MEMEORY**</u> and into our <u>**LIFETIME MEMORY**</u> to look for new ways to address the world. Easy.

Not so easy. We introduce the "Lion".

As we all know, our brain always gets in the way. It easily drifts into a chaos of fantasies. These fantasies will always foul our most earnest attempts at creative thought. We call these mental fantasies, the "lion". It's just a symbol. You'll recognize the "lion" when it gets in the way of your creative energies. Stay-tuned, later, we'll suggest some tricky ways to <u>avoid the "lion".</u>

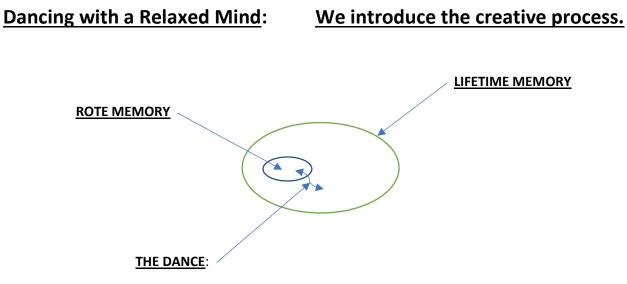


Figure (2): BRAIN MODEL --- The creative mind.

<u>THE DANCE</u>: This is a back-and-forth action that mixes life's experiences. Under certain circumstances, this mixing process may lead to an active alliance between disparate elements of memory that may lead to the making of meaningful connections to perform meaningful outcomes.

<u>What to do</u>: For creative thought, all we have to do is to figure out a way to make this creative process happen. This may be how --- we assume that the quality of this mixing between ROTE and LIFETIME memories determines the value of creativity that you might experience. And, in turn, this depends upon the <u>ease at which this mixing happens</u> --- which prompts us to understand that <u>relaxing</u> the mind may be the key. A relaxed mind allows for a <u>freer access to our LIFETIME MEMORY</u> --- and that's what we want. This prompts us to say that for the creative mind, the mantra is:

RELAX-YOUR-MIND

We're done:

This is all we need to know. We can end this conversation right now --- but how do we actually do it? How do we relax the mind ? Included are seven ways that I think might be of value. I have tried most, and have found that the more you try, the easier it becomes, you may even be able to feel it.

>>> In keeping with the norms of the day, the following pages will refer to **<u>ROTE MEMORY</u>** as the **<u>conscious mind</u>** and the <u>**LIFETIME MEMORY**</u> as the **<u>unconscious mind</u>**. Pl. See <u>NOTE</u>: *(5), pg. 18.

- <u>MECHANICAL</u>: Relaxing the mind leads to lessening the influence of the conscious mind. We can do this by simply giving the conscious mind (ROTE MEMORY) something else to do. Something that will keep the conscious mind busy enough so that the unconscious mind can operate semi-independently. I call this <u>parallel thought processing</u>.
- SLEEP: Sleep effectively shuts down the conscious mind. It works. The unconscious mind runs -- almost --- free range. I use this mental scheme all the time. The words you're reading have
 their origin, most probably, from sleep.
- 3. <u>CONTOUR DRAWING</u>: This effectively separates the conscious mind from the unconscious mind. Don't expect too much from this if you are not a student of the arts. We'll talk about how to do it, later.
- 4. <u>WINE OR OTHER</u>: I hesitate to mention any type of outside additive, but I will. For me, a small amount of wine or lots of coffee (not in that order --- it depends upon circumstances) may promote an increase in mental awareness / energy. All-in-all, I say, stay close to mother nature. Stay away from mind-twisting drugs. I expect arguments.
- 5. <u>YOGA OR SIMILAR</u>: I have no data, but I can imagine that mind control practice may easily yield positive results.
- 6. **PACE**: This is working fast. It's effective and easy to do. However, you must have adequate preparation to be effective. Working fast simply out runs the speed of the conscious mind, and that's what we want. We have examples.
- <u>BODILY CHEMISTRY</u>: We're talking about <u>BIOLOGY</u> --- In particular, the bodily produced chemistry that affects the neurotransmitters of the brain. It is, by far, the best and the most satisfying means to the creative process. Later, we include a detailed description, albeit personal by the author, of a biological event. <u>It will stun you.</u>

<u>TIME-OUT</u>: (2 of 5) **<u>COMBINATORY PLAY</u>** by Albert Einstein --- a justification. (Note: *(1), page 17)

In 1945, a French mathematician, J. Hadamard, asked Einstein to explain his thought processes. With editing, it goes like this: "<u>The words or language, as they are written or spoken, do not play</u> <u>any role in my mechanism of thought</u>". Whereas "<u>the psychical entities</u>, <u>which seem to serve as</u> <u>elements in thought</u>, <u>are certain signs and more or less clear images which can be ...</u> <u>reproduced and combined</u>" --- resulting in the **combining of the two elements of memory --**the "<u>muscular images</u>" of the unconscious mind, and the "<u>logical concepts</u>" of the conscious mind. "... <u>this Combinatory Play seems to be the essential feature in productive thought</u>...". (my emphasizes)

Note the similarity between Einstein's "Combinatory Play" and "The DANCE".

NEXT --- EXAMPLES:

We include twelve common and some not-so-common examples on how to cultivate that creative spark. These examples will center around two things: Relaxing the mind and how to null the effects of the conscious mind.

Examples 1 - 5, We'll start off with a few scenarios that require little or no use of the conscious mind. For sure, we still have the conscious mind, but we'll put it someplace where it will not hinder our creative thoughts. This is what I call parallel thought processing. It's a mechanical process.

Next, Examples 5-6, We introduce a few exceptions that eliminate the perceived presence of the conscious mind.

Finally, Examples 7 – 12, We provide samples of creative events in Acting, Sports, Pablo Picasso, Antoni Gaudi, and Jack Kerouac. Some may surprise you.

EXAMPLE (1): Driving to work: This is about parallel thought processing.

Remember the day, while driving the car to work --- you suddenly had a revelation of thought --- that's the deft two-step. I say "deft", because you're driving skills are not hindered --- it's just a flick of an image. It's an image gleaned from your vast memory of past experiences. This happens because your conscious mind (ROTE MEMORY) is occupied (it's driving the car). Your unconscious mind has a chance to wonder.

EXAMPLE (2): Walking, jogging, or running. Another way at parallel thought processing.

It's hyperventilating with a view. It's a pleasant way to unwind your daily problems by side-stepping your conscious mind. Surprisingly, people seem to learn about this over and over again, as I have seen many published articles, over the years, describing the exhilaration felt while doing any one of these activities. It's the "kick" you need to initiate that feeling of "newness" --- seeing a fresh world in front of

your eyes. I do it often. It's keeping the conscious part of your mind busy while allowing your unconscious mind to daydream or daydreaming with a purpose --- a creative behavior.

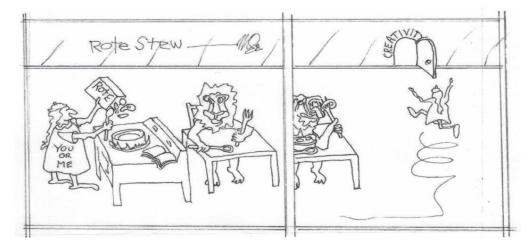
EXAMPLE (3): The "aha" moment: The "classic" example.

This is a story about the absent-minded professor/scientist. As the story goes, it's the "scientist on the bus". This is where the scientist, having a mind-set which is <u>entirely consumed in thought</u>, steps off the bus and suddenly experiences a sudden flash of insight while engaging the folding doors and deploying stairs. It's the perfect setup for the "dance". It's that surprising movement, the doors, the steps, all of which may provide the <u>mental diversion</u> needed for that sudden insight. That's the "two-step" (pun).

Note: Albert Einstein would play his violin, at times, for this same purpose.

From Einstein's Quotes: "I thought of that while riding my bicycle".

Also: "I think 99 times and find nothing. I stop thinking, swim in silence, and the truth comes to me".



EXAMPLE (4): ROTE STEW.

Figure (3): The basic idea of "ROTE STEW" is to side-step the "lion" (remember the "lion"... it's all in your head !). Here we're giving the "lion" something else to do. It should be something easy, something repetitive, and something that requires little thought. When the "lion" is occupied --- your creative mind can find the door --- that's parallel thought processing. (I made a mistake while drawing the cartoon --- can you find it ... ?) see <u>NOTE:</u> *(2), page 18.

EXAMPLE (5): Sleep:

The jewel of the unconscious mind. We all have it, but we may not all use it. During sleep, our unconscious minds have a field day. Personally, I try to steer my sleep-time thoughts towards my day-time problems. On the most part, it works --- no guarantees. Mentally, it's the same situation as

described in the previous examples. We null-out the conscious level of our minds so we can dip into our unconscious memory. Dream on ... !

EXAMPLE (6): Contour Drawing:

This is a special activity.

It's an experiment of the mind. It's a secret that every little kid in school knows.

What does it do ... ? <u>It separates the CONSCIOUS MIND from the UNCONSCIOUS MIND.</u> But fear not, no kid was hurt (to my knowledge) by practicing Contour Drawing. This is how we do it:

Get a pencil, paper and a subject. This subject should not be a box or a ball shape, but a thing or person having compound curves and an <u>identity</u> --- not a Rorschach image. First, you fix your gaze wholly on the subject and mentally focus on one point on the contour of the subject, then, drop your hand, with pencil, on the drawing surface. Move the pencil on the drawing surface at the same time, at the same speed, and in the same direction as you move your focused eye along the contour of the subject --- never looking at the drawing and never taking your focused eye off the subject contour. Your eye and hand activities must be kept separate at all times . If done successfully (practice helps), you will see surprising results. No cheating.

EXAMPLE (7): Being an actor (man or woman).

Being an actor is about a repeated interplay between the conscious and the unconscious and working with pace.

Let's talk specifics. Consider Colin Firth, the English actor. Colin Firth starred in the movie "The King's Speech" as Prince Albert (Bertie). As an actor, Colin Firth was required to immerse his own personality into another who had the immense psychological problems of a ridiculed sibling who was frightened and tormented since birth. He was mulch in the hands of his out-going older brother who was next in line to be King. The younger Prince was constantly devasted with life. So much so that he developed a life-stopping stuttering problem. Later on, as he was surprisingly and abruptly ushered into becoming the new King of England, he had to take on all of these emotional problems in secret, away from the discerning eyes of the entire English Nation --- and do this while his country was approaching a world war --- and all the English people were desperately clinging onto every one of his spoken words.

WOW can't do much better than that.

EXAMPLE (8): Let's talk Basketball.

This is about working fast = "zoning it". Working fast nulls the influence of the conscious mind.

Working fast forces the mind into an <u>array of automatic actions</u> that out-run the speed of ROTE MEMORY (conscious mind). Basketball players are good examples. When running at top speed, the

players describe themselves as "being in the zone". It seems that the <u>conscious mind has a speed limit</u>. If you exceed this speed limit --- you may be "in the zone".

That "<u>array of automatic actions</u>" is important. In the case of basketball players, this array will be composed of basketball moves or actions stored in the player's unconscious mind. That's the "PREPARATION" part. Putting these learned moves together, successfully and efficiently, requires a mental quickness that out-paces the speed of the conscious mind, that's the "DANCING" part. It takes both PREPARATION and the speed of your unconscious mind (THE DANCE) to operate efficiently in basketball --- that's "zoning it".

EXAMPLE (9): Let's talk Baseball:

Working slow --- This is about the "lion" in your head and how to counter its influence.

Speed is not of the essence. "Slow" interferes with the mind (the presence of the "lion"). This is about the mind of the quintessential baseball player, the pitcher. Have you ever noticed a pitcher's "eye dip" (my term). Just before a pitcher's violent arm action of throwing the ball to the target, he momentarily takes his eyes <u>off</u> his intended target --- this action is the "eye dip". During the ensuing violent arm movement, the pitcher's eyes reconnect with the target. This is quick, too quick for the "lion" to interfere. The pitcher's eye view is clean, and his mental view is clean. It's <u>"clearing the mind</u>". This has nothing to do with physically "resting" the eyes --- it's all mental --- it's all in the "head". Be advised, however, that this technique does not replace the years of practice and natural talent that makes success possible. Note also that not all successful pitchers use this "eye dip" technique.

This "<u>clearing the mind</u>" brings us, briefly, back to basketball. Have you ever wondered why so many good basketball handlers have difficulty standing at the line, making free throws .. ? Mentally, it's the same processes that goes through the mind of a baseball pitcher. It's a slow process --- the mind gets in the way. Avoid the "lion".

FROM HERE ON... We consider creativity --- as applied to painterly artists, sculptures, and writers:

This opens everything. Before we proceed, let's get a few things out of the way. Let's define art. As the saying goes: Art is in the eye of the beholder (or, beer-holder). Anything goes. Everything qualifies as art. BUT --- for those of us who think we can discern things better than most --- it's not what is on the paper or canvas or other --- it's the interplay of what is on the canvas and what was in the mind of the artist --- the vision of the artist --- how the mind interprets this vision --- this is judgment one.

EXAMPLE (10): Picasso:

This is about working fast. A technique that nulls the effect of the conscious mind.

Image this: Your art teacher puts a red apple on the table and says, "Don't paint the apple, paint the "RED". This notion runs parallel to the life-long ambition of Picasso --- It's not unlike painting the "RED", it's painting the intrinsic nature of life.

Let's talk "Guernica":

Arguably, "Guernica" was the epitome of Picasso's life. It was Spain, 1937, Picasso was asked to provide a large painting to cover the entire entry wall of the Spanish International Exhibition.

Picasso accepted the commission in January but could not start his painterly work until months later. During this time, Picasso ingested the outward political hatred of the Spanish regime and the World's "first-ever" wartime bombing of civilians in the small town of Guernica. With this, and the onset of the Spanish Civil War as a backdrop, Picasso started his painting in mid-May and finished in four weeks ---one month.

Given his wealth of preparation, Picasso --- as in basketball --- was "in the zone" as he completed his monumental 12 ft by 26 ft painting. I'm sure his conscious mind could not keep-up with the quick energy of his unconscious mind. That's working fast.

A SIDE-NOTE:

A MISTAKE ? ... ! Did Picasso make a mistake while drafting Guernica ...? It is my view that every single element of Picasso's Guernica was thoroughly and mentally processed. Ever distorted hand, every distressed body part was put there with meaning. I'm sure that Picasso lived and felt each brush stoke --- except, maybe, one ---

It's the little finger. The little finger of the woman holding the oil lamp, center top. The finger wraps around the oil lamp <u>in the wrong direction</u>. What's your opinion ... ? Was it on purpose or not ... ?

EXAMPLE (11): Antoni Gaudi --- imagination gone wild --- a delicious array to fill your appetite.

This is about preparation and intent.

It's the flowers. Antoni Gaudi had an amazing imagination and gleaned much of his extraordinary flights of fantasy from the structure of flowers. It was the twining of stamens and the surround of seed. Mother nature and Gaudi's creative mind had no bounds.

Arguably, it is the juxtaposition of dissimilar objects that might signal the presence of Gaudi's creative genius. On first site, Gaudi's solutions might have been shocking --- but then, reasonable, and still, later, it was satisfying --- always beautiful and, maybe, even lustful.

As for "PREPARATION", Gaudi's life was it. He was forever conscious of his surroundings, the immense truth of nature. As for his unconscious mind, Gaudi's intent was emphatically and energetically transmitted to <u>trusted artisans</u>.

As an example of Gaudi's immense pre-occupation with nature, consider Gaudi's life-ending work, the Sagrada Familia. This is a monumental chapel reaching to the sky. In his mind, it was a living flower. Look closely and you might identify the internal supporting structures as --- stamens of a flower.

EXAMPLE (12): Jack Kerouac:

This is a story of the unconscious mind --- working fast and never stopping.

Kerouac does the "<u>Scroll</u>".

CIRCA 1950. It was Jack Kerouac and his traveling buddy, Neal Cassady, both traveling West. They were a team, both were about the same age, both were exposed to the same drug culture of the 50's. They called themselves writers --- looking for adventure. It was catch-as-catch-can on trains, either under or over, never inside. Maybe a hitch on 66, if lucky.

Jack split. He wanted to record their adventures, typewritten, on paper (no computers). His title work would be "<u>On the Road</u>". In the meantime, Neil would continue sending his hand-written stories via mail. Neil's letters were rich with excitement, mostly women and alcohol.

Jack was about to present his final draft of "<u>On the Road</u>" to the publisher when Neal popped another letter. This one was special --- maybe greased with extra stuff. It was long. It was rambling, and it never stopped (18 +/- pages, see <u>NOTE</u>: *(4), pg. 18). Neal's "style" blocked Jack. Ideas flowed like never before. Jack had no choice. He tucked his newly completed draft of "<u>On the Road</u>" under the covers and began rewriting from day one. This was the beginning of what we now call, "<u>The Scroll</u>".

It was a new style of writing. Today we call it "<u>stream of consciousness</u>". It was a new genre. For our purposes, it wasn't <u>what</u> jack wrote, it was <u>how</u> he wrote the "Scroll". Jack produced about 125 feet of continuous type, without stopping (except as necessary). Mechanical typewriters of that day, called for the taping together of hundreds of paper sheets. Essentially, it was --- never ending --- three weeks --- continuous typing --- 400 "book" pages --- but <u>one paragraph</u> !!

TIME-OUT: (3 of 5): A BIOLOGICAL EVENT:

The following is a description of a biological event as experienced and detailed by the author. (A similar biological event is documented by J. Hadamard, called "<u>Automatic Writing</u>". see <u>NOTE:</u> *(1) page 17.

IN THE BEGINNING

About fifty years ago, I experienced what I now call a full biological creative experience. Not then, but as I see it today, this must have been a scenario of mental/muscular actions, seemingly controlled, on the most part, by the unconscious mind. Years later --- recalling my life --- the following is my experience.

IN MY MIND

May I be brief. In my mind I was born an artist. Not a good thing during my youthful days. Science, not esthetics, was king. Combining science with the creative arts creates a mental knot. However, I did have a chance to use my imagination/creativity in the aerospace industry. It went well. But my suppressed desires for creating --- "new", the "untried" --- was still not completely fulfilled.

Living on, family and the military service took their toll. Unfulfilled and driven was the day. To lessen this mental confusion and that deep and lingering desire to express myself in paint, clay or other --- I took to the dead of night, alone in my garage. But not alone. I was with my easel, my paint, and my mentor, Rembrandt van Rijn. Paint flowed and I was released from my past in twenty minutes.

I WASN'T THERE

Not so. "Time" was nothing --- it could have been hours or minutes --- I wasn't there --- my "rational self" took no part in my garage. It happened like this: My arms moved --- but not under my rational control. I felt someone behind me, I turned --- that was silly --- I was alone. I remember that.

It wasn't scary, but it was a full-fledged-bewilderment. My eyes recorded it --- arms moved --- but nothing else. I remember that frazzled brush with the great gob of mineral white --- as it guided itself to the canvas. It was automatic. Arms moved. I saw it --- no conscious control. I still have the canvas. The canvas hangs on my wall. I can point to the paint. The brush is gone.

I still remember, even know, years later, vividly. I remember sitting on the garage floor, my energy absolutely depleted --- gone, but doing my best scribbling notes, trying to document the flying emotions of what had just happened. Days later, I put those scribbled notes together and wrote essays to my art professors. They gave me A's and asked for copies.

<u>AFTER</u>

This brief episode of time changed my life forever. So here I am --- with another piece of paper --- trying to communicate. It's not easy. These are my secrets. I try to share them --- but not. Since, and years away, I have not revisited this call to accumulate this immense amount of biological energy. The lifelong traumas leading up to this event are not there. I am no longer a frustrated and creatively starved individual. The drive for "new", however, still lingers. Once felt --- never forgotten --- it's life itself.

<u>YOU TOO</u>

A word to the businessperson, accountant, the engineer --- the same disciplines apply. It's the obsequious "<u>MIND-SPLIT</u>" --- the "DANCE" --- It's that split between the two elements of the mind, the conscious and the unconscious --- the mixing of elements --- always looking for new associations. This mental energy is open to all who want to try.

KICKING AND SCREAMING --- THIS IS WHAT I LEARNED

<u>ONE</u>: <u>*RELAX*</u>: The surprising <u>AVAILABILITY</u> of the unconscious mind comes with the practiced ability to <u>relax-the-mind</u> --- which allows more "stay-time" in the unconscious mode.

TWO: <u>*TIME*</u>: The unconscious mind seems <u>not to support the concept of time</u>. Time vanishes.

THREE: "<u>SPOOKY</u>": This is Einstein's word for "<u>ACTION AT A DISTANCE</u>". "<u>MIND-SPLIT</u>" uses this word for "<u>ACTION BY THE UNCONSCIOUS MIND</u>". Akinsanya Kambon, the ceramic artist, said it best: "... spirits just come, and they possess me, and they control my hands. I really never know what I'm doing".

FOUR: PACE: The unconscious mind processes information much faster than that of the conscious mind.

FIVE: EMBODYMENT: All Cognition is processed through or mapped across the body's muscular system.

<u>SIX</u>: <u>PROCESS</u>: When writing a piece ---_jot notes when or where they occur. These notes will exist in your mind as well as on paper. Hold. <u>Wait until the entire piece comes together in your mind</u> --- then DUMP ALL AT ONCE --- complete the piece --- <u>without referring to your written notes</u> !

SEVEN: <u>NOTHING HAPPENS</u>: if you don't want it to happen --- if desire is not present. #

Call it what you wish --- my take --- this process is like licorice trickling down the back of your throat --- when it happens, nothing else matters. see <u>NOTE</u>: *(3) page 18.

TIME-OUT: (4 of 5) CREATIVITY --- A DEFINITION:

Creativity is the gathering together of life things --- and re-putting them in startling ways.

May you feel it --- May you live it --- May we advance and discover together.

Thank you, Norris Martin Evans

The author's background:

I am not a psychologist. I may be an artist (and I think a good one), but not one that sells art. This sounds crazy. It might be. I majored in physics (UCLA) and math (UCLA/Sokolnikoff) but left sans a paper degree but lots of units. Next, it was the Selective Service and the Army Military Electronics schools for the next three years. Afterwards, I worked in the Aerospace Engineering Industry (the slide rule era) for seven years. This was during the first lunar landing and return. Continued in Aerospace toward the processing of the proposed Space Shuttle Contract. The following 18 years were spent in various Civil Engineering Departments for the local city government (Sacramento, CA.) until retirement.

I look forward to your comments/creative experiences.

E-MAIL: <u>dubsnave@myev2.com</u>

NOTES:

*(1) : From: Jacques S. Hadamard, "<u>An Essay on the Psychology of Invention in the Mathematical</u> <u>Field</u>", Princeton University Press, 1945. All references are taken from the original essay reprint.

<u>Re. Albert Einstein</u>: J. Hadamard was able to draw answers of a personal nature from Professor Einstein regarding his approach to creative thought --- Einstein called his approach "<u>Combinatory Play</u>". It was a "<u>combining</u>". It combined the "muscular" thoughts --- from the unconscious mind --- with the "logical concepts" from the conscious mind, where the <u>unconscious mind always leads the way</u>. (return is to page 10).

<u>Re. Automatic Writing</u>: This event is writing that appears on a page without conscious input by the person holding the pen --- an involuntary --- unconscious --- happening ! J. Hadamard first experienced this strange mental episode as a young student while dealing with a highly frightful academic situation.

This spooky happening seems to have its origins directly from the <u>unconscious mind</u> --- where unrealized feelings may evolve from deep-seated, suppressed, past experiences. Hadamard, thus, and involuntarily, "opened-the-box" to his unconscious mind --- easily leading to similar phenomena throughout his lifetime. Strikingly, in my opinion, Hadamard failed to recognize the far-reaching importance of these mental episodes. For our purposes, the concept to be learned here, is the existence and importance of the <u>unconscious mind</u> --- the second part of the <u>two parts of the human</u> <u>mind</u>. (return is to page 15)

*(2) : The chair of the lion, left, floats in space --- should have a passing indication of an attachment to the floor. (return is to page 11)

*(3) : Sorry, licorice like that is no longer available in U.S. candy stores --- it was when I was a kid --- I remember --- you're on your own. Check with the FDA. (return is to page 17)

*(4) : Jack, plus others, lived at times on a boat, docked on or near San Francisco Bay. It's rumored that some of these papers might have, inadvertently, found their way to the bottom of the bay. (ret. pg. 15)

*(5) : The first part of this paper uses the original words/names/phrases that came to mind while I tried to make sense of an actual hands-on art experience that happened to me some fifty years ago. Today, I think of this experience as an exceedingly rare biological creative event. Back then, it was spooky --- a bewilderment --- and scary-far from normal. So much so, that for years since, I kept this experience a secret. I did my best to discern the "how" and the "why". Uninformed as I was, I tried to assign meaningful names to the meaningful experiences that passed through my mind. Later, the word, "ROTE", was pulled from my vintage-past because it fit, exactly, the essence of our every-day-automatic memory. To say the least, this discovery was exciting. Immediately, I knew I was on my own, and that was exactly what I wanted. I wanted no outside influence, none, nothing to mediate my thoughts. I just wanted to immerse myself into this mental bliss of nature, to nurture the moment, and to discover everything.

Today, I have relented. I am no longer in that "Garden of Eden" --- thou my mind and muscles still retain those same immense feelings of wonder. "<u>MIND-SPLIT</u>" came about as a review of my life in an attempt to explain those past experiences. "<u>MIND-SPLIT</u>" combines my thoughts with society's thoughts and bends to academia for the modern-day nomenclature. Today, opinions are plentiful in the opensourced literature. Papers are freely published, most of them express a variety of questions, some, maybe, even answers. Opinions come from two sides of the mountain. Either from the "inside-out" --using first-hand experiences, as myself, or, from the "outside-in" --- using academic, peer reviewed, scientific methods. Let us all learn, together. (return is to page 9)

Selected Bibliography/References:

An Essay On The Psychology of Invention In the Mathematical Field: By Jacques Hadamard, Copyright, 1945, Princeton University Press. Published unabridged by Dover Publications, Inc.

THE CREATIVITY QUESTION: By Albert Rothenberg and Carl R. Hausman. Copyright 1976 and Published in 1976 by Duke University Press, Durham, North Carolina.

<u>The CREATIVE PROCESS</u>, A Symposium: Edited and with an Introduction by Brewster Ghiselin, Copyright 1952 by Regents of the University of California, Published by University of California Press, Berkeley, Los Angeles, and London, England.

<u>IDEAS AND OPINIONS, ALBERT EINSTEIN:</u> With an introduction by Alan Lightman. Based on <u>Mein</u> <u>Weltbild</u>, Edited by Carl Seelig plus others. Introduction Copyright 1994 by Alan Lightman, A 1994 Modern Library Edition, Copyright 1954 by Crown Publishers, Inc.

<u>The Guernica</u>: By Yayo Aznar, First Edition: Copyright 2004 by Edilupa Ediciones, S.L., 2004, Printing: Talleres Graficos Penalara, Spain.

<u>ON THE ROAD, The Original Scroll, JACK KEROUAC:</u> Edited by Howard Cunnell, copyright 2007, Published by the Penguin Group Inc., 2007.

<u>Neal Cassady, The First Third and Other Writings:</u> Edited by Lawrence Ferlinghetti and Nancy J. Peters. Copyright 1971 and 1981 and Published by City Lights Bookstore, San Francisco, California.

<u>YELLOW --- a love story</u>: By this author. Originally recorded in the Copyright Office of Records, Washington, D.C., November 12, 2012. A second rendition was published and recorded in the search-list of pdf-archive.com, 2020, and of Academia.edu, 2020. This second rendition contains additional background information and descriptions of happenings as experienced by this author that may be <u>pertinent to the understanding of the creative process</u> as described in "<u>MIND-SPLIT</u>".

<u>BUILDING AN ELECTRIC CAR</u>: By this author. Published and recorded in the search-list of pdfarchive.com, 2020 and Academia.edu, 2020. This illustrates the actual hands-on production of putting together <u>innovative ideas</u> as they evolved during this project.

#

ONE MORE THING . . . <u>*TIME-OUT*</u>: (5 of 5)

FAST-FOOTBALL

FAST-FOOTBALL

THIS IS A "SHOW AND TELL" THAT DEMONSTRATES THE HANDS-ON DIFFERENCES BETWEEN THE CONSCIOUS MIND AND THE UNCONSCIOUS MIND



Scribbling for your brain

From the author: I scribbled like this for years without thinking what I was doing --- and then someone wanted my scribbles !! Do these little mindless drawings have something of value ? Since then, I figured out what I was actually doing and am now including scribbling as an addendum to this paper. Do these scribbling exercises have any pedagogical value ? Your thoughts.

We do Fast-Action-Figures

American football was chosen for the action figures because almost all moves are available --- but choose your own.

A few rules apply as well as several suppositions:

<u>Rule one:</u> <u>Linear figures</u> are not allowed.

<u>Rule two</u>: Scribbled markings must express <u>amorphous areas</u> --- directionless.

<u>Rule three</u>: Only scribbled markings that are <u>counter to the figure</u> are allowed.

Rule four: Scribbling must be fast, immediate, and final.

Supposition one: Stick figures are products of the rational conscious mind.

<u>Supposition two</u>: The brain absorbs and/or produces information by actualizing muscular processes.



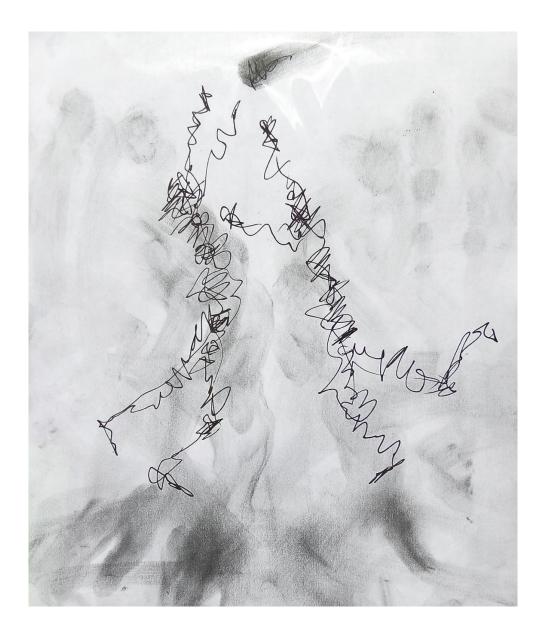
<u>Rule four</u>: Express yourself quickly, immediately, and stop immediately. Do not re-touch or rework. If you are not satisfied --- start a new scribble. The object is to work fast. This allows your mind to use the mental/muscular information held by the unconscious mind, while nulling --- <u>not eliminating</u> --- the routine effects of the conscious mind.



Create your scribbling style --- I start off with the head and go from there, it's your call. The idea is to move your hand as you feel the energy. Reach for the ball --- it's all in your head --- it's exercising the unconscious mind, while being dutifully guided by the conscious mind. <u>They work together</u>.

So-far-so-good. If you wish to take this a little further, try expressing yourself with a background. This can be done either before or after scribbling. One option is to use powered carbon. Spread it with your hands and fingers. Shape it quickly, as you did scribbling. This is messy, but washable, thou no guarantees.

An inexpensive source of powered carbon is the hardware store. The powder is sold as a dry lubricant used to lubricate locks. Usually, it comes in a small, squeezable, plastic tube, use it sparingly.



<u>RELAX-YOUR-MIND</u> You're the artist, go for it --- It's just scribbling.

CONNECTIONS

After completing the first draft of "MIND-SPLIT", the author looked for <u>knowledgeable</u> <u>opinions</u>. The most reliable information came from academia, mostly from domains of psychology. The following is the result of this survey. The originating authors are noted, **highlighted**, and keyed to the final draft of "MIND-SPLIT", by <u>KEY WORDS</u> and **page no**.

Page 7 (E. de Bono, 1985), (Weisberg, 1993), (Ripple, 1999), (Florida and Goodnight, 2005)

THE COOKBOOK:

Years ago, psychologists gave us a new way to think.

E. de Bono, plus others: . . . Provided us with this general remark:

" the creativity training industry promises to produce more creative workers and therefore more creative products and therefore more revenue".

(my emphasizes)

Page 7 (A. Engman and C. Cranford, 2016), (Koestler, 1964)

ROTE MEMORY:

"<u>MIND-SPLIT</u>": . . . points out the obvious: We always choose the same behavioral responses (or nearly so) to solve our common everyday problems. It's automatic.

Engman and Cranford: . . . provided a study entitled Habit and Routine: . . .

"<u>Habits allow us to act in familiar situations with relative ease ...</u>. <u>the formation</u> of habits is fundamental to human experience ... and ... <u>habits are self-</u> valorizing repetitive behaviors that can be performed with minimum conscious effort on the part of the subject".

Koestler, 1964: ... " the potential for creative activity --- a potential existing in every individual --- is <u>constrained by the automatic habits of thought and action</u> that dominate individuals lives." Also, "... creativity is an act of liberation --- the defeat of habit by originality".

(my emphasizes)

Page 8 (Katz and Maeda, 2015)

THE LION: .

"<u>MIND-SPLIT</u>": . . . Describes the "Lion" as a symbol of mental confusion. As far as I know, we all have this. Our minds just free wheel through our unconscious, bringing up past visions, mostly non-directed and largely destructive to our directed creative energies. Avoid the "Lion".

<u>Katz and Maeda</u>: . . . They describe this state of mind as "<u>factors that are</u> <u>barriers to the expression of the creative nature</u>".

(my emphasizes)

Page 8 (Sigmund Freud, Theory of the Unconscious. 1856-1939), (exploringyourmind.com),

BRAIN MODELS:

<u>"MIND-SPLIT"</u>:...

- Figure (1) BRAIN MODEL --- <u>Two parts of memory</u>.
- Figure (2) BRAIN MODEL --- <u>The creative mind</u>.

<u>Sigmund Freud</u>: . . . devised several models (two here) to explain the relationships between the conscious mind and the unconscious mind.

Exploringyourmind.com: . . . describes one of Freud's models as . . .

"... consisting of a simple geometric model comprised of two inscribed/concentric ovals or circles. Where the "... the unconscious is the biggest circle (and, included) inside it, the smallest circle of the conscious".

(Note the similarity of the "MIND-SPLIT" BRAIN MODELS, Figures (1) and (2).)

Freud's second model took the shape of an <u>iceberg</u>, He called it his <u>topographical model</u>.

As we all know, an iceberg floats in water with only a small portion of the iceberg visible above water. With this image in mind, Freud divided his iceberg model into three parts: (Where the entire iceberg represents the brain.)

<u>The conscious mind</u> represents the exposed small top of the iceberg --- where all attention is focused --- this focused attention can be used immediately for all situations as it is quickly accessed.

<u>The pre-conscious mind</u> is just below the surface where it affords ease of recall and is the <u>precursor to the unconscious mind</u>.

<u>The unconscious mind</u> is the remaining part of the iceberg --- this is the major part beneath the surface and signifies the vast remainder of memory.

Note: . . . "<u>MIND-SPLIT</u>" simplifies things by folding Freud's concept of the <u>pre-</u> <u>conscious mind</u> (also referred to as the "<u>fringe-conscious</u>") into the <u>unconscious</u> <u>mind</u> and considers both as being just <u>**one entity**</u> --- <u>the unconscious mind</u>.

(my emphasizes)

Page 8 (Leschziner & Green, 2013), (Gabora & Ranjan, 2013), (Pringle & Sowden, 2017), (Henri Poincare, 1854-1912),(A. Koestler, 1964), (Chaiken and Trope, 1999), (Beaty, 2016), (Ernst Kris, 1952), (Colin Martindale --- <u>Cognition and Consciousness</u>)

DANCING with a RELAXED MIND --- THE CREATIVE PROCESS:

"<u>MIND-SPLIT</u>": . . . Interprets the word "DANCE" as a process of <u>DITHERING</u> (a back-and-forth motion) between the conscious mind and the unconscious mind. This process may continue until the mind is satisfied with an outcome that satisfies the intended solution.

<u>Ernst Kris:</u> ... C. Martindale: ... "What really characterizes the creative person is the ability to <u>shift back and forth</u> between primary and secondary process states." Where the "... <u>primary process states</u> of consciousness are characterized by a <u>defocused attention</u>".

<u>Pringle and Sowden:</u>... "Creative thinking entails <u>shifting between different</u> <u>processes</u>"... and further states ... "Findings suggest expansion of mode shifting theories of creative thinking to include the importance of <u>close coupling</u> <u>between different modes</u> of thinking and of an analytic mode processing affective content".

<u>H. Poincare</u>: . . . _ believed that creative ideas came about through the combination of <u>old ideas in the unconscious</u> . . .

<u>A. Koestler:</u> . . . states that while ordinary thinking used habitual associations, creative thinking used bisociative thinking to combine two previously separate associative streams to produce a new idea.

<u>Chaiken and Trope</u>: . . . " two fundamental types of cognitive processing, one being <u>autonomous and the other requiring controlled attention</u>".

<u>Pringle and Sowden:</u> ... " suggest that <u>the capacity to switch between</u> <u>associative and analytic modes of cognition is a key skill for creative thinking</u> because the latter requires an <u>iterative back and forth</u> between the generation and evaluation of ideas and therefore a constant shifting between associative and analytic modes of thought"... <u>this "mode switching" is a critical skill for</u> <u>creative thought</u>. (my emphasizes)

Page 9 <u>RELAX-YOUR-MIND</u>:

The MANTRA:

"<u>MIND-SPLIT</u>": . . <u>RELAX-YOUR-MIND</u> is the gateway to your unconscious mind. Do this, and free yourself from those "sticky" habits of the conscious mind.

Additional opinions: . . . see CONNECTIONS, page 32, under the heading, RELAX.

Page 9 (Arthur Koestler (1905-1983) as attributed to Johannes Gutenberg (1398-1468)

WINE OR OTHER:

"<u>MIND-SPLIT</u>": . . . The author hesitates to encourage any type of an outside additive --- but we note in history the following:

Arthur Koestler: . . .

"<u>Gutenberg's insight was helped along by the wine that he drank; alcohol</u> presumably works to lower conscious inhibitions and can thereby facilitate primary-process thought."

(my emphasizes)

Page 9 (Hayk S. Arakelyan, Yerevan State University, Ph.D. in Medicine)

BODILY CHEMISTRY:

H. S. Arakelyan: ... Opines the following: (paraphrased/edited)

The prime-mover is <u>Dopamine</u> --- a hormone produced by the brain and functions as a neurotransmitter between nerve cells. It effects bodily processes, such as movement, memory, sleep, mood, pleasurable reward, and the <u>cognition</u> <u>of creative behavior</u>.

(my emphasizes)

Page 10 (Marily Oppezzo and Daniel L. Schwartz, 2014), and (Howard-Jones, 2010)

WALKING:

"MIND-SPLIT": . . . Hyperventilating with a view: . . .

The following are a few knowledgeable comments:

<u>Oppezzo and Schwartz</u>... "<u>Walking outside produced the most novel and</u> <u>highest quality analogies</u>". "<u>Walking opens up the free flow of ideas, and it is</u> a <u>simple and robust solution to the goals of increasing creativity...</u>".

<u>Howard-Jones</u>: . . . " <u>suggests that the simple act of movement resulting in a</u> <u>change in location and the visual field is an activity that has a measurable effect</u> <u>on those regions of the brain implicated in creative thinking</u>".

(my emphasizes)

Page 11 (Knoblich, Ohlsson, Haider, & Rhenius, 1999), (Fink, 1996)

"AHA" MOMENT:

"<u>MIND-SPLIT</u>": . . . The "classic" that we all know about:

Knoblich, Ohlsson, Haider and Rhenius: ...

" impasses in thought, are broken by relaxation of constraints by removing a problem from consciousness temporarily to gain new perspectives by performing <u>unrelated or mundane tasks</u>".

(my emphasizes)

Page 11 (Hobson, 1988), (Dietrich, 2003), (Sigmund Freud, 1856-1939)

<u>SLEEP</u>:

"<u>MIND-SPLIT</u>": . . . We all do this and know all about this, but here are some scientific sources:

<u>Hobson</u>: . . . "Dreaming is regarded by many as the mental state with the most creative potential because the pattern of cortical activation allows for unregulated and unlimited combinational creativity due to the coactivation of stored items that are not closely associated by conventional wisdom. Thus, dreaming might be regarded as the <u>most extreme form of the spontaneous</u> <u>processing mode</u> and can give rise to insights that are difficult to come by during normal waking consciousness".

<u>Dietrich:</u> ... "It has been argued that daydreaming is also an altered state of consciousness ... but not as profound as dreaming ... and can <u>play a vital part</u> in the creative process for the arts and sciences".

<u>Sigmund Freud</u>: ... " The interpretation of dreams is the true path towards knowledge about the <u>unconscious activities of the mind</u>".

(my emphasizes)

Page 12 (Contour Drawing)

CONTOUR DRAWING:

"<u>MIND-SPLIT</u>": . . . Maintains that contour drawing separates the conscious mind from the unconscious mind. The eye follows the contour. This is the conscious part. The unconscious part would be the hand and pencil on paper, whereas the eye has no conscious connection with the activity of the drawing hand.

No psychological references were found. (A topic to be studied ?)

For "how-to-do-it", return to page 12.

Page 12 Being an actor (Thalia R. Goldstein, The Mind On Stage, 2012), (Elizabeth Ligthelm, Department of Psychology, University of Cape Town), (Wu and Barsalou, 2009)

BEING AN ACTOR:

"<u>MIND-SPLIT</u>": . . . Sees acting as a repeated interplay between the conscious and the unconscious mind.

<u>Goldstein</u>: ... Acting involves what is referred to in psychological terms as theory of the mind (<u>the ability to understand and interpret other individuals'</u> <u>mental and emotional states</u>) and empathy (the ability to experience the feelings of others).

<u>Ligthelm</u>: . . . Three psychological skills. They are the theory of the mind, empathy, and emotion regulation or finding a way to <u>control your own emotions</u> <u>and replace them with the emotions of your character</u>.

<u>Wu and Barsalou:</u> . . . <u>Embodied simulation</u> . . has fundamental implications for understanding the creative work of actors who . . draw on their <u>bodily and</u> <u>sensory experience</u> to create something new . . must anticipate how others will somatically react to their creations.

(my emphasizes)

Page 12 (Sian Beilock, President of Barnard College, has Doctorates of Philosophy in both Kinesiology and Psychology from Michigan State University, 2003, and a B.S. in Cognitive Science/Psychology, U.C. San Diego, Author of: "Choke: What the Secretes of the Brain Reveal About Getting It Right When You Have To"), (Steve Nash, NBA super star)

LET'S TALK BASKETBALL --- WORKING FAST:

"<u>MIND-SPLIT</u>": ... Free throws are the big <u>elephant in the room</u> when talking about psychology in basketball. Everything else is simply "<u>zoning it</u>" (playing with pace, <u>stressless</u> --- as fast as you can). "Slow" means trouble. Your brain gets in the way. In sports, this mental phenomenon is called "<u>choking</u>".

<u>Sian Beilock</u>: . . . Author of "<u>Chock</u>: What the Secretes of the Brain Reveal About <u>Getting It Right When You Have To</u>", attributes mistakes (clunking free throws off the rim) to "<u>paralysis by analysis</u>". This is when a player "<u>over thinks a task</u>". She states that this over thinking interrupts the working memory (top fringe of the unconscious). Where this working memory has been established through many hours of practice.

<u>Steve Nash</u>: . . . Goes through a series of rhythmic pre-shot rituals <u>every time</u> he shoots a single free throw. Part of his ritual is <u>dribbling the ball</u> just before raising his eyes toward the target. "MIND-SPLIT" sees this as an act of diverting the mind from a situation of <u>high stress</u> (demanding perfection) to a <u>low stress</u> level of just playing the game ("zoning it"!).

(my emphasizes)

Page 13 No specific academic reference was found but <u>www.letstalkpitching.com</u> came to the rescue with "<u>Welcome to Let's Talk Pitching":</u>

LET'S TALK BASEBALL --- WORKING SLOW:

Academia seems not to handle this, but coaches do.

<u>www.letstalkpitching.com</u>: ... Provides athletic in-sight --- but little psychology. The best we could do was their reference to "<u>looking off</u>".

"<u>MIND-SPLIT</u>": . . Uses the term "<u>eye dip</u>" in place of "<u>looking off</u>". Whatever the case, both terms refer to the <u>same behavior</u>.

"<u>Welcome to Let's Talk Pitching.</u>" . . . Indicates the following:

"Looking off is the only thing that makes sense. Remember the old pictures that you'd stare at for 15 seconds until your mind went numb and you saw something else? That's total "lack of focus". Rapid eye movement slows the brain and allows for better focus and ability to see what you're throwing to".

"A kid needs to make sure he has picked his target up early enough at the leg kick so he can lock into it, but prior to that, it should be taught to . . .

look off the target,

in both the windup and the stretch."

(my emphasizes)

Page 15 (Poincare (1854-1912) as per --- R. Weisberg in "CREATIVITY BEYOND GENIUS".

<u>A BIOLOGICAL EVENT:</u>

"<u>MIND-SPLIT</u>": ... See <u>A BIOLOGICAL EVENT</u> (page 15.).

Additional events:

- <u>J. Hadamard</u>: . . . "<u>Automatic Writing</u>" qualifies as a biological "spooky" event and was described and included in the text of <u>NOTES</u>: . . . page 17.
- <u>Poincare:</u>... Reported an experience which he and others interpreted as an observation of his own unconscious at work. It goes like this --- After coffee and a sleepless night, trying to reconcile a series of ideas and thinking --- Poincare was obviously conscious when these ideas arose, but he felt that (his) thinking was of an extraordinary sort, since it occurred during sleeplessness induced by coffee ...

... he felt himself to be an "INACTIVE PARTICIPANT" ...

he concluded that he was, essentially ...

"OBSERVING THE WORKINGS OF HIS OWN UNCONSCIOUS".

(my emphasizes)

Page 16 (Blicbau & Steiner, 1998), (Dow & Mayer, 2004), (Amabile,1983), (Heitz,2013), (Lucas, 2001)", (Koestler, 1964), plus others

<u>YOU TOO:</u>

"<u>MIND-SPLIT</u>": . . . We are all capable.

Here are a few knowledgeable examples:

<u>Blicbau and Steiner:</u> ... "Creativity is believed to be <u>NOT limited to one area</u> (e.g., art) and is a general thinking pattern that can be <u>applied to many areas."</u> "... research has long established that creativity training and environmental techniques can foster creative thinking".

<u>Heitz</u>: . . . "The cornerstone philosophical foundation . . . is that creativity can be "<u>inspired</u>" . . . if there are in place the right goals and correct educators and infrastructure."

<u>Amabile</u>: . . . "Intrinsic motivation arises when the task itself is a source of interest, enjoyment, self-expression, and personal challenge."

Also, "... research has long established that creativity training and environmental techniques can foster creative thinking".

<u>Lucas</u>: . . . As per Yu-Sien Lin (2011) in <u>Creative Education</u> . . . maintains that the qualities and capacities of everyday creativity "<u>can be demonstrated in any</u> <u>subject at school or in any aspect of life</u>".

<u>Koestler</u>: . . . " . . the potential for creative activity is a potential <u>existing in every</u> <u>individual</u> . . . ".

(my emphasizes)

Page 16 (Norbert & Ksenija Jausovec, 2000), (Hair & Jung, 2008 -- Roeper Review, pg. 176)

<u>RELAX</u>:

"<u>MIND-SPLIT</u>": . . . <u>Relaxing the Mind</u> nulls the conscious mind and provides a gateway to the unconscious mind and creative thinking.

The following clinical study links <u>Relaxing the Mind to creative thinking</u>.

Norbert and Ksenija Jausover: . . "Differences in Resting EEG Related to Ability"

N. and K. Jausover: ... "... investigated the relationship between different EEG measures and ability (creativity and intelligence) ... with subjects either eyes open or closed ... (this) study showed <u>only weak correlations</u> between measures based on the level of activity in different areas (mean power, mean frequency, ...) and creativity. The correlations with IQ scores were even <u>less pronounced</u> ... "

"ON THE OTHER HAND, COHERENCE MEASURES SHOWED A MUCH MORE INTENSE RELATIONSHIP BOTH WITH CREATIVITY AS WELL AS INTELLIGENCE."

"MIND-SPLIT": . . The <u>RELAX-YOUR-MIND</u> mantra seems to be in good company! Consider this:

Finding a meaningful example of <u>RELAX-YOUR-MIND</u> is difficult. We can say that daydreaming is a perfect example. But, because it is so common, so simple, it does not really impress. What we want to convey is the feeling of "free-wheeling". It is a mental "drifting". Some artists describe this mental non-stressful state as "flowing", or, just simply, the "flow". It's that simple, but it's hard to explain the feeling. It's allowing you mind to "float" <u>while still being</u> <u>conscious of the moment</u>. In other words: The brain must occupy two mental states at the same time !

Consider the following weird example. It starts off as "May I excuse myself": ...

May I excuse myself by adding a real-life example that may or may not make sense. This is something we all can relate to, as it takes place in the bathroom and happens at least once or twice a day.

It's pooping. (My 12-year-old granddaughter said it was OK to use this word).

The pooping process works best * when you split your conscious thoughts into <u>two levels</u>. First, it is suggested that you <u>relax your mind</u> by mentally separating yourself from your biological processes (pooping). And then, second, do this by re-directing your mind else ware --- this may be why so many people put reading materials in their bathroom!

This "bathroom" example shocks but may give a real-life inkling of what is meant by relaxing the mind. If you agree or not --- this "bathroom" example does poke your mind.

* Under normal conditions --- consult your doctor.

(my emphasizes)

Page 16 (Fanny Soderback, 2014), (Freud, "The Unconscious", 1915)

<u>TIME</u>:

"MIND-SPLIT': . . . TIME VANISHES --- who would have thought !

Who would ever agree with this outlandish idea !

Not in my wildest dreams would I find some hint of agreement that "time vanishes"--- as being <u>not supported</u> in the unconscious mind. I thought I was the only "nut" --- not so.

<u>Freud:</u> . . . seems to agree that time does not exist in the unconscious mind --- he does this by simply stating that <u>mental visions in the unconscious mind</u> are ---

"not chronologically ordered".

<u>Fanny Soderback</u>: . . . Freud attempts to establish the special properties of the unconscious, and states that one such property is that the processes in the unconscious system are "<u>timeless</u>" . . . i.e., <u>are not chronologically ordered</u>, <u>are not altered by the passage of time</u>, indeed . . they . . .

"bear no relation to time whatsoever."

(my emphasizes)

Page 16 (Kraepelin, 1921/1976), (K. R. Jamison, 1989), (Goodwin and Jamison, 1990)

"<u>SPOOKY"</u>:

Einstein uses this word for "ACTION AT A DISTANCE".

"MIND-SPLIT": ... Uses this word for "ACTION BY THE UNCONSCIOUS MIND".

The following views point to some surrounding behaviors that may occur during times of unconscious creative activity:

<u>Kraepelin:</u>... During mania, <u>thought processes are loosened</u>, which can result in the production of new ideas that would not be possible during nonmanic states.

<u>Jamison</u>: . . . Artists and writers have reported powerful positive mood changes before periods of intense creative activity.

<u>Goodwin and Jamison</u>: . . . "This period of elated and expansive mood is described by many individuals as their time of inspiration"---

<u>"A time of faster and more fluid thinking, new ideas and connections of thoughts".</u>

For real-time "SPOOKY", see the following:

- **AUTOMATIC WRITING:** by Jacques Hadamard, see **NOTE**: *(1), page 17.
- **INACTIVE PARTICIPANT**: by Henri Poincare, see <u>A BIOLOGICAL EVENT</u>: , Page 31.

(my emphasizes)

Page 16 (Leschziner and Brett, 2019), (Jamison, 1989), (Evans and Stanovich. 2013), (Jonathan St. B. T. Evans and Keith Frankish, 2009)

PACE:

"<u>MIND-SPLIT</u>": . . . States that the cognitive mind processes of the unconscious mind are <u>much faster</u> than that of the conscious mind.

Sociologist have recognized two fundamental types of cognitive processes, the first, as being <u>Unconscious cognition</u> --- and is recognized as being <u>FAST and</u> <u>intuitive.</u>

The second is **<u>Conscious cognition</u>** --- and is recognized as being **<u>SLOW</u>** and **<u>deliberative</u>**.

<u>Jamison:</u> . . . " changes in thought processes are believed to be both quantitative and qualitive". And also states that: . . .

"Quantitatively, <u>speed of thought, *per se* is increased during mania</u>; more ideas would be produced, but not necessarily better ones . . . whereas . . . this

increased output of thought may bring with it a qualitative change in the ideas produced, with ideas becoming better, that is, more original.

J. St. B. T. Evans and K. Frankish: . . . " the mind as a whole should be thought of as <u>neatly bifurcated</u>. . . . characterized as <u>conscious</u>, slow, reflective or logical thinking, while on other occasions <u>unconsciously</u>, <u>quickly and intuitively</u>".

(my emphasizes)

Page 16 (Leschziner and Brett, 2019), (Collins, 2004,2009), (Jung and Haier, 2007), (readaheathyyou.com), (Vaisey and Frye, 2019), (Wu and Barsalou, 2009)

EMBODYMENT: --- The body's muscular system as related to cognition.

"<u>MIND-SPLIT</u>": . . . Opines that the muscular system is the <u>only means</u> that the brain has to express itself. And further states that <u>ALL COGNITION</u> is reflected or mapped onto the body's muscular system.

<u>Collins:</u>... states that "... <u>bodily processes</u>, such as verbal and nonverbal communication, the mutual attunement of bodily rhythm, and the swelling of emotional energy, <u>all play important roles in creativity</u>".

<u>Leschziner and Brett</u>: . . . as stated in Social Psychology Quarterly, 2019, under the subtitle: "<u>THE MIND AND BODY IN CREAIVITY</u>"

"... we demonstrate that <u>creativity is more grounded in bodily and sensory</u> <u>experience</u> and more reliant on a combination of cognitive processes than has been typically recognized.

"... creativity emerges through a range of <u>cognitive and bodily processes</u>, combining conceptual and bodily knowledge as well as heuristic and analytic cognition."

Also: . . . "We have found evidence that <u>bodily and sensory experience and</u> <u>knowledge scaffold cognition</u>, facilitating interactions between heuristic and analytical cognition." And further ". . . <u>highlights the interconnected role of the</u> <u>mind and the body in creativity</u>".

<u>Jung and Haier:</u> ... "Parieto-Frontal Integration Theory or P-FIT recognizes that our species gathers and processes information predominantly through <u>auditory</u> <u>and/or visual means</u>, usually in combination ... ".

<u>Readaheathyyou.com</u>: ... relates to <u>Clinical Kinesthesia (muscle responses)</u> where the sensory input from sensory organs (<u>auditory, visual, olfactory organs</u>) transfer information from these sensory organs to the brain, which,

"maps this information onto the body's muscular system".

<u>Wu and Barsalou</u>: . . . "<u>Embodied simulation</u> . . has fundamental implications for understanding the creative work of actors who . . <u>draw on their bodily and</u> <u>sensory experience to create something new</u> . . . ".

Vaisey and Frye: ... Creative Processes: It's the "the Dualism of Mind and Body".

(my emphasizes)

Page 16 (Mozart, 1756-1791). (Psychology Today, 1989)

PROCESS:

"<u>MIND-SPLIT</u>": ... Suggests that the process of "writing" might be thought of as collecting thoughts in **two different modes**. One mode: is to <u>mentally retain</u> <u>an idea</u>, and, second: briefly <u>record that same idea on paper</u>. This tactic releases the mind of an unwanted stress of remembrance. The <u>written note</u> is thus a "<u>place-holder</u>", freeing the mind to drift --- realizing, of course, that the mind <u>still retains that same idea</u>. When the mind is satisfied, and all ideas are rapped-up in one single mental/muscular vision --- then release this vision ---

all at once

without looking at written "place-holders"!

(Looking at "place-holders" before drafting the piece, may destroy the vision.)

<u>Psychology Today</u>: . . . <u>Mozart wrote the overture to *Don Giovanni* in only a few hours, after a virtually sleepless night and without revision.</u>

<u>Psychology Today</u>:... Mozart's letter --- as reported:

" all this fires my soul, and, provided I am not disturbed, my subject enlarges itself, becomes methodized and defined, and the whole, though it be long, stands almost <u>complete and finished in my mind</u>, so that I can survey it, like a fine picture or a beautiful statue, at a glance . . .

Nor do I hear in my imagination the parts SUCCESSIVELY, but I hear

them, as it were,

"ALL AT ONCE"

(my emphasizes)

Page 16 (T. Moore & M. Shaughnessy, 2008 --- Reflective Conversation with D. K. Simonton)

NOTHING HAPPENS:

D. K. Simonton: . . .

Regarding motivation of creative genius . . . "<u>Intelligence is crucial</u> . . . <u>motivation</u> <u>is crucial</u>".

"WITHOUT EITHER, THERE IS NOTHING".

(my emphasizes)

Page 17 (T. Chemi & C. Zhou, 2016), (Psychology Today, 2013), (Esquivel, 1995)

CREATIVITY : A DEFINITION.

"<u>MIND-SPLIT</u>": . . . argues that If you put something together, and it happens to be <u>new to you</u> --- then it's creative --- it <u>does not need to be useful</u>. This is **NOT** the common definition of Creativity.

For a more expanded view of the definition of Creativity, "<u>MIND-SPLIT</u>" recommends the following: . . .

Chemi and Zhou: . . .

"Teaching Creativity in Higher Education Bridging Theory and Practice".

Published by the Aalborg University Press, 2016.

<u>Psychology Today</u>: . . . Maslow states that "Creativeness is a facet of <u>self</u>-<u>actualization</u>".

<u>Psychology Today</u>: . . . further comments that "Maslow <u>breaks with tradition</u> of defining creativity in terms of its <u>products</u>. Most scholars (STILL) assume that creativity is the process that results in something novel and useful".

<u>Esquivel and others</u>: . . . "<u>Process-oriented creativity</u> focuses on the <u>MENTAL</u> <u>PROCESS</u> involving creative potential to generate new ideas, solutions of problems and self-actualization of individuals".

(my emphasizes)

Page 20 (Liu and Schoenwetter, 2004), (Sternberg and Williams, 1999), (Cropley, 1999), (Coren and Schulman, 1971), (Tortarella, 1968)

SCRIBBLING:

"<u>MIND-SPLIT</u>": . . . For the scribbler, <u>set stress at ZERO.</u>

Liu and Schoenwetter: . . . points out that the obstacles to creativity include "fear of failure ".

<u>Cropley</u>: ... suggests that "... down-time, such as scribbling for fun may be "<u>free of constraints</u> of the strictly logical" ... and ... "risks can be taken without <u>fear</u> of real-life consequences, rules can be broken, the impossible can be tried out, and <u>fantasy can be given free rein</u>".

<u>Coren and Schulman</u>: . . . " stress produces decrements in originality. If people are placed under stress, they will give more <u>stereotyped</u> word associations and will do worse on paper and pencil tests of creativity".

(my emphasizes)

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