

Inhibited Connection-Making in Thinking, Learning and Relating

By Kathleen Logan-Prince and George M. Prince

In our combined experience with creativity and psychotherapy we have come to believe that there is a widespread way of operating that could be called Inhibited Connection Making or ICM. It is analogous to Inhibited Sexual Desire or ISD, but it refers to the everyday capacity of a person to make meaning of the various events that compose his or her life.

This view is based on extensive research into basic needs, brain function, the thinking/learning process and how people are physically and emotionally affected by the information field, which surrounds them.

Dr. John Bowlby in his research into attachment between infants and mothers, identified two instinctually rooted drives: one toward independence, individuality and autonomy; the other toward togetherness and belonging. When these needs are ignored there is reactivity and defensiveness that interfere with thinking learning and relating. Here is how this works:

The Thinking/Learning/Creative Process*

Step 1.	Perceiving—becoming aware of/observing
Step 2.	More or less confusion
Step 3.	Trial connecting the unfamiliar with things I know to make sense of it
Step 4.	Deciding on a connection to form an idea of the observation
Step 5.	Testing to see if the new idea matches reality and makes sense
Step 6.	Repeat steps 2 through 5 until it seems right

*This was developed through research with thousands of managers in business as they worked on problems and inventions. Synectics® Inc., the company that did this research, is one of the original and still the largest teachers of creativity to industry.

Examples

Connecting to create meaning/understanding

Grandson, six-year-old Max, is with me on a boat. He is pumping water, invisible beneath the floor-boards, out of the bilge. It is his first time. The pump sucks air. I say, "What does that mean?"

Max says, "It means I have pumped out all the water."

"How do you know that?" I ask.

"From sucking a soda with a straw."

The essential action in each of these steps is to make connections. Going through these steps presents many opportunities to make "mistakes" or feel mistaken and uncertain. If, in my past experience I have been rigorously corrected and disapproved of when I made mistakes, all of these thinking steps can trigger anxiety. If my internal field or the field around me is unfriendly or punishing, my foresight function will urge me to avoid the risk of proceeding—in other words, to stop thinking.

Connecting to create a new idea

Sally needed a better place to study for exams. Her roommates distracted her and she did not want to go to the library. She needed a new way to think about it so she went on an "excursion". The image of a mushroom popped up in her mind. She pretended she was inside a mushroom. It was cool and damp as though in a cave. The walls were nubby and moist. There was a faint pulse as though the mushroom was breathing—it was a little like a heartbeat...

Sally thought, "Heartbeat...it would be comforting, as though I am in a womb. It would block out other distracting noise. That is what I will do. I will record my heartbeat and then play it back into earphones. Wherever I am will be a place to study."

Anxiety

In the mid fifties, Harry Stack Sullivan, the great psychiatrist, made us aware of the enormous influence of anxiety on our thinking operations and behavior. He emphasized that the underlying apprehension that gives anxiety its overpowering force is fear of abandonment.

More recently, Goleman, LeDoux and van der Kolk in their studies of the brain and trauma identified the physiology of anxiety and underscored the physical component that makes anxiety such a potent influence in thinking.

Dr. John Gottman conducted research with couples over a twenty-year period into the emotional impact of negative transmissions (words, tones and non-verbals) on couples discussing their everyday issues. He found that when there is more than *one* negative message to every *five* positive, validating messages, the marriage will be unstable. The four major offenders, he found, are: criticism, contempt, defensiveness, and stonewalling.

In the study of thousands of videotapes of invention sessions, Synectics found that *any* discounting action leads to a destructive revenge action from the discountee and has a negative effect on the field for accomplishment.

Relating these findings to children, it is revealing to read Brazelton and Daniel Stern on their studies of the extreme sensitivity of children to the transmissions of their parents, teachers and other authority figures. This is not news to teachers who have observed how young children, when attempting something independently, continually check the reactions of the teacher.

Study of sufferers with Post Traumatic Stress Disorder (PTSD) has revealed a close relationship between feelings of helplessness and the impact of a traumatic event. People who have a well-developed sense of competence and self-sufficiency tend to survive high stress without after-effect. This underscores the importance of encouraging children to take initiative and develop self-reliance. When there is too much control and “telling” rather than “figuring out”, a child will learn helplessness, over-dependence and “hidden” ways of expressing his autonomy—all are symptoms of ICM.

The implications of Gottman’s five to one law suggest that present teaching and managing practices (not to mention childrearing practices) may involve far too many discounts and punishments and too few validations and appreciations, leading to ICM and may be causing defensiveness, hidden rebellion and self-limiting reactions.

Field Theory

In 1954, Sullivan stated that the most powerful determinant of an infant and child’s well being is the *interpersonal field* that is created between the child and her parents.

The more recent field theory from quantum physics gives us an explanatory, unifying and fundamental concept that may be used as a guide in designing creative, learning and accomplishment-oriented environments.

The physicists found that sub-atomic particles exist as tiny, invisible fields of energy—bundles of potential. Only when two such fields come together, do their potentials come into being.

We now believe the field around us is made up of information which is generated by everything in the field. As this external field of information envelops a person it interacts with his internal field and determines his behavior, which, in turn, influences the general field.

Margaret Wheatley suggests that each of us is a bundle of potential and the field determines which of our talents will develop. The diagram on the next page is an attempt to combine the findings.

From study of the creative/learning process we know that the essential activity is connection-making. This process can happen through a teacher explaining something. The teacher is in charge of the process and focuses on having the person get and remember the correct answer. Another, more effective teaching approach is known as discovery learning. In this process, the person is led to make the connections herself, obviously a more involving and satisfying way of learning. The emphasis is on making the *correct* connections and getting the *right* answer.

In Field-Based managing and teaching the discovery idea is carried further. The emphasis is still on making the correct connections and getting a right answer, and the emphasis is also on the *process*—the sometimes messy trial and error process necessary. The objective is to help the person experience her own trial and erroring without evoking the anxiety of *having to be instantly correct*. That fear of being “wrong” while working toward a right answer triggers anxiety and leads to *avoidance of the thinking process itself*—Inhibited Connection Making.

The physiological roots

The physical center of all our emotions is the amygdala which monitors *all* incoming information from the senses and, in cooperation with the rest of our brain, “tells” us what to think and how to feel. It determines the emotional significance of everything in our awareness. It is important for us to understand how the amygdala is “trained” to take charge of this important part of our lives.

The amygdala’s genetic and instinctual assignment is to insure survival. It scans *everything* in its field—sights, sounds, feels (touch), tastes, smells. From infancy it is learning to examine fields of information that signal support, nourishment and possible friend or mate, or danger, threat and possible annihilation and inform the rest of the brain. It becomes, through experience in reading the field, both our emotional memory and the *foreteller* or early warning of emotions to come.

Amygdala training begins early with the infant's powerful attachment to Mother and later to Father. We know that when infants and young children are taken from their parents and raised in institutions—even though the care is excellent—there is permanent damage to the child's ability to relate to others. The amygdala registers this early deprivation as *abuse* and becomes avoidant or traumatized. It tends to numb out the signals and the developing emotions of connection making—the heart of intimate relating.

Videotape studies of the exchange of verbal and nonverbal communications—the interpersonal field— between Mother and infant reveals the enormous amount of information that an infant absorbs, most of it having to do with the instinctual questions the amygdala asks: does this person care about me, will she nurture me, can I influence her (am I meaningful to her, does she respect me and my needs), am I safe?

Very early an infant is introduced to the sensation of anxiety, which is the basic communicator governing the degree of safety the infant feels. She experiences this dreadful feeling in her first few months when her mother suffers a pang of it and the infant “catches” it.

Anxiety gets its focus at about the sixth month when the infant is left alone longer than she can tolerate and she senses abandonment, which instinct tells her will lead to death. She does not, of course, think in that term, but forever after, any anxiety gets its remarkable influence from that underlying and unconscious meaning.

In the early years of intense learning and growth the infant and child is trying almost continual experiments—trial and erroring. Those two instinctual drives: one toward individuality, independence, competence and autonomy and the other toward belonging and togetherness—the development of interactive loving and tenderness. Success in each of these produces feelings of *meaningfulness* and each of us will be striving to feel and be meaningful as long as we live. “*Not meaning*, by definition, is utterly lonely. Well-fed, warm, and free of disease, you may still perish if you cannot “mean”.”¹

From the first few weeks, an infant has “the all-important first task of learning the nonverbal basis of social interaction upon which language will later be built. And this primary task takes several years.”²

He becomes expert at “reading” non-verbal actions and reactions of his parents. By four and a half months, he learns that his caregivers “...can use their feelings and the social behaviors that show feelings (their interpersonal fields), in order to change the feelings of another person”.³

A well-known experiment illustrates the sensitivity of a two and a half month old: it is called the *still-face procedure*. The mothering one wipes all expression from her face and just looks at the baby. His smiles die away, and he frowns. He makes repeated attempts to re-engage by smiling, gesturing and calling her. If he does not succeed, he looks away unhappy and confused. All our lives, most of us continue to react strongly to “still” faces.

Anxiety is the governing signal

This is the mechanism the amygdala uses to communicate negative feelings in the emotional system. “The tension called anxiety, in early experience, is differentiated from all other reductions in euphoria by the absence of anything specific, and consequently there is in the infant no capacity for action toward the relief of anxiety...anxiety is not manageable.

“Anxiety always interferes with any other tensions with which it coincides.”⁴

Learning by anxiety gradient

An important developmental process is learning to discriminate increasing from diminishing anxiety and to alter activity in the direction of reducing it. Sullivan calls this “foresight function”, and this is a pivotal cause of most inhibitions, including ICM. “If the impulse [to engage in an anxiety-laden activity] is quite strong, some mediate performance may be engaged in.”⁵

Babies and children become exquisitely sensitive to signs of rejection, disapproval and distaste. When such signs are repeated, they form a “path” in the amygdala that more and more easily triggers anxiety.

Infants and children are naturally curious beings. They live in a fog of confusion and are absorbed in making connections and creating meaning.

Inhibited Connection Making has its beginnings in a child’s learning that mistaken connections are punished. Parents’ punishment ranges from physical abuse to subtle signs of disapproval or distaste. The child’s emotional interpretation registers on his amygdala. When this is repeated over time, the child’s foresight triggers anxiety *even before* he makes a connection. Whenever he feels confusion that *may* lead to a mistaken connection, he gets an early warning and if he has developed little tolerance for anxiety, he will tend to stop that direction of thought. For example, she may avoid anything that confuses her.

Of course, the infant and child differentiates between communications that discount and those that validate. It seems likely that she differentiates between those that impact her loveableness and those that are critical of her intelligence. She will feel

some hurt and anxiety about a criticism of her spelling, "Your spelling is wrong" but far more about rejections of her as a person, "You are wrong". While intellectual corrections may make her a cautious connector in learning science, rejections of her as a person produce such a trauma that she will gradually numb herself and use selective inattention to avoid the anxiety. She inhibits connecting with material that has emotional content although she may stay open to connecting to the "purely" intellectual.

Since we know that every transmission has feeling as well as thought, she is, in effect, straining out part of the meaning.

The more violent and abusive the rejections, mistreatments and neglect, the greater the consequences in inhibiting connecting-to-understand-and-create meaning.

Foresight function leads the child and adult to learn strategies to deal with the pain of anxiety by converting it to more bearable feelings. Foresight works so well that "most anxiety is not a clear ingredient of awareness; it's just a little warning which is immediately followed by anger..."⁶ or other defensive operations such as inattention, distraction, no feeling, revulsion, boredom—all stratagems that defend against the anxiety that may be aroused by stretching for a connection.

The central task of one who suffers from ICM is to become aware of those "little warnings" of anxiety that trigger the more obvious defending actions such as "I don't get it". Once aware, he can focus on the anxiety, reduce it through Thought Field Therapy or other self-administered self-soothing process, and cultivate the natural feelings of joy that accompany connecting to create new meaning.

One of the frustrating aspects of ICM is that the anxiety triggers may have been installed in the amygdala in tiny, separate incidents or "blows" that are impossible to isolate, remember and treat. What is needed is a process for treating both remembered trauma and unidentifiable trauma. Remembered trauma may respond to talk therapy aided by EMDR. Unidentifiable trauma may be reduced with TFT or EFT procedures *applied by the client* at the "instant" the "little warnings" occur.

Example

In the course of a Synectics invention session there are several operations that are likely to trigger anxiety. Wishing, Excursion, Force Fit, Idea Statements (if there is a flaw in an idea presented, anxiety says, "do not accept any part of this". Methodological Belief is difficult), Itemized Response (finding positives in an idea that one "knows" is flawed).

We have developed some procedures to help participants "limber up" their connection making abilities: Absurdity Drill, Tree Like a Tractor exercise, Discontinuous pass-along

story, policy of no discounts, Role Definition, and other procedures to reinforce the message: "this is a safe field".

The subtle aspects of Inhibited Connection-Making

ICM in invention sessions is an extreme or "visible" example of repression. ICM exists as a policy in many more everyday situations where one resists connecting for fear of being rejected or being wrong. It can create other distortions of one's interpersonal field that lead to distancing and affect one's ability to recruit and be recruited to other relationships. A common example is the labeling of a person as "cold" or "unapproachable".

Recruitment and non-recruitability

Recruitment refers to the capacity to emotionally connect with other persons and we believe it depends upon the early conditioning of the amygdala. An infant and child whose moves to get loving attention and tenderness have been answered, develops an interpersonal field that communicates validation and openness to connect and appreciate. One, whose moves have been repeatedly ignored or rejected, is made anxious by impulses to connect and represses them. This may include an inclination to find fault and focus on negatives as a defense.

A common example is the person who "overtalks", does not take turns. Taking turns, surprisingly, is learned in early infancy as mother interacts with infant. Normally, mother smiles, raises eyebrows, coos, and infant responds. Then it is infant's turn to grin, gurgle and nod as mother mirrors this. If mother consistently ignores this protocol, the infant grows to be insensitive and does not connect to signs that it is someone else's turn to "speak".

Children, who have been seriously deprived of tenderness or abused, tend to be non-recruitable and anti-social. Bessel van der Kolk, in his research on Post Traumatic Stress Disorder, found that neglect (non-responsiveness), like trauma, often leads to "problems in developing the capacity to use words and symbols to identify what one is feeling."⁸

The destructiveness of Inhibited Connection Making

"Whenever [the connection making of] creativity is impeded, the ultimate result is not simply the absence of creativity, but an actual positive presence of destructiveness..."

"What is even of greater danger to the child...is that it eventually brings about violence of various kinds. For creativity is a prime need of a human being and *its denial brings about a pervasive state of dissatisfaction and boredom.*"

“What is even more destructive than such overt violence (and false excitement) is that the senses, intellect and emotions of the [person] gradually become deadened and the [person] loses the capacity for free movement of awareness, attention and thought.”⁹

Other strategies for dealing with anxiety

Inhibited Connection Making may be just the tip of an iceberg of repressed perceptions. A person who has been subjected to the abuse of indifference or neglect may limit her impulse-to-connect with *anything* that stirs strong emotion and/or confusion. They may “turn off” to sunsets, poetry, love stories and enjoyment of any awareness of need-to-think-about or need-to-understand. Van der Kolk observed a disconnect between right hemisphere of the brain, where painful memories are stored, and left hemisphere where language is developed.¹¹ This suggests that one avenue of promise is to develop more fluent articulation and observation in people with ICM.

Treatment of Inhibited Connection-Making

We believe that any move toward increased willingness to connect will need to begin by dealing with the strategies for avoidance of uncertainty and confusion developed long ago. Moves to avoid connecting are an amalgam of need: a “knot” of anxiety to trigger evasive action to block awareness, plus an internal story that rationalizes the need to avoid connecting, for example, “sensible” cynicism or skepticism. Each of these interwoven, multi-layered justification of not connecting needs to be addressed.

A case might be made that by examining the areas where a person has ICM would disclose we would get a picture of the type of traumas that person suffered in growing up. For example, a scientist who is a brilliant connection maker in the intellectual area of his profession is inhibited in making connections in his relationship with his wife and children. A machine operator is quick and skillful in learning assembly line procedures and in inventing ways of improving production, but avoids every intimate personal connection and uses sports and TV as emotional outlets.

Youthful sexual drive overcomes Inhibited Connection Making and permits “falling in love” and marriage, but as soon as the initial drive is satisfied, ICM takes over and the avoidance of intimacy tends to be the rule.

We need a reliable process to repeatedly collapse the knot of anxiety so awareness can emerge. We need a procedure that can calm anxiety when it recurs as awareness is brought into consciousness. We need a “safe”, repeatable process to make visible the anxiety that may be hidden under defensive maneuvers.

[Two key concepts are critical to modifying internal field. Meaning is interactional. “...language is not simply representative: a convenient picture of the world. It is more as La Rochefoucauld has said, “We could not experience love as we do if we had not

learned to talk of love." Language is the transformation of experience, and at the same time it transforms *what we can experience.*" (Goolishian and Anderson, unpublished paper, p. 10)

"Meaning and reality...evolve from dialogue with one's self and others. In monologue, no new meaning arises. One perspective reigns and reality becomes closed." (Ibid p.10)]

References

1. Kegan, Robert, *The Evolving Self-Problem and Process in Human Development*, Harvard University Press, Cambridge, 1982, P.19
2. Stern, Daniel N., *Diary of a Baby, What your child sees, feels, and experiences*, Basic Books, New York, 1990, 1998, P.55
3. Ibid. P. 61
4. Sullivan, Harry Stack, *The Interpersonal Theory of Psychiatry*, W.W. Norton, New York, 1953, P. xvi
5. Ibid. P. 43
6. Mullahy, Patrick (ed.), *The Contributions of Harry Stack Sullivan*, Jason Aronson Inc. Northvale, N.J., 1995, P. 120
7. Schnarch, David, *Passionate Marriage*, W.W. Norton, New York, 1997, P. 101
8. Sullivan, Harry Stack, *The Interpersonal Theory of Psychiatry*, W.W. Norton, New York, 1953, P. 153
9. van der Kolk, Bessel A., *Trauma, Memory and Self-Regulation, Clinical Applications of Current Research*, Workshop September, 1997, P. 92
10. Bohm, David and Peat, David, *Science, Order and Creativity*, Bantam Books, New York, 1987, P. 231
11. van der Kolk, Bessel A. Workshop statement 1997
12. Brazelton
13. Goleman, Daniel
14. Gottman, John
15. Wheatley, Margaret