

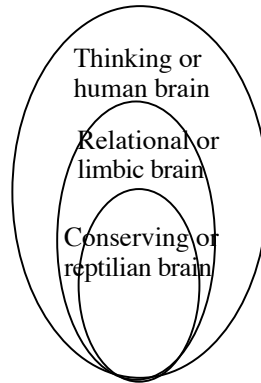
Change Management

One of the most repeated axioms is that “people resist change” or “are afraid of change”. It is said so often that it is believed to be the truth, the whole truth and nothing but the truth. It is a partial truth, a sometimes truth, and a situational truth. But it is not always true or more importantly, it does not have to be true.

We now know enough about how we work as human beings to understand that it is only part of us that resists change. And that it is not innate in us a human to resist all change, to resist change interminably, or to resist in arenas where we personally have something to lose. We have learned 95% of what we know about the human brain in the last 5 years, so if the sources you are using to understand and work with change are based on information any older, they are probably outdated and giving you incomplete and probably incorrect information.

A team of researchers led by Paul MacLean at the National Institute of Health has synthesized the work on the brain done by themselves and several major research centers. They have developed a construct of three brains or neurological systems in humans that act vertically and as an integrated unit similar to the interaction we have already seen in our behavior and value structures. InterOctave has developed a set of intelligences and processes for developing them that correlate directly to these brains. These structures gives us a scientific, psychological, and even physiological base for understanding the functioning of our behavior and values.

Triad of Intelligences



Our brain is composed of three parts, literally organized in three segments. Part of this triune design of our brain structure is shared with reptiles, and part with mammals. The third part is shared partially with higher mammals, e.g. primates, but within the third part is a smaller though distinctively important part that is unique to humans. All brains and intelligences are working all the time, primarily outside our control and awareness, therefore not to their full potential. It is critical to develop and engage the capacity of the higher intelligences, because without this development, the lower brain and intelligences usurp the higher capacities into the service of the more primitive “defensive and territorial systems” of the reptilian brain. But with development the higher intelligences and more human sections of the thinking brain, automatically integrates the lower brain and associated intelligences into the thinking brains service and employs all thinking processes to their best advantage. (Joseph Pearce: 1992).

Lower Brain

The reptilian brain is conservative by its nature and seeks habituation, permanence, and stability. It correlates with the stimulus-response mechanism that is studied by the behaviorists when they look at animals. Their extrapolation to humans is correct also as far as our reptilian brain is concerned. However even these stimulus response mechanisms can be guided, directed, and modulated when put into the service of the higher intelligences. This is the brain that is activated when we fear or resist change.

Reptilian Brain 5% of Brain *Resists/Avoids Newness*

- Routine, Autopilot, Conserving
- Sees Elemental: parts, categories
- Defines self by social order (territorial, ritual, hierarchical, aggressive)

Proper work of the Reptilian Brain: Manage our physical world interface and physiological systems

Midbrain

The middle brain, or limbic brain, maintains all relationship at the physical level of the body as well as the emotions bonds between individuals, families, and societies. This brain also has responsibility for dreaming, visioning, and intuition. It can help the lower

brain determine whether there is a true emergency or threat and develop appropriate action. It can help individuals overcome their competitiveness in settings where this is inappropriate and to design cooperative efforts where needed. If it is not well developed, the lower brain will use its emotions to bring an emergency to a fever pitch and to become carried away with fear or other intense emotions. The middle brain has functional aspects of its own and it can provide the reflective intelligence needed to make best use of the sensory motor and physical processes of our lower brain. Since the middle brain can scheme, and figure out ways to predict and control our environment and other people, be philosophical and poetic, inventive and emotional, it is a powerful force when co-opted by the lower brain or a potent manager when developed as a guiding force of the lower brain. So if the lower brain is activated by a change effort initiative, and in cultures where people have not been developed to actively manage their thinking, the midbrain will increase the resistance to change and actively seek to pull the person's entire sphere of influence in that direction.

Mammalian Brain 30% of Brain
Welcomes change conditionally

- Collaborative, relevance and meaning, contextual
- Individuation, identity plus emotional
- Imaginative, visualization
- Being-to-being appreciation

Proper Work:

Developing and improving human relationships and personal self-worth,
unifying and aligning work and causes

Human Brain

The thinking brain, or neo-cortex, if developed can radically alter the potential of both the other brains. It incorporates instantly the learning of the two other brains. But most importantly it can use them for higher purposes. Managing the lower brains takes only a small amount of energy from the neo-cortex because it is designed for constantly evolving and intervening in the constructs we hold of the universe and reality itself.

When the neo-cortex brain is undeveloped, or unengaged, we tend to get stuck in defensive or emotional postures and the higher system is forced to focus on the needs of the lower system. Since this takes very little effort the higher systems for the most part is simply put on idle until such time as the coast is clear. If this happens often enough for long enough, the highest system tends to atrophy and what is developed of this brain becomes dormant.

Human Brain 60% of Brain

Prefers and pursues change—thrives on innovation and challenge

- Futurizes, envisions possibilities and pursues them
- Sees Wholes, complexity, differentiation
- Self-regulating, purposeful, individuation becomes uniqueness
- Purpose driven based on greater whole effectiveness (specific

Proper work: What is “right” and what is “good” for all our stakeholders; managing mammalian and reptilian brains.

Implication for Leadership

What does this suggest for leadership of change? It is not merely a matter of putting the minds of our people to work-using the potential of people. People will tend to put to work the reptilian brain, particular if the involvement of people is accompanied by incentives or threats of any sort. The upper brain and its corresponding intelligence are not developed in our culture through families or schools, or work environments. There are so few exceptions to this gap that we almost universally learned to use this brain in the service of our self-preservation and belonging values which tend to be ramrodded by our lower and maybe middle brain. Most organizational work designs today provide lots of food and fuel for the reptilian brain and intelligences. Some new work designs and change initiatives are initially nourishing the middle brain by involving people, without really developing it and giving the guiding capability needed to manage a now unruly and quite strong lower brain. The higher brain is rarely considered in change efforts for any level of system- educational, or business or societal. Think of the potential of a nation or an industry, or a leader who had all three brains/intelligences developed.

The design and implementation of most change efforts impact almost exclusively on only the lower brain, even though most managers would say they are working on the qualities we have spoken of for the middle brain and even some of the higher brain. The initiatives are intended to get a specific predictable response that produces some habitual result in the organization. Even though designers hope to provide reasons to change, the lack of relationship to purpose, the result of downsizing or layoffs tends to trigger the lower

brain sensing threat among the majority of the members of the organization. An organization that works on the development of all three brains and the intelligences that go with them, is creating a culture that will enable the full development and expression of a full value base. This makes possible a whole set of behaviors guided in their execution by the *thinking* brain that has the potential for creating development and evolution of us as businesses and nations.

Developing and Engaging the upper brain

Although it really takes a development process to enable people to fully engage their own upper brain, all change efforts can take advantage of this naturally ability in us as humans. We can see this at moments where we are inspired—by a parade, an act of heroism, and a spiritual moment. What it takes to engage the upper brain is to use its unique capacities. The core of these capacities are:

- To see into the future and manage oneself to move in that direction
- To connect to a greater whole of which we value being a part
- To see our own uniqueness and how we can contribute to the purpose of a greater whole and therefore, a better future.

It is important to avoid the processes that tend to activate the lower brain particularly.

These include:

- Threats and incentives regarding the change (incentives help some but alienate those not incented or are not motivated by incentives)

- Comparisons among people and where people fit as a group. It gives the lower brain a way to co-opt the midbrain and form alliances for resistance.

What Invites resistance to Change?

- **Threats, incentives, and polarization.**
- **Judgment from others (both good — and bad).**
- **Command/control (as receiver or — deliverer).**
- **Over-simplicity and partial views.**
- **Modular mastery approaches—one step at a time.**

Leadership Implications Change Initiatives

- *Collaborative, “levelless”* efforts focused on *stakeholder* effectiveness—reflectively developed.
- Inclusion of Individual *Uniqueness*—reflective.
- *Measures* of stakeholder (e.g. customer) effectiveness (external, not internal evaluation).

Exercise:

Discuss why each of the above might have an effect on ability to embrace change based on your own experience.

What implication do that suggest in your own processes of engaging with others.

Exercise:

1. Identify the fear or disordering elements in terms of:

- ◆ where the old order is not available and what may be missed as a result?
- ◆ What new order is going to be important?

2. Identify the belonging concerns in regard to:

- ◆ Where collaboration feels reduced?
- ◆ Where (on what) we will need greater collaboration? Guidelines for that collaboration
- ◆ Meaning that is changing in our work?
- ◆ What will be important to place meaning in now?

3. Identify future and contribution elements:

- ◆ Where there are new possibilities to differentiate ourselves as a group?
- ◆ Where I personally would value making a contribution or being in a leadership role?
- ◆ Where do we need to define purpose because it is unclear or seen as missing?
- ◆ Define purpose for those arenas as an offer to the group or redefine the work as you see it can be more purposeful.

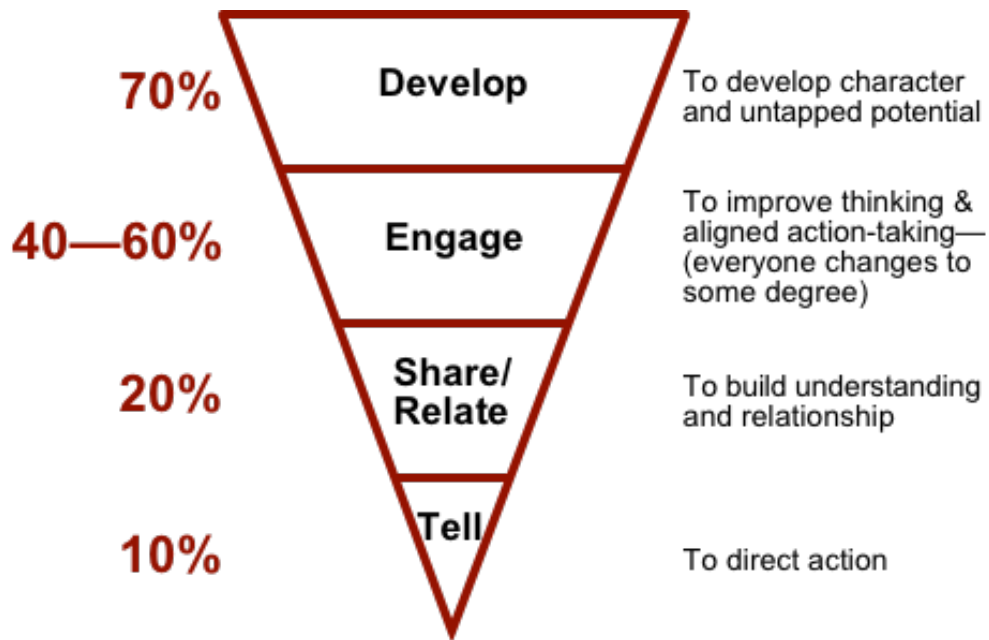
Change Communications that are Effective in their Result

The new research on the brain we just explored helps explain some discoveries from earlier research on change. John Glaser, Ph.D of Harvard School of Education, did a study from 1965-1970 to determine what really caused people to integrate new learning and demands for change. He studied students in the classroom, both adults and children and discovered that some methods on interaction were much more effective than others at promoting integration of new ideas and tasks.

Exercise:

- ◆ Select something you need to communicate. Design a communication using the following framework.
- ◆ Carry out the interaction to the person or persons
- ◆ Come back to reflect with your “mini-workshop” leader to reflect on its success and your learning.

Levels of Communication



The percentage represents the degree of effectiveness in achieving commitment or integration with existing work or life. The right side suggests what level of result it is likely you can achieve based on the level of interaction chosen. The levels are cumulative, so each one makes the levels below more effective, that even things that are *told* have more impact on memory and acceptance as we work from engage and develop than if we tell also. It seems the upper brain is being “engaged” when there are particularly nature of interaction.

Techniques for Effective Interactions

<p>Develop</p>	<p>Ask questions that cause people to have to articulate thinking, develop reasoning, develop thoughts they don't already have (cause people to take on thinking that makes them uncomfortable so can see need for development.</p> <p>Provide frameworks that reflect wholeness and higher degrees of ordering so that people are pulled to evaluate selves and see gaps and therefore new possibilities.</p> <p>Destabilize being by Socratic processes</p> <p>Reflect on function, being and will changes</p>
<p>Engage</p>	<p>Let people develop their own thinking before giving them yours</p> <p>Put people in small groups to process ideas and concepts</p> <p>Provide opportunity to "try out" new ideas and approaches</p> <p>Audit to upgrade</p> <p>Processes that futurize, connect to greater whole, and individual uniqueness engage the upper brain</p>
<p>Share/Relate</p>	<p>Take turns express thoughts and reactions</p> <p>Own your own feelings and thoughts</p> <p>Use good listening skills</p>
<p>Tell</p>	<p>Plan your thoughts in terms of the effect they will create.</p> <p>Write them first and then rewrite them from the other persons shoes before you deliver.</p> <p>Ask for feedback for understanding and agreed on path forward and outcomes as well as timelines.</p>

Sustaining change and continuous change cultures

Harvard University in late 1940's through early 1960's¹ conducted a combined longevity research study across three schools—education, sociology, and psychology, with the intent of understanding what makes successful change possible, without recurrence of or reverting to old patterns. These studies were natural outgrowths of the research beginning the 1930's in industrial management begun by the team with Western Electric which lead to our first understanding of social intervention in industrial change. Pattern changes that were studied were alcoholism, smoking, regular exercise, delinquency and recidivism in criminal activity, language learning, and immigrant socialization. They looked at individuals working independently and at persons working in collective programs to support change (e.g. Alcoholics Anonymous).

Summary of findings:

The Harvard research indicates that change seems to be most effective when some fundamentals elements are present, no matter the nature of change that is being undertaken.

Fundamental Elements for Successful Change:

- *Intensity*- Those changes that were sustainable in terms of permanent patterns changes were characterized by people having invested 10%-20% average of waking time immersed in shifting to the new pattern. This means that the

changers were actively thinking about and learning new processes related to the changes they were seeking to make, while the remainder of their time was spent in using old patterns on routine tasks. In other words they did not try to change everything every minute. In fact the study seems to indicate limited benefit for focusing on the changed patterns above 20% of an individual's or group's time. Spacing was needed in terms of time to integrate and experience the difference in results and outcomes. There was benefit in seeking to elaborate the options and approaches available for the new patterns and in trying out new skills on different situations, rather than working on the change always on the same routines.

- Frequency— Working for 10-20% of each day is more ideal than saving up and only working intensively a few days a year as frequently happens after a new resolution. Daily is ideal but a minimum is weekly produced approximately the same success of change.
- Duration—Patterns we have built over a life time are very tenacious and cause a great deal of inertia to restrain us as we move toward change. For most areas, “lasting” change is defined as 4-7 years. This seemed to be the amount of time that was required for internalization and full integration of the complex new patterns where non-reversion to old patterns was very atypical.
- Context—The environment of change is critical also. The environment necessary for change is characterized by the study as one that nourishes experiences of change through the impetus that comes from shocks or

stimulating sources *outside* the system (not others inside) introduced into the systems in order to break up existing patterns and initiate the repatterning of systems. The external sources must be ones with extensive previous experience on the path of change themselves, and therefore able to recognize, confront, and reframe the patterns for others. (e.g. Alcoholics' Anonymous, and Weight Watchers meetings are lead by successful followers). These were most effective in settings where self-discipline was developed by a teacher or guide who was themselves disciplined in following a set of rituals aimed at change.

The change to occur more quickly and more permanently if there is a group or partnership in the repatterning process. Externally developed reward and incentive systems (those developed by others for reinforcing someone else's behavior) seemed to had very little effect on the whole changing and rather only effected a relatively small number. The most effective incentives were self-developed and self-administered programs of reinforcement within a guided program. Most effective were those that experienced or found a higher value purpose, objective, or order as a source of motivation or inspiration. c

The change process itself, researchers also found, must incorporate three dimensions of experience— physical and functional patterns (some skill development or activity patterns to perform), emotional and state of being patterns, (some processes from

reflection and self-management) and intellectual or thought patterns (development of will and intentionality) — for the change to be achieved. Working on any one or even two is not sufficient for lasting effect. Without intention and without a designed effort toward change of patterns, people tend to reify and revert to existing patterns as the “right” way. Development of will through process of reflection were found to be highly effective Familiarity was found to be the greatest deceiver by causing one to think that what their own experience is the best or only way. Other studies of change have indicated that integration of learning in a natural work or home setting, not separate out from life and work is imperative.

Most of these can be seen as common sense in regard to change is we look at our own attempts at personal change when trying to institute a New Year’s Resolution, a new diet or exercise regime or other significant change requiring a change in patterns that has become automatic to us.

Implications for a change effort:

1. Plan immersion activities that have people reengage with the some effort one hour per week or two hours every other week. (use all the information in the previous materials on the brain, designing interactions.)

2. Integrate the same topics into many events so that it is being reflected on about 10-20 % of the time people are engaged. In a forty hour work week this is 4–8 hours. Otherwise it is not integrated.
3. Use processes that foster the upper brain's leadership of the lower brain, not a co-opting of the mid and upper brains in resistance to change by the lower brain.
4. Refer to this material a couple of hours a week and when planning interactions to remind your self as a leader what it takes to lead change

¹ Studies were overseen by Professors Fritz Roethlisberger and Elton Mayo, and with then Research Assistant, later professor, James V. Clark. The study was published in elements in many sources and never as a complete study, since Roethlisberger died before he authorized closure and final publication of the work. James V. Clark who worked with them throughout the entire project has provided much of the outcomes and implications to our team over the last 25 years as guidance on leading change. He also headed the Community Chest Board for several years, later called United Way, and helped many non-profit change organizations such as Alcoholic's Anonymous benefit from the study. Carol Sanford, the CEO of InterOctave Development Group, Ltd, was a protégé of Jim Clark's for 25 years and he was a committee member on her research doctoral committee. We are forever indebted to Jim Clark for his guidance on effectively leading change based on over forty years of research and practice.