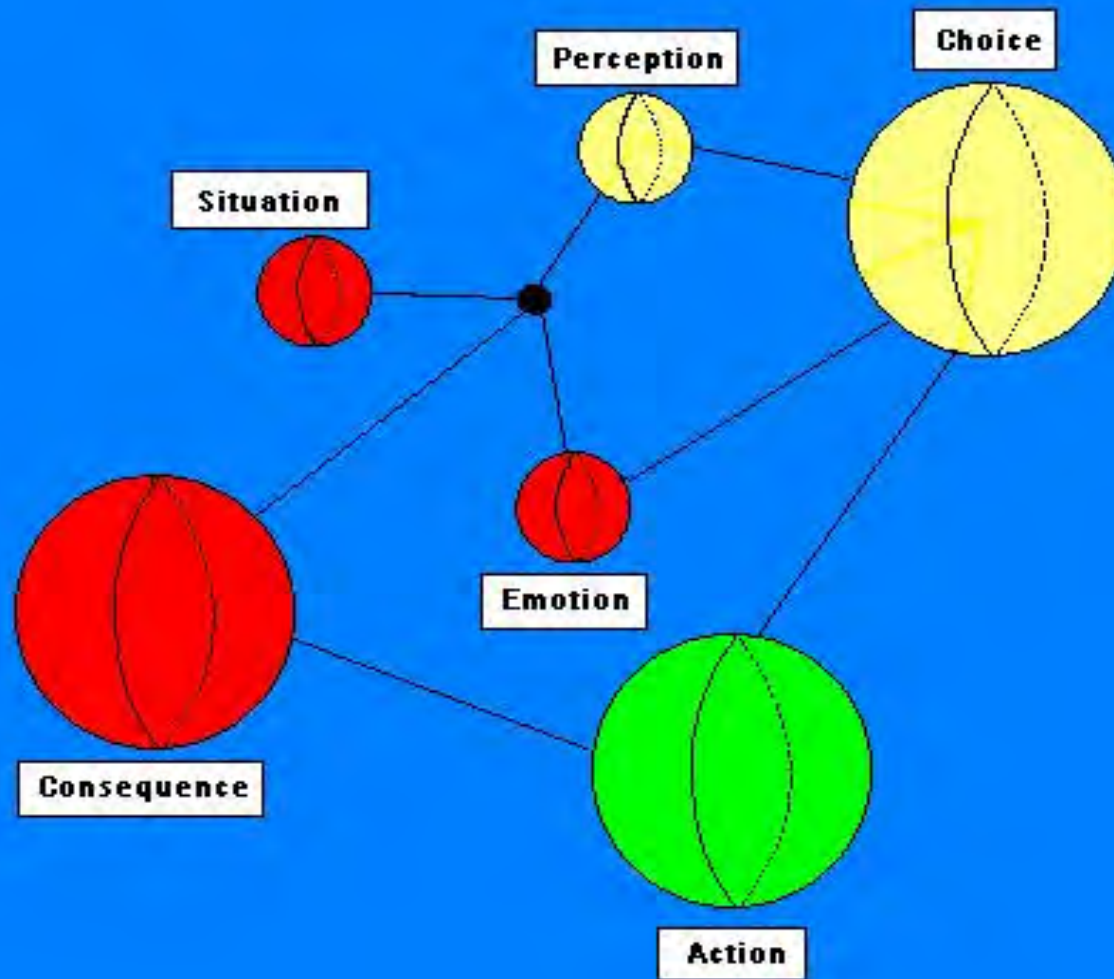


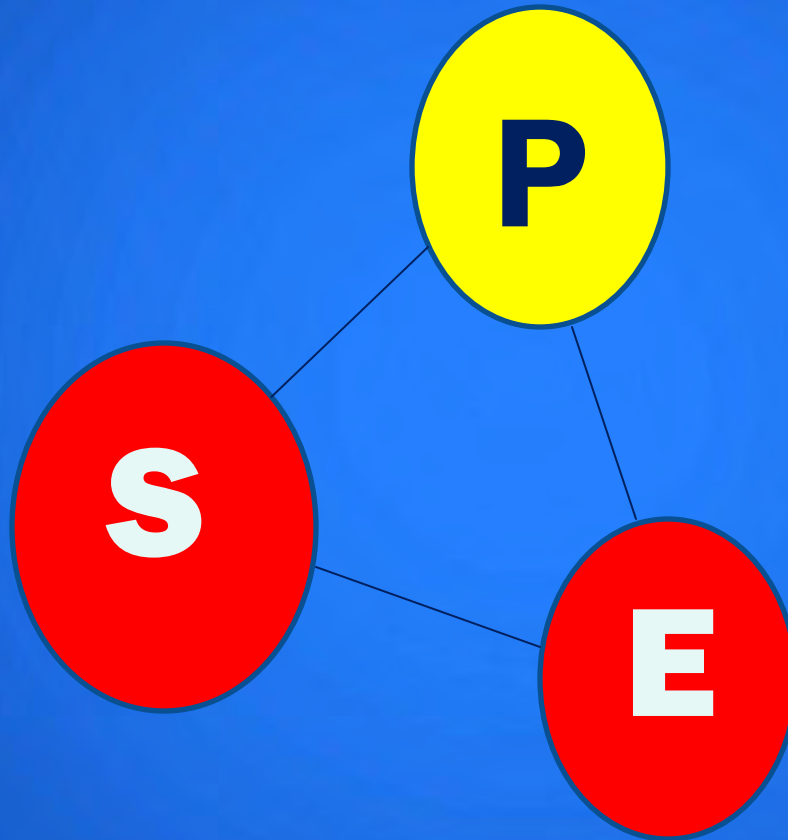
Theoretical Implications of Fear of Flying Therapy



Common Elements of Students

- **All students faced a common situation**
- **All students had formed unique perceptions of the airplane and aviation**
- **All students had one or more emotional reaction**

Elements in the Stage of Alarm



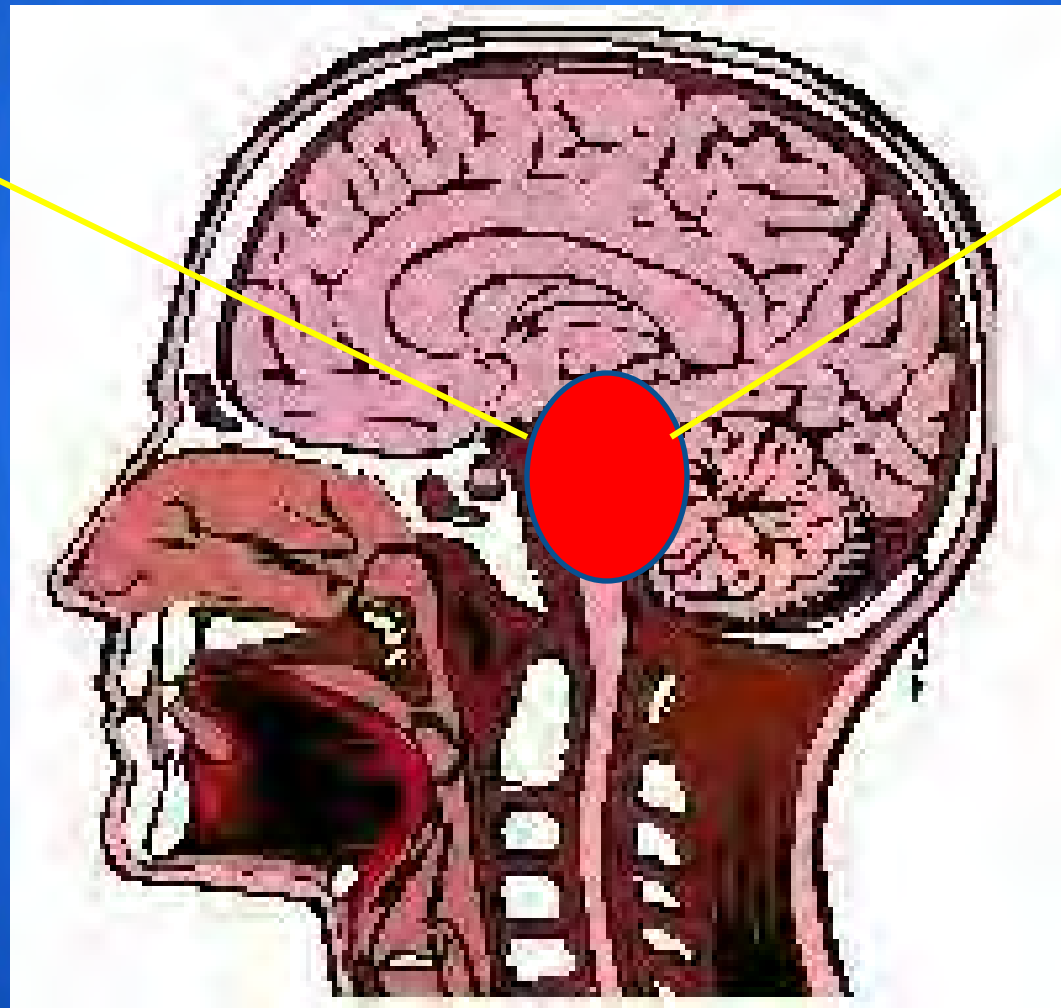
The Problem of Control

- Talking directly to the fear is ineffective**
- Verbal Commands do not change emotion**
- Control is located in the musculo-skeletal nervous system**

Dr. Walter Hess

The Hypothalamus

**Alarm
Reaction**
-
**Muscle
Tension**



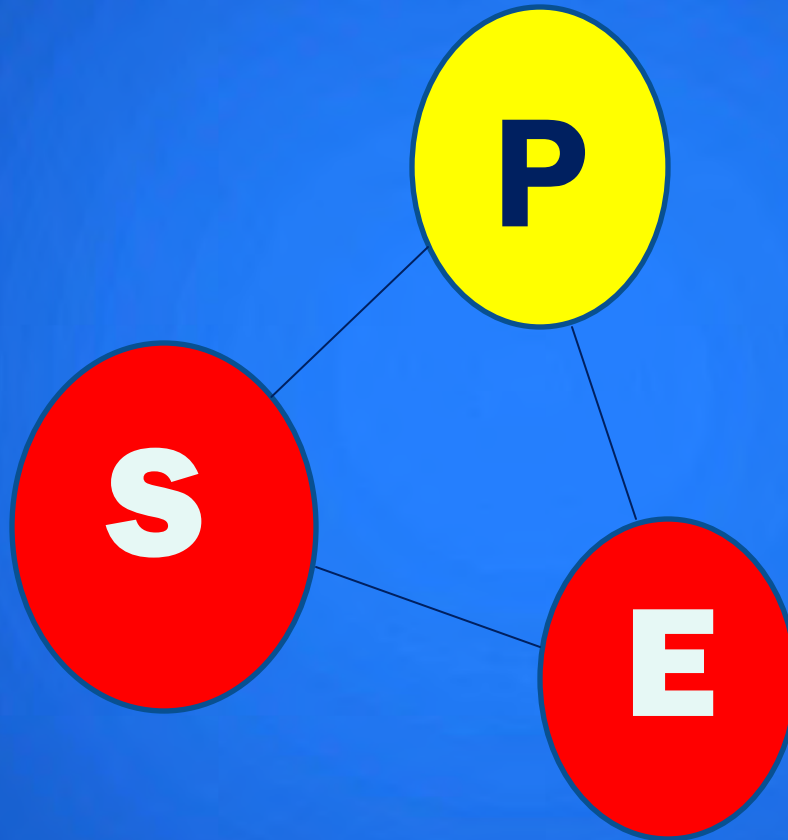
**Trophotropic
Response:**

**Turns off
Alarm
Reaction -
Relaxes
Muscles**

Controlling Factors

- **Perception starts the fear reaction**
- **Muscle tension keeps it going**

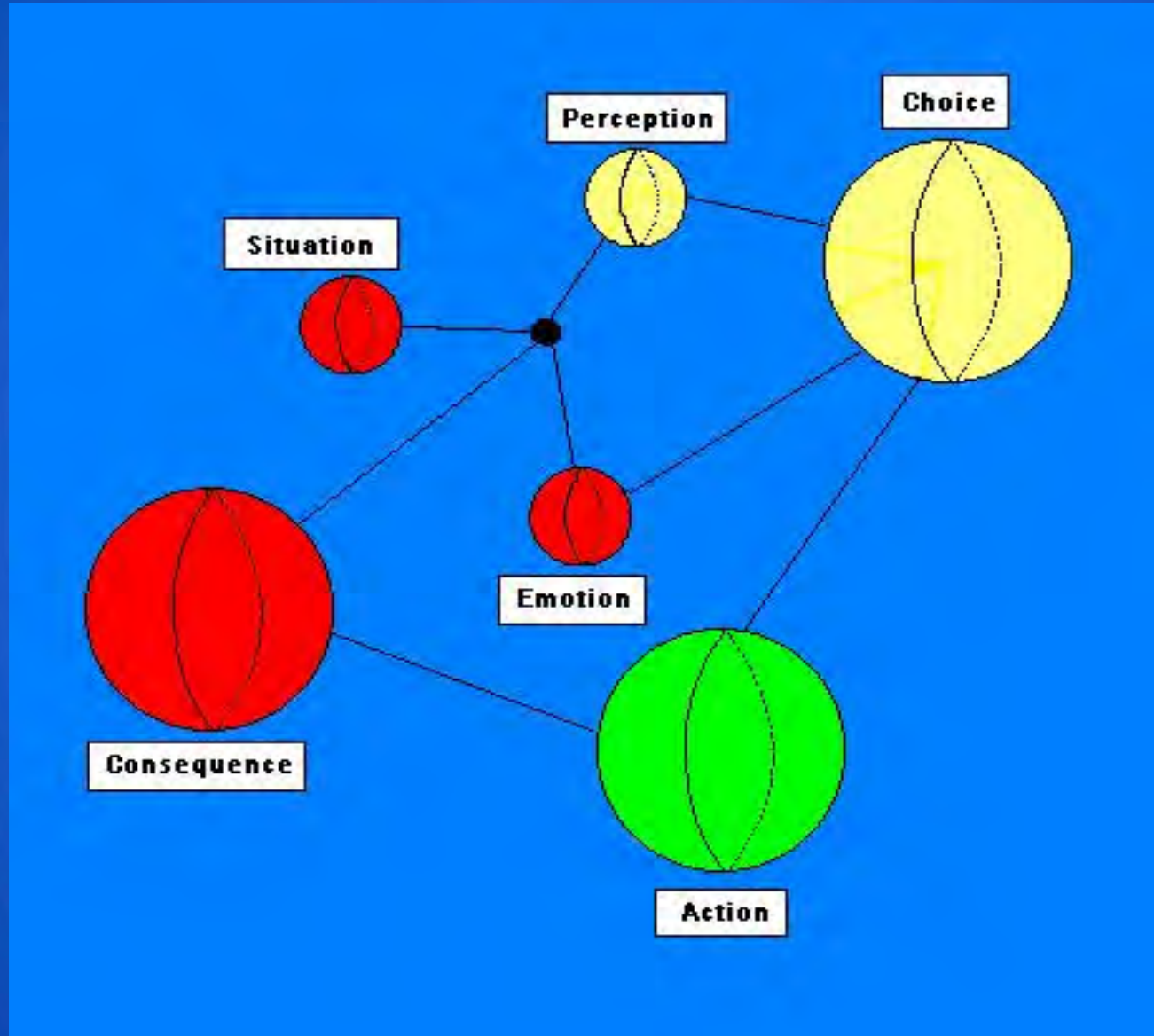
Elements in the Stage of Alarm



Fear and Anger

- **Dual Stage of Alarm**
- **First Fear, then Anger**
- **Actions lead to perception of a hostile environment**

Molecule of Functional Memory

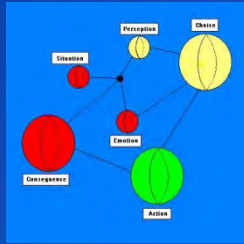


Calvin and Hobbes

by WATSON

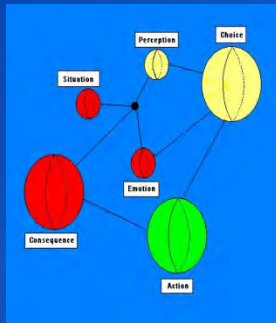






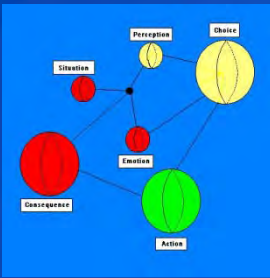
“Ever notice how the actions we take create chain reactions of new situations which require new choices and new actions?”





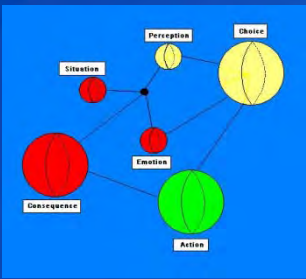
“Each Action we take from our first choice creates the situation for our next choice”



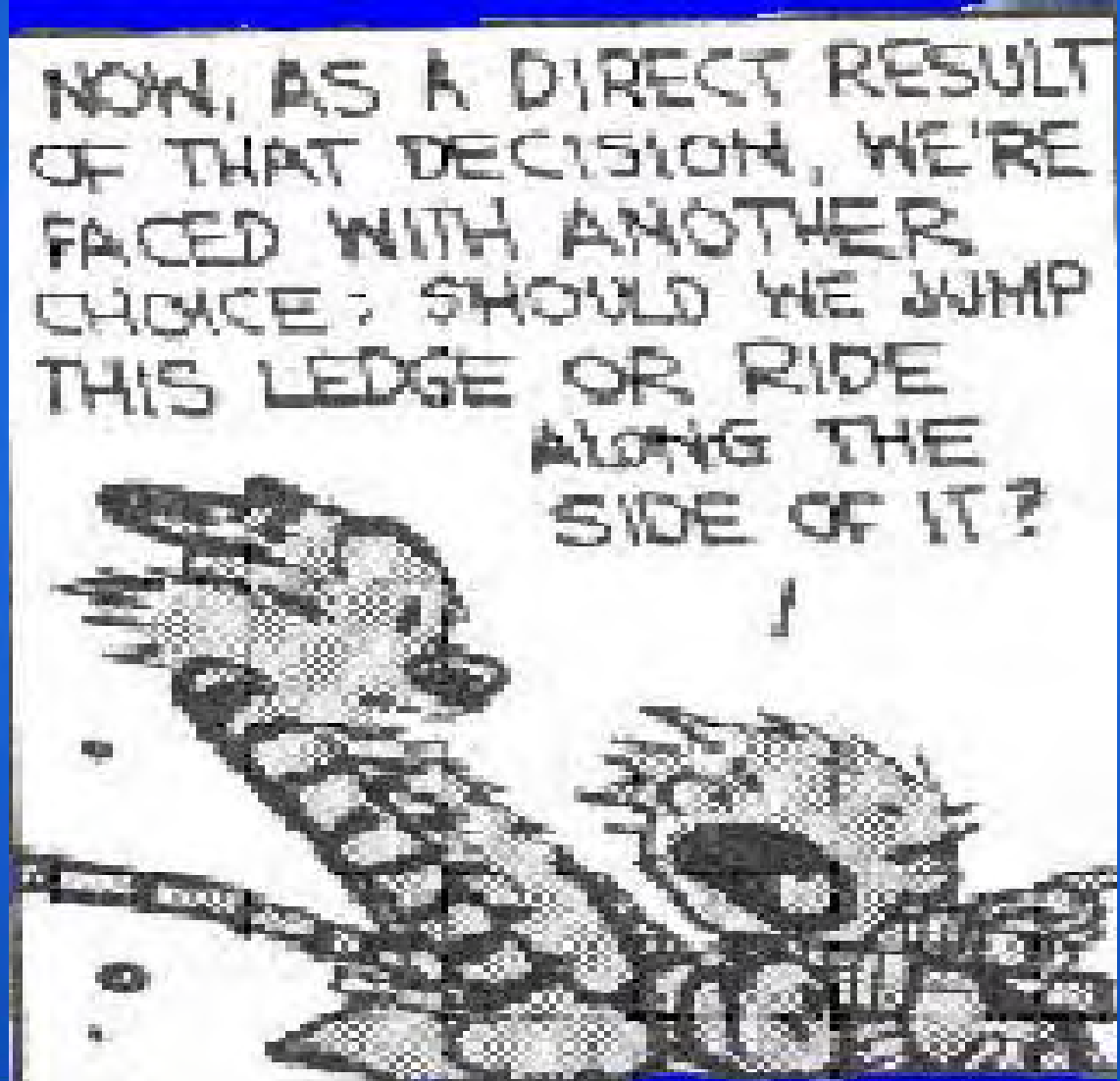


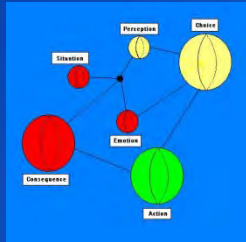
“Take this situation, for instance, we could choose right or left, arbitrarily, our action will be to choose left”





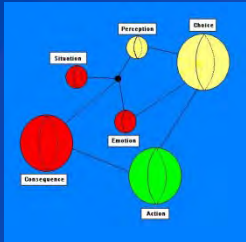
“Now, as a direct result of that action, we’re faced with another situation. Should we choose to jump ... or ride along side of it?”



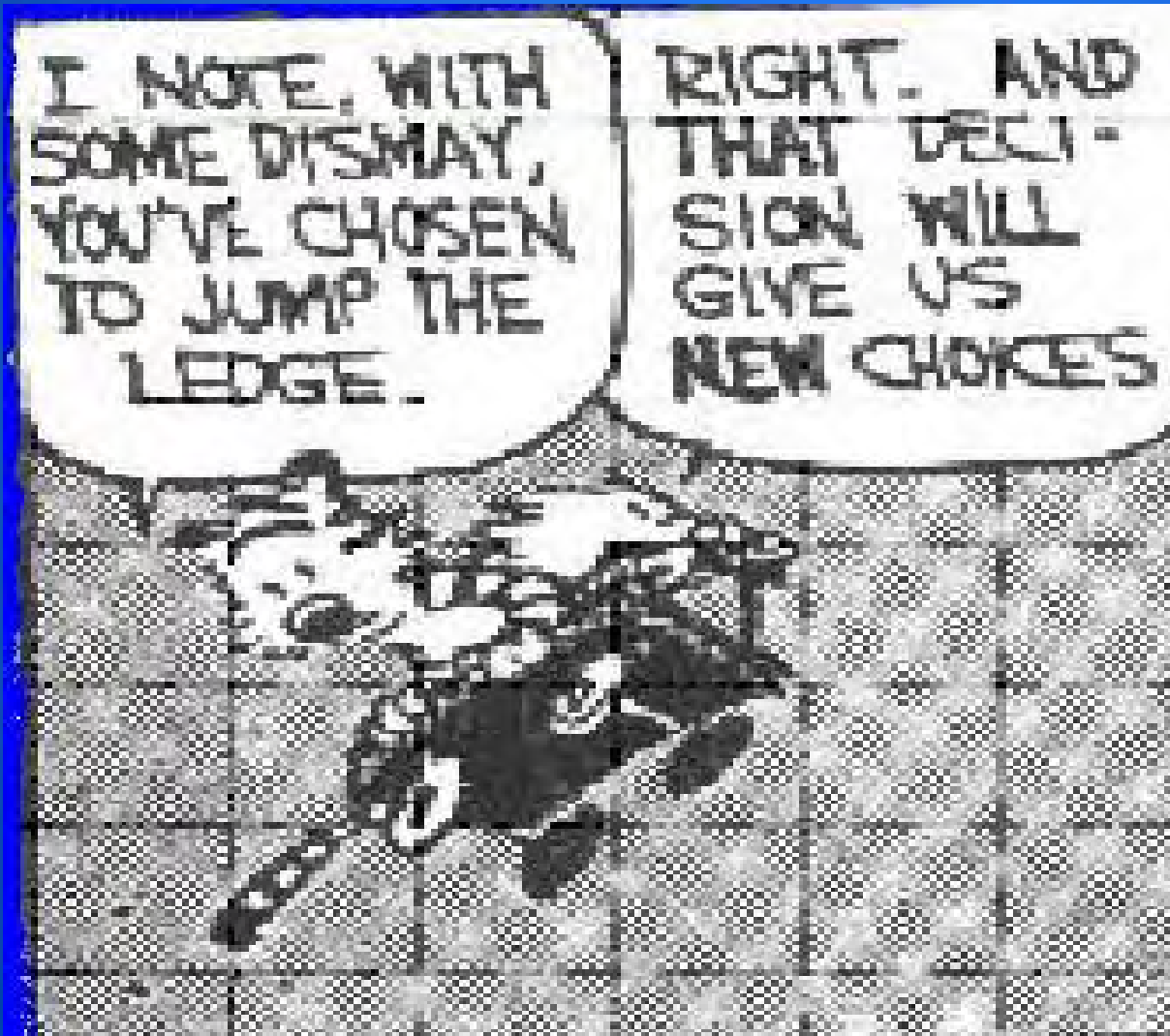


“If we had not chosen the action of turning left at the last situation, this new situation would not be here.”

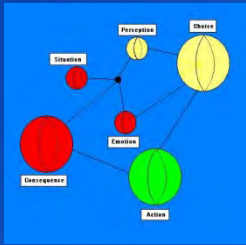




“I note (perception), with some dismay (emotion), that your action of jumping has created the consequence, and new situation, that we are falling!”



“Right, and now that we are in the situation of falling, we have new choices”

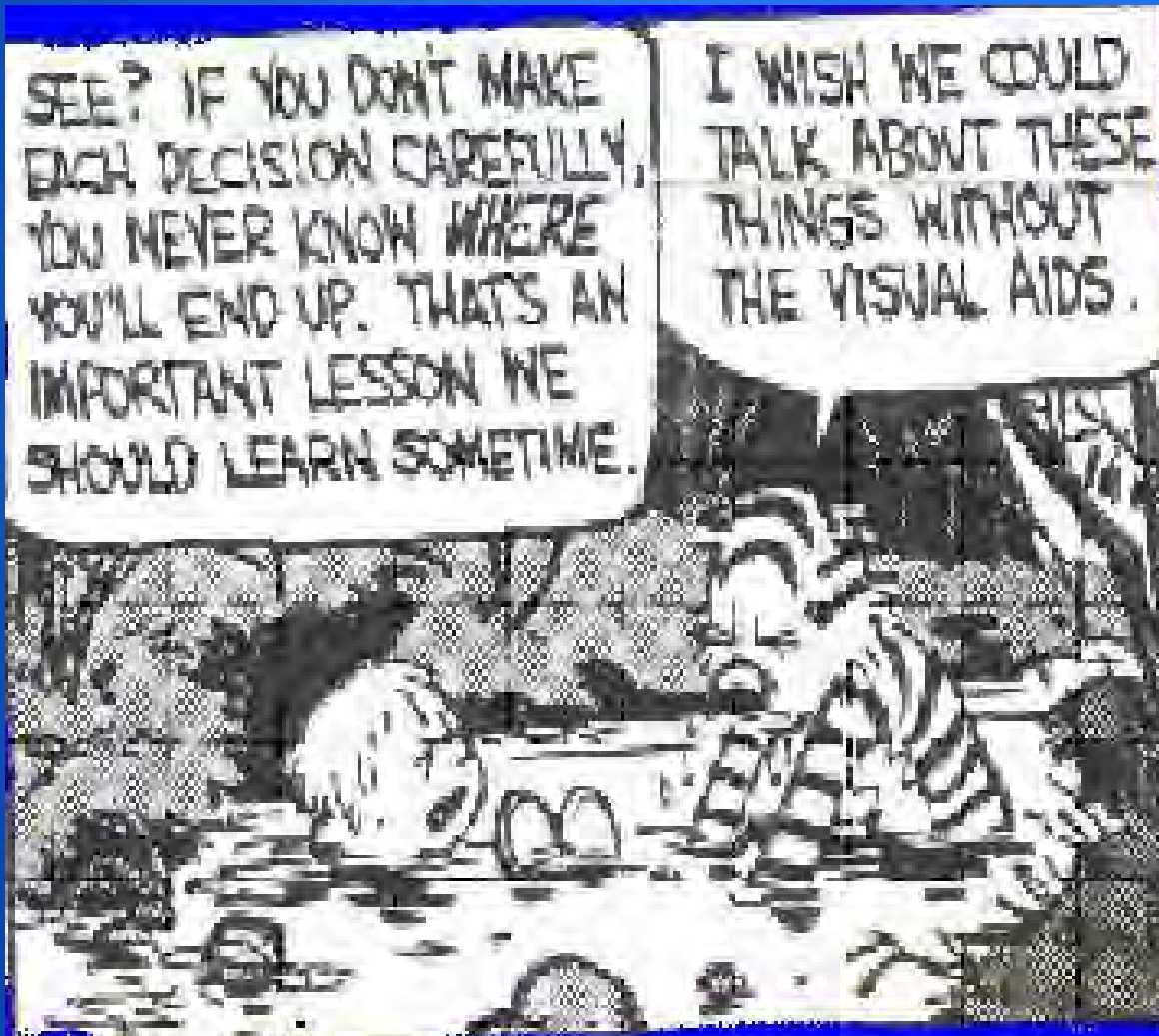
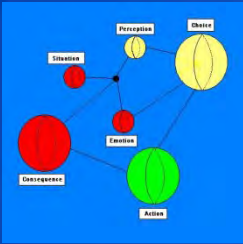


“Like should we choose to bail out or choose to die in the landing?”



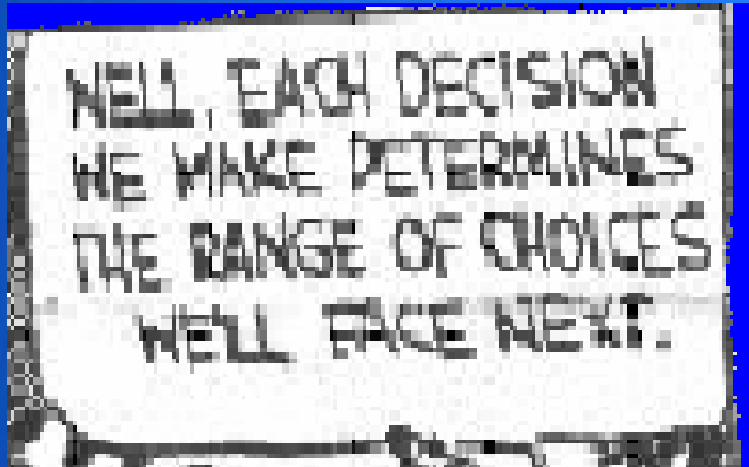
“Exactly, our first action created a chain reaction of new situations, choices and actions. Let’s choose to jump.”

“See? If you don’t choose each action carefully, you never know what situation you will create. That’s an important lesson we should learn sometime.”



“If you would therapy, you could learn about things like this!”

Functional Definition of “Consequence”



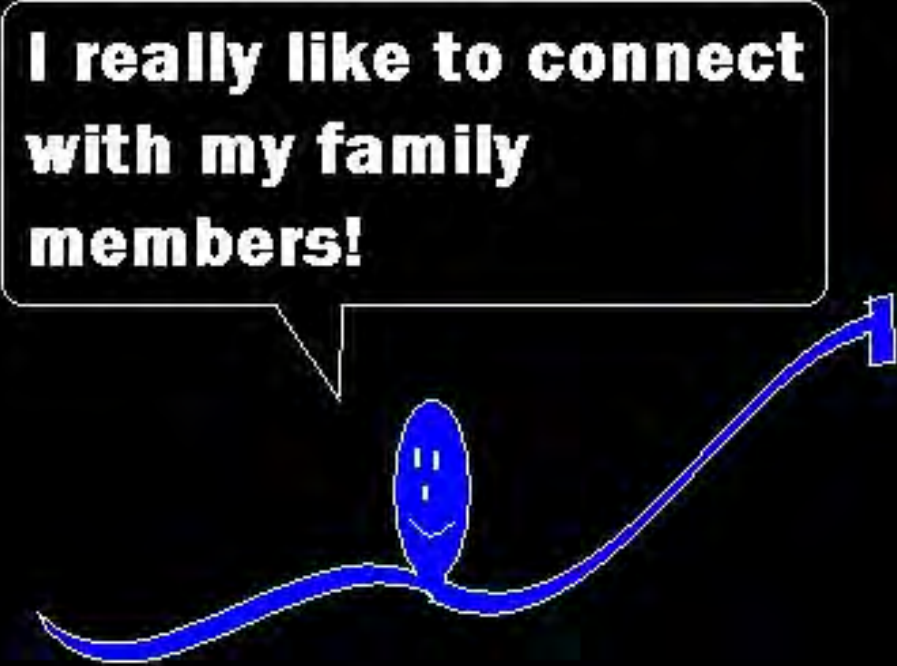
=

“Each action we take from the choices available will determine the situation we face next”

Extinction Model of Anxiety Reduction

- **Quantities of anxiety in the conditioned stimulus**
- **Repeated exposure to the CS, in the absence of the UCS empties neurone of response potential**
- **Perception remains unchanged**

The Basic Element of Learning



**I really like to connect
with my family
members!**

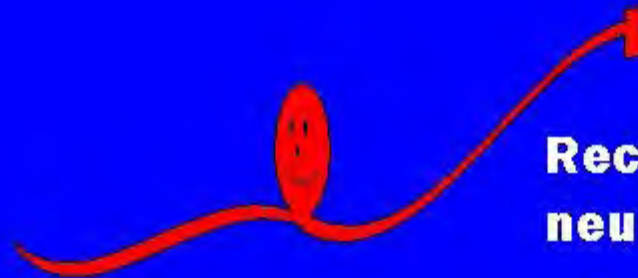
**There are 100,000,000,000
nerve cells in the brain.
(One hundred billion)**

Nerve Cell in Brain



Every Cell is Assigned a Duty

No self control



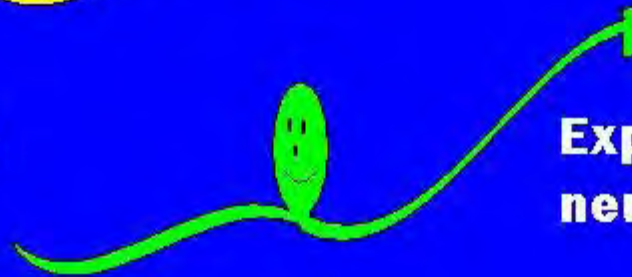
**Receptor (afferent)
neurone**

Some self control



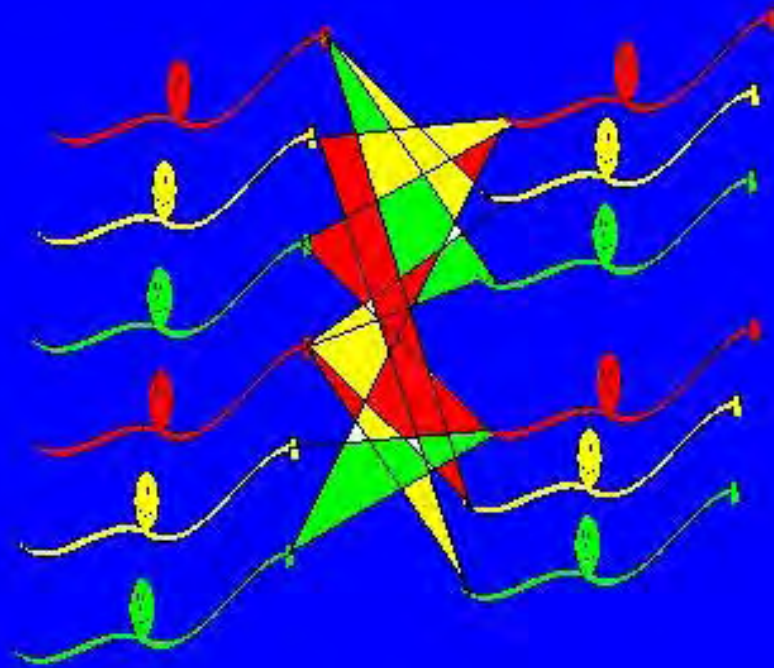
**Connector (inter)
neurone**

All self control



**Expressor (efferent)
neurone**

With Learning, Cells form “Functional Assemblies”



Donald O. Hebb (1949)
The Organization of Behavior

??? !!! What ??? !!!

Output or actions
Leading to
Transformations of
Reality

Input
I

O (IT)

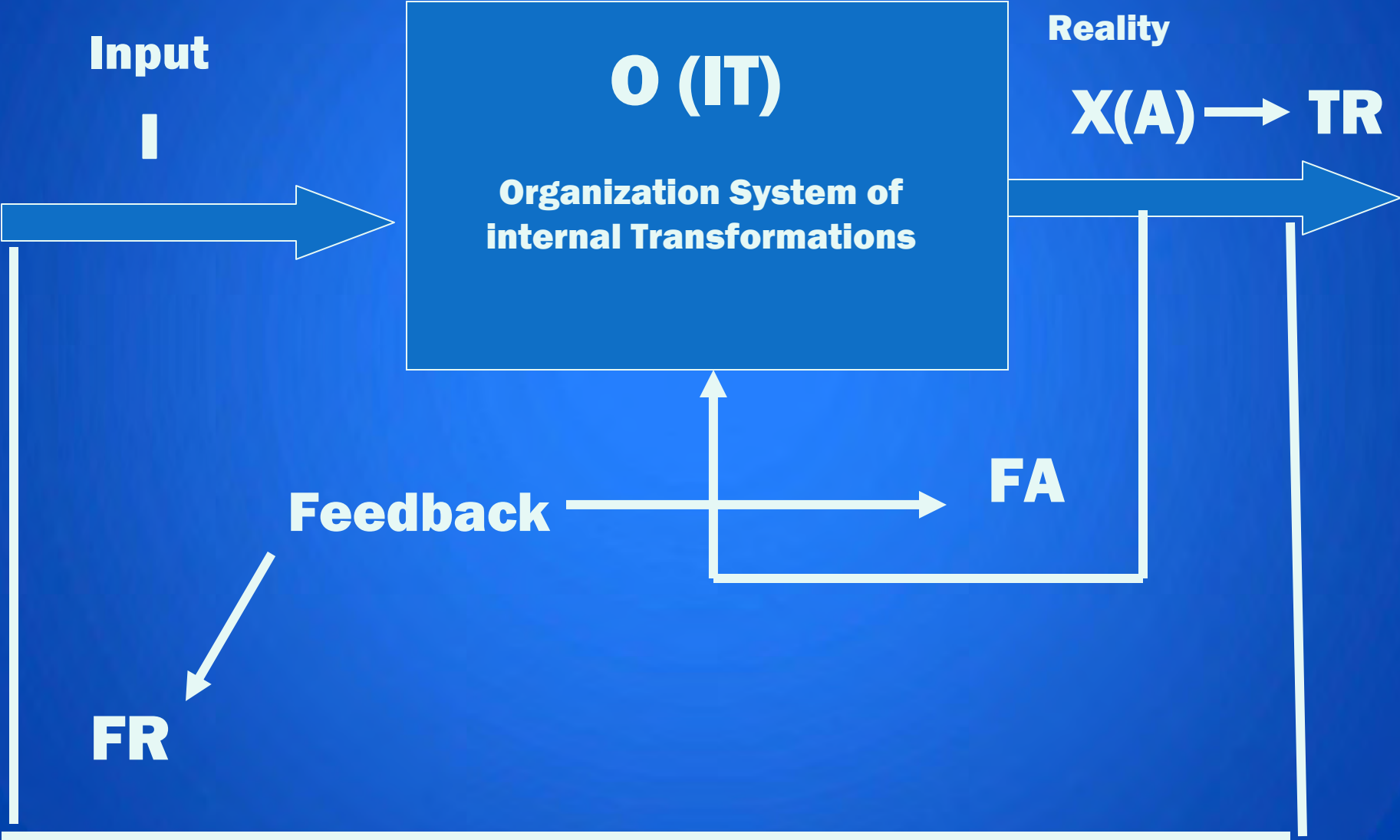
Organization System of
internal Transformations

X(A) → TR

Feedback

FA

FR



Learning must involve “Action”

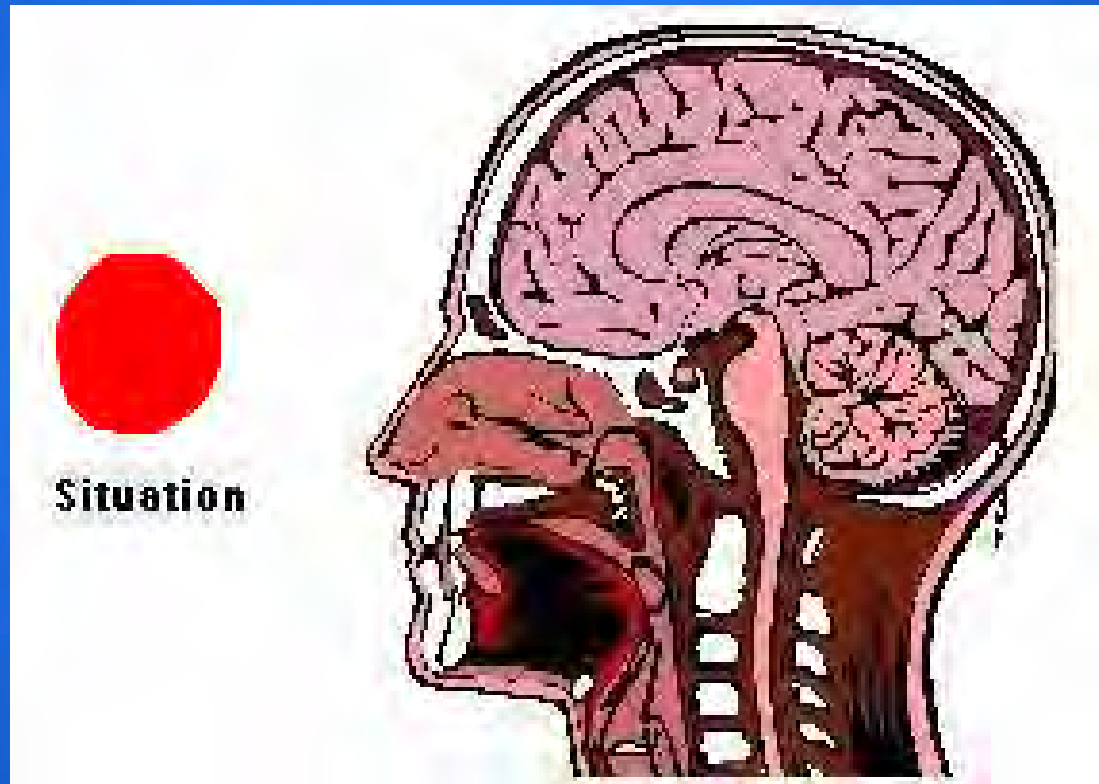
- **“In order to ‘know’ an object, the subject must act upon it.”**
- **Acting on the object changes (creates) the environment through the situation the action creates. -- Piaget, 1973**

Putting the Learning Sequence Together

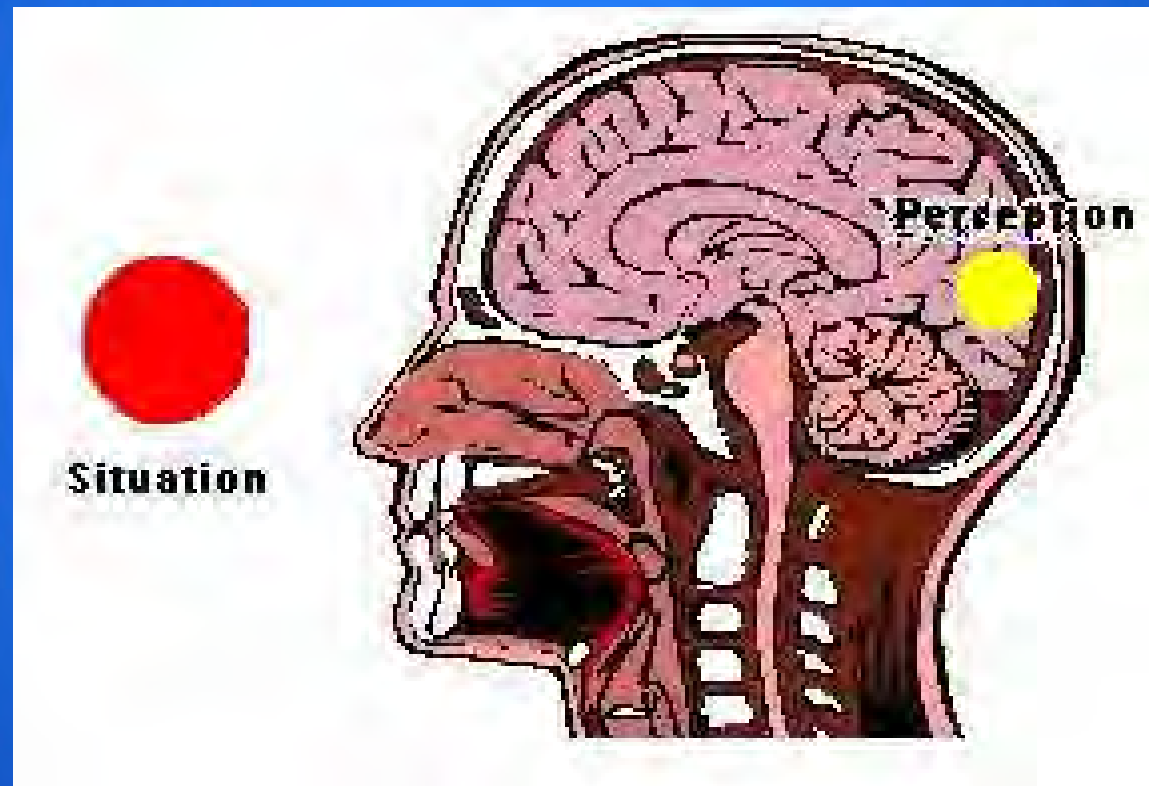
**If we put Hebb, Piaget, and Selye together
with a little help from Tomaro -----**

This is what we get.

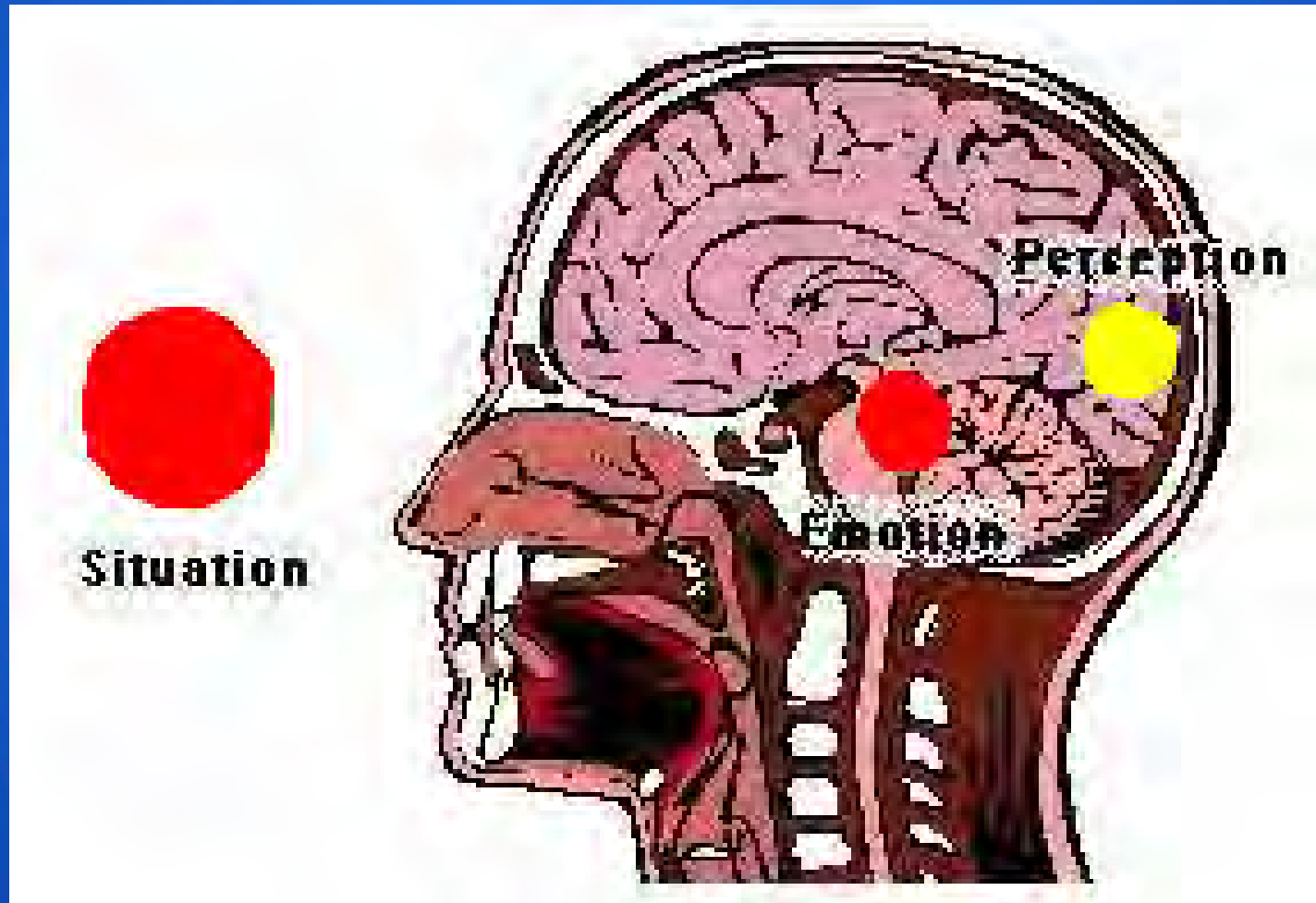
**Each learning sequence begins with a
“Situation”**



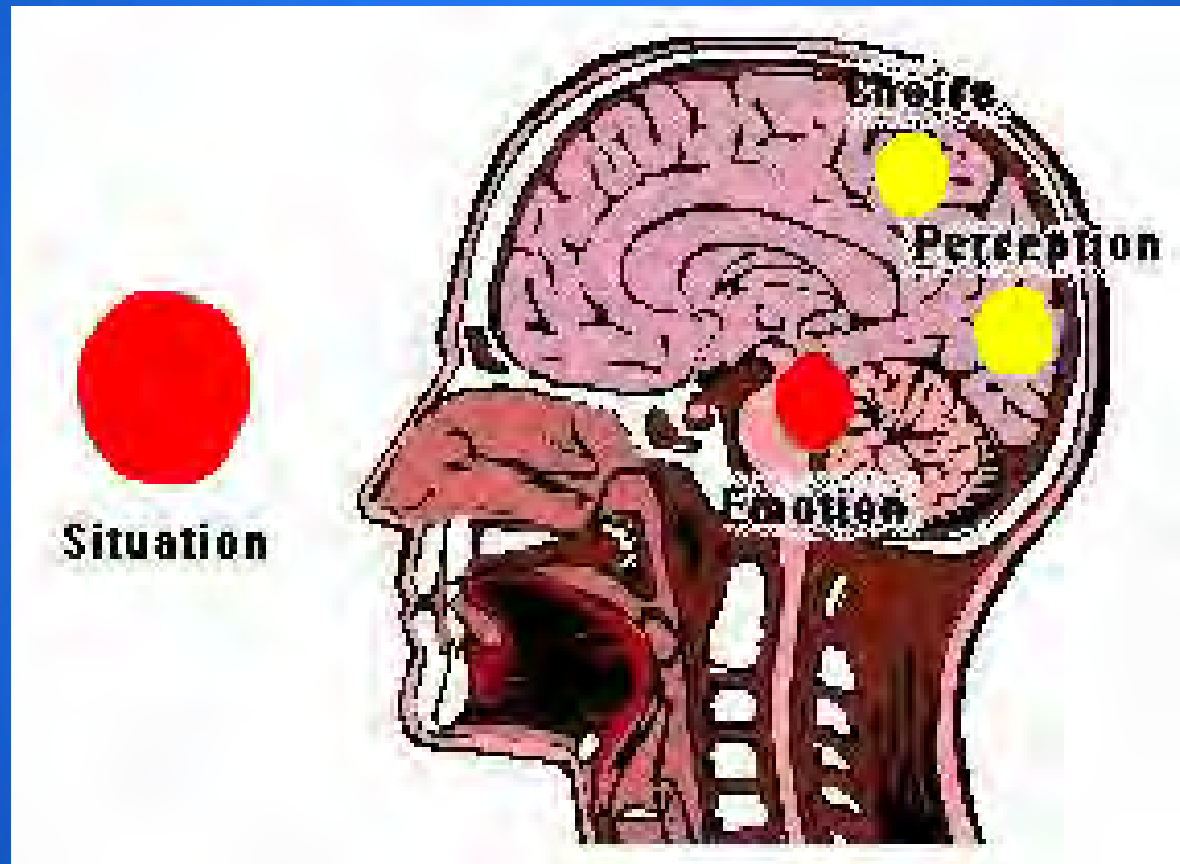
**The individual perceives the new situation
in accordance with previous learning**



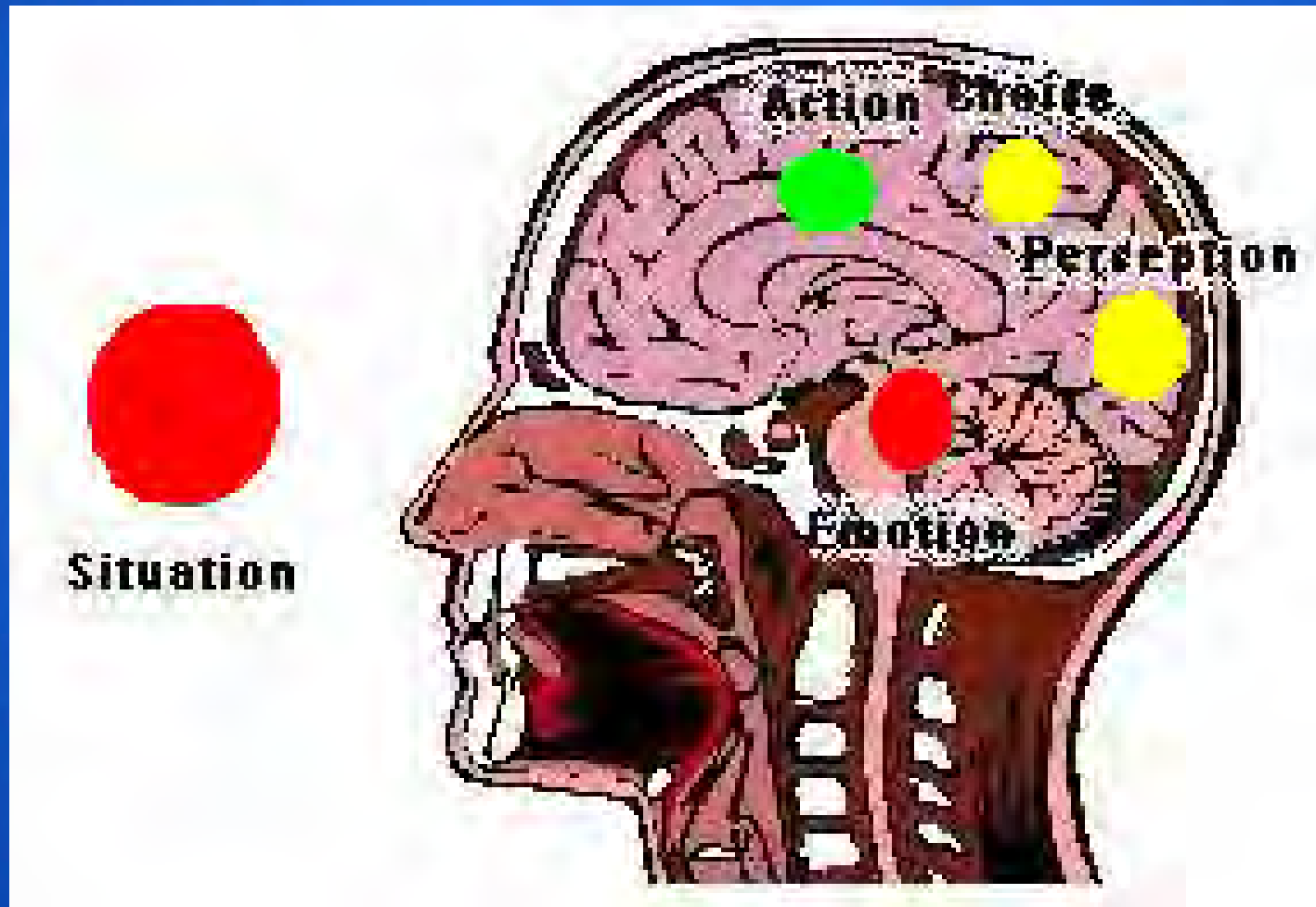
.....and reacts with some kind of emotion



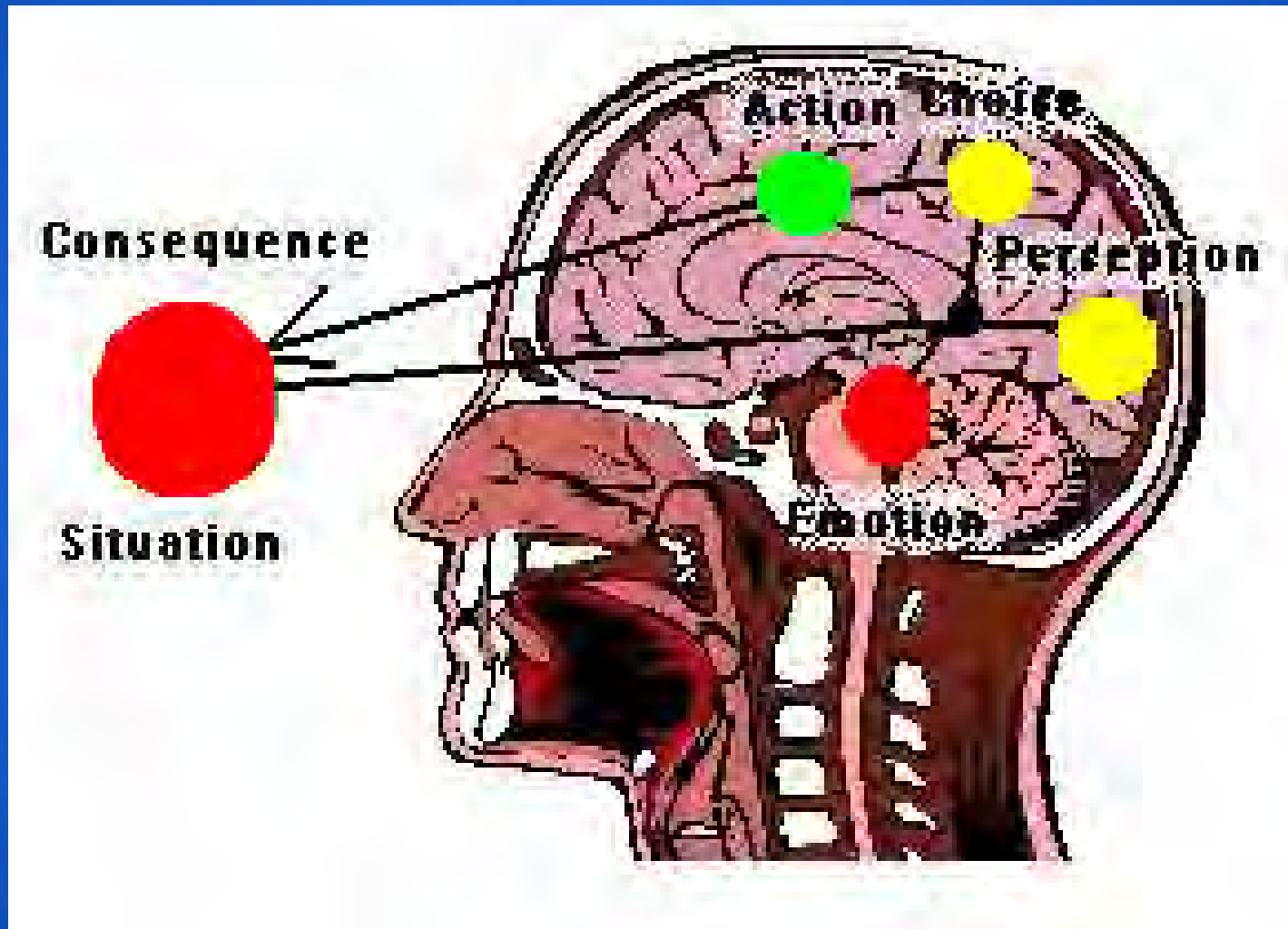
**Choice follows, it is the prelude to action
and anticipates consequences.**



Action follows choice and is the most controllable of all the elements



Consequence “seals the deal” and shapes the next situation.



Consequence “binds all the elements in association with each other - creating “Functional Memory”

