

Cognitive & Affective Bases of Intimate Partner Violence

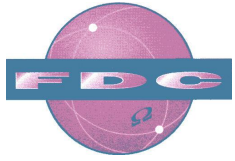
Joe Ferguson for AGee Greene

PSY 706 & 725 with Violence Track Emphasis
Santa Barbara, CA - January 13th, 2003

<http://www.Fergi.com/Fielding.htm>



© Joe Ferguson, 2003



Domestic Violence



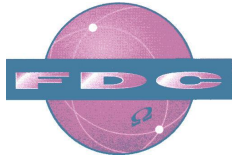
- 4 million American women experience a serious assault by an intimate partner during an average 12-month period
- Each year, an estimated 3.3 million children are exposed to violence by family members against their mothers or female caretakers
- In 1993, approximately 575,000 men were arrested for committing violence against women
- Each man represents a family in perpetuity

American Psychological Association. (1996). Report of the American Psychological Association Presidential Task Force on Violence and the Family.

An important opportunity for social action



© Joe Ferguson, 2003



The Cognitive Hypothesis

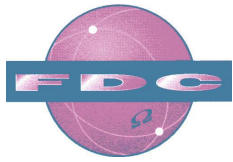
“The central hypothesis of cognitive science is that thinking can best be understood in terms of representational structures in the mind and computational procedures that operate on those structures.”



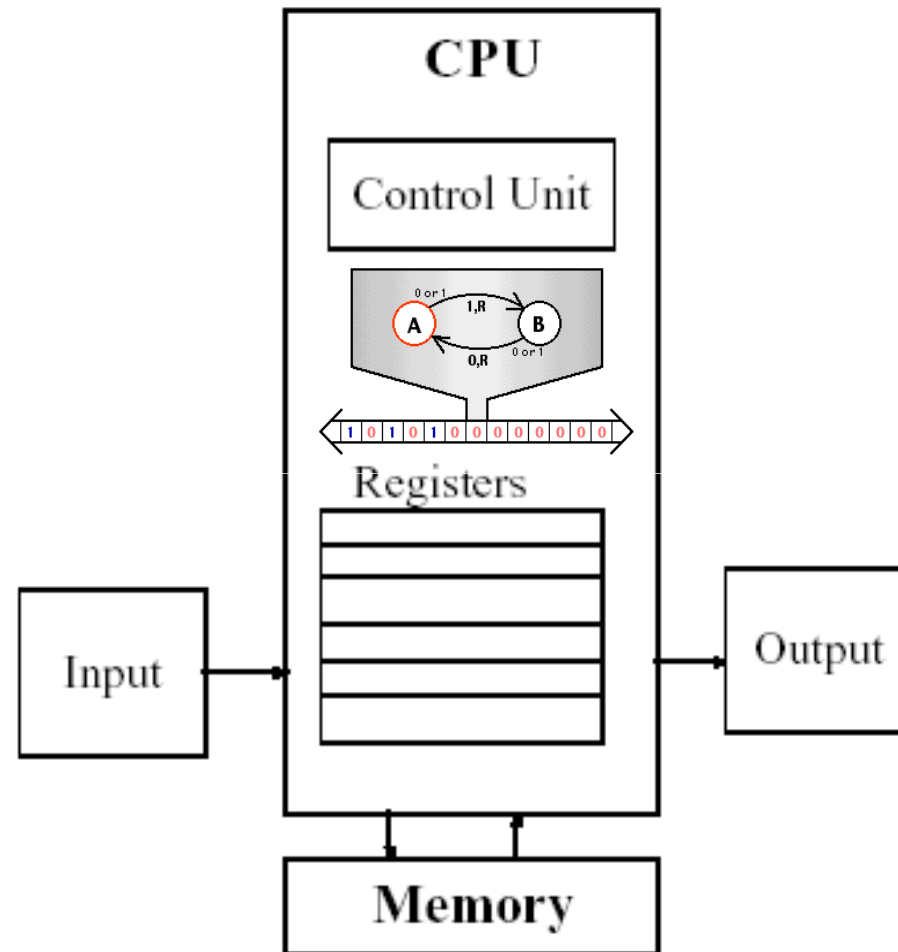
Stanford University Center for the Study of Language and Information (1997).
Stanford encyclopedia of philosophy,. Stanford University.



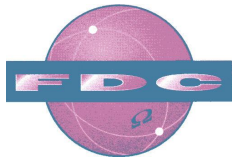
© Joe Ferguson, 2003



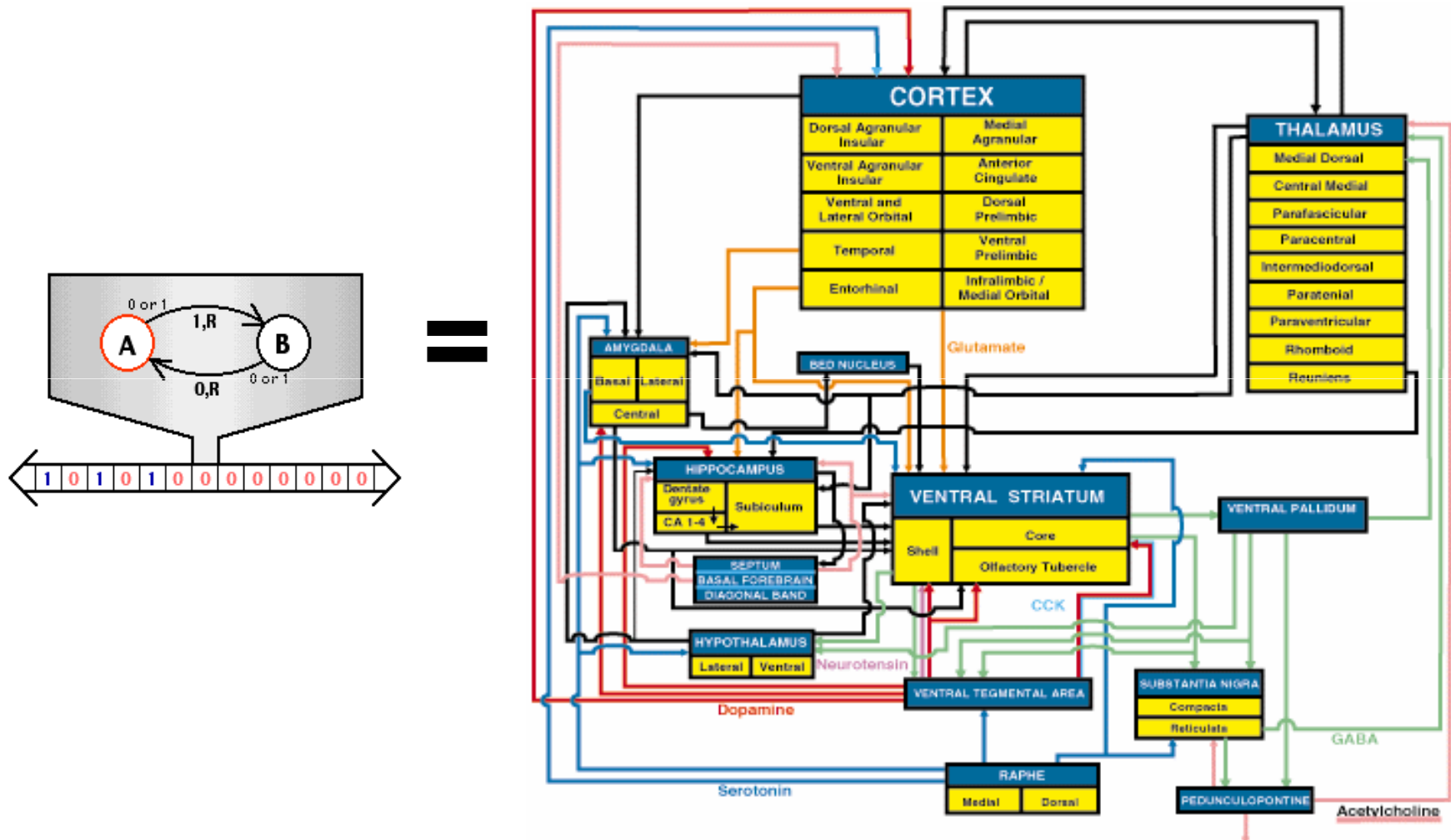
Computer Organization



Procedure and data are both memory



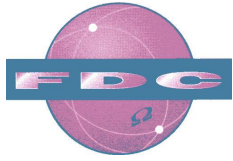
Church-Turing Serialization



Generalizes to any cybernetic function

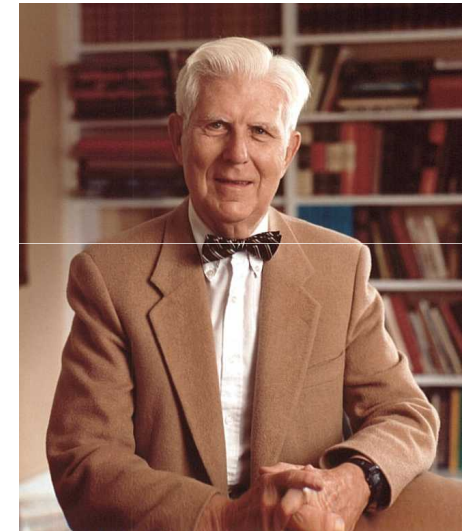


© Joe Ferguson, 2003

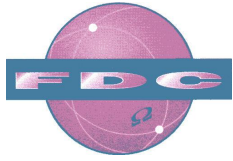


Some Cognitive Computational Procedures

- Speaking
- Reading
- Writing
- Vision
- Recognizing
- Learning
- Remembering
- Comparing
- Discriminating
- Performing
- Understanding
- Planning
- Speculating
- Prioritizing
- Deciding
- Calculating
- Estimating
- Imagining
- Responding
- And maybe a few others...

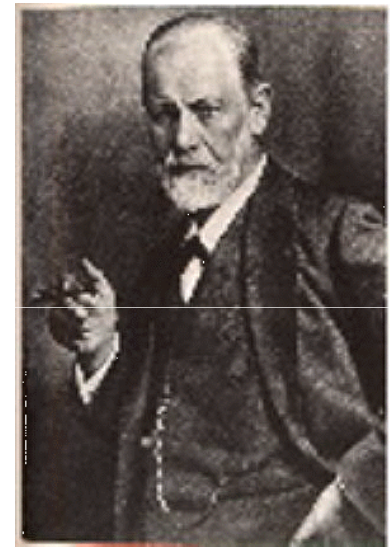


What is called thinking?

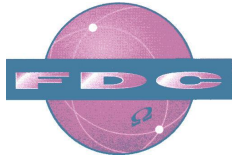


Psychodynamic Computational Procedures

- Displacement
- Transference
- Symbolization
- Condensation
- Fantasy
- Repression
- Reaction Formation
- Projection
- Isolation
- Undoing
- Conversion
- Introjection
- Identification
- Sublimation
- Rationalization
- Idealization
- Dream Work
- And maybe a few others...

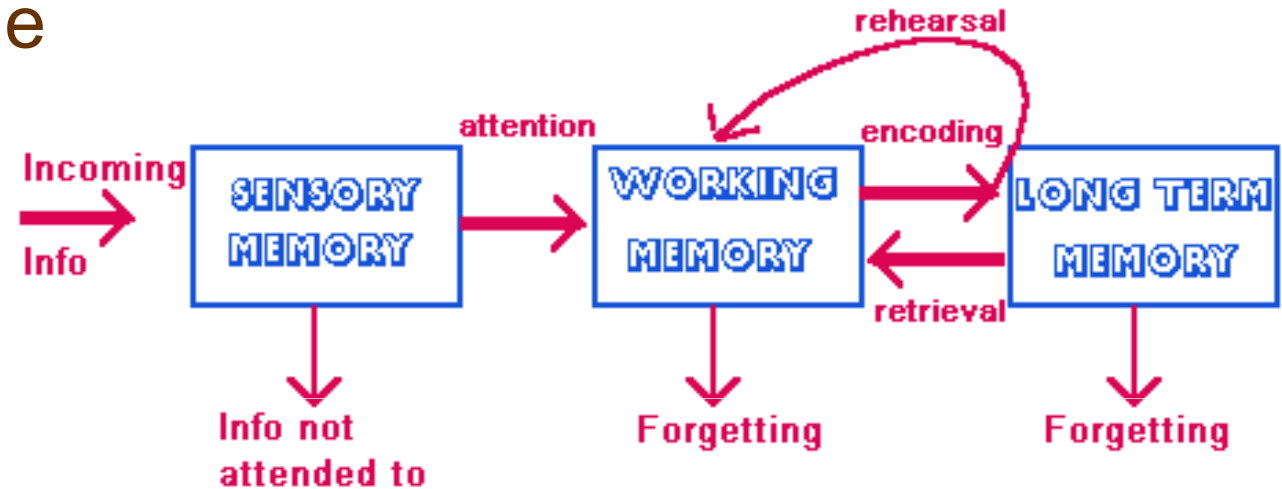


Specializing in resolution of dissonance



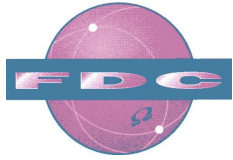
Memory

- Knowledge
- Skill
- Intention
- Appraisal
- Association



The representational structures upon which computational procedures operate are all memory

Objects, summaries, pointers, hints, & triggers



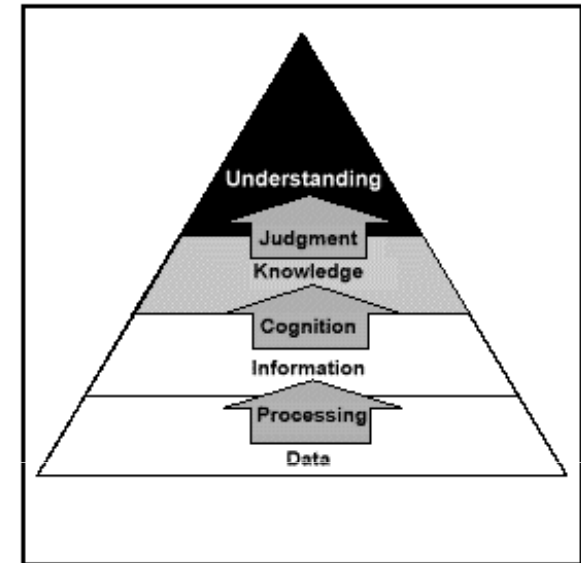
Acquisition of Repertoire

- Vicarious modeling
- Speculation & study
- Operant conditioning

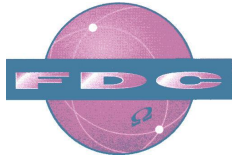
Motivators are primary or secondary reinforcers.

Strategy is the goal-oriented line of action prescribed by motivation. Specific conceivable futures imply goal-oriented lines of action to attain them, and each goal-oriented line of action is a strategy.

Tactics operationalize strategy at the level of actions, intentions to act, and preferences for actions to be taken, with reference to concrete environmental stimuli.

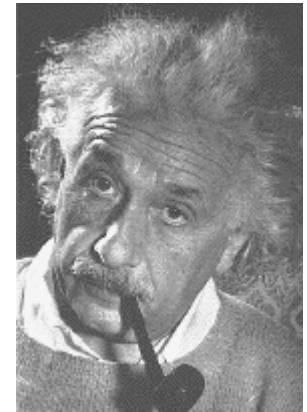
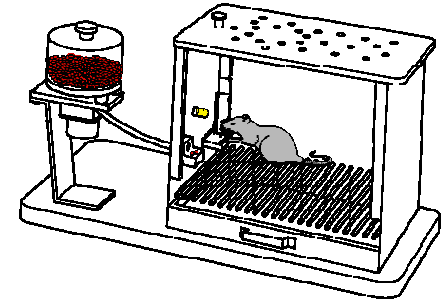


Stored in memory with activation cues

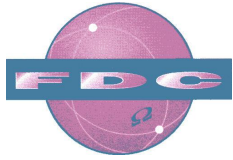


Reinforcement & Learning

- Manifest at all levels of organization
 - ❖ **Neural:** Spatial orientation, foraging
 - ❖ **Motor:** Walking, eating, fighting
 - ❖ **Social:** Face recognition, identity, empathy
 - ❖ **Cognitive:** Declarative, procedural, intentional
 - ❖ **Metacognitive:** Feeling, intuiting, evaluating, exploring, speculating, forecasting, planning, monitoring, controlling
- Learning is transformative & exploratory
- Reinforcement is preservative & repetitive

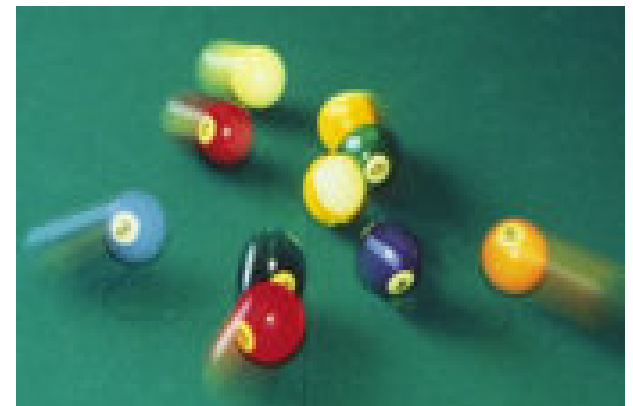
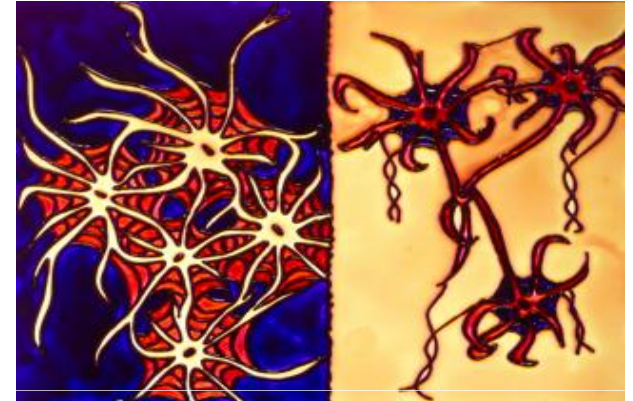


Emotional and cognitive at all levels

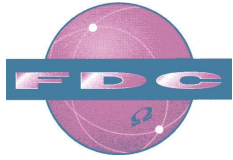


Novelty Is Efficient

- New learning is straightforward
 - ❖ Introduces new information into virgin networks
- Unlearning is impossible
 - ❖ Networks entangle knowledge
 - ❖ Knowledge is widely distributed
 - ❖ Network effects are irreversible

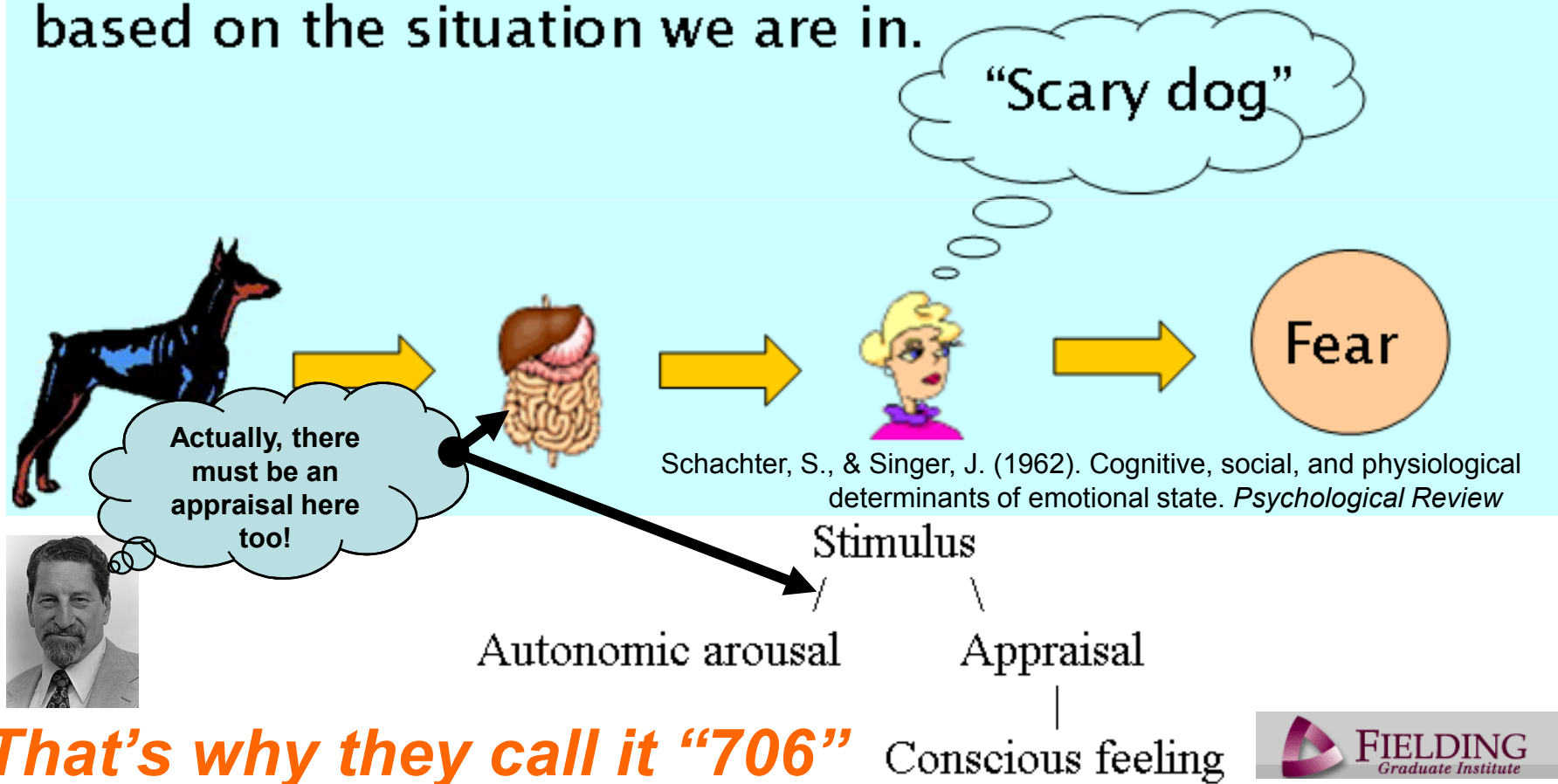


Profound implications for intervention

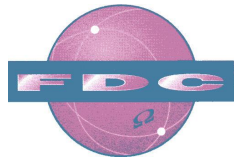


Cognitive Appraisal & Emotion

We have the feeling of an emotion when two factors are present: we are physiologically aroused, and we interpret that arousal in terms of a specific emotion based on the situation we are in.



That's why they call it "706"



Emotion as Metacognition



Richard Lazarus's *cognitive-motivational-relational* theory of emotion: All emotions are the result of cognitive appraisals of the personal meaning of events and experiences. Emotions occur as the result of the cognitive interpretation of a stimulus or event to determine if the event is personally positive, negative or neutral. Then a secondary appraisal takes place to assess our thoughts and emotions and determine if we are able to successfully cope with the event.

Lazarus proposed that we have four categories of emotion:

1. **Negative emotions** that result from harm, loss or threats: anger, fear, shame, sadness, jealousy, and disgust
2. **Positive emotions** that result from reaching goals: happiness, joy, pride, and love
3. **Borderline emotions** : hope, contentment, compassion
4. **Cognitive evaluations that could lead to emotions:** grief, depression, frustration, disappointment, nervousness, tension, curiosity, surprise and amazement.

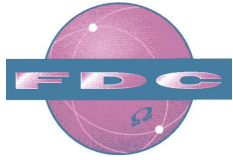
Lazarus, R. S. (1991). *Emotion and adaptation*. London: Oxford Univ Press.



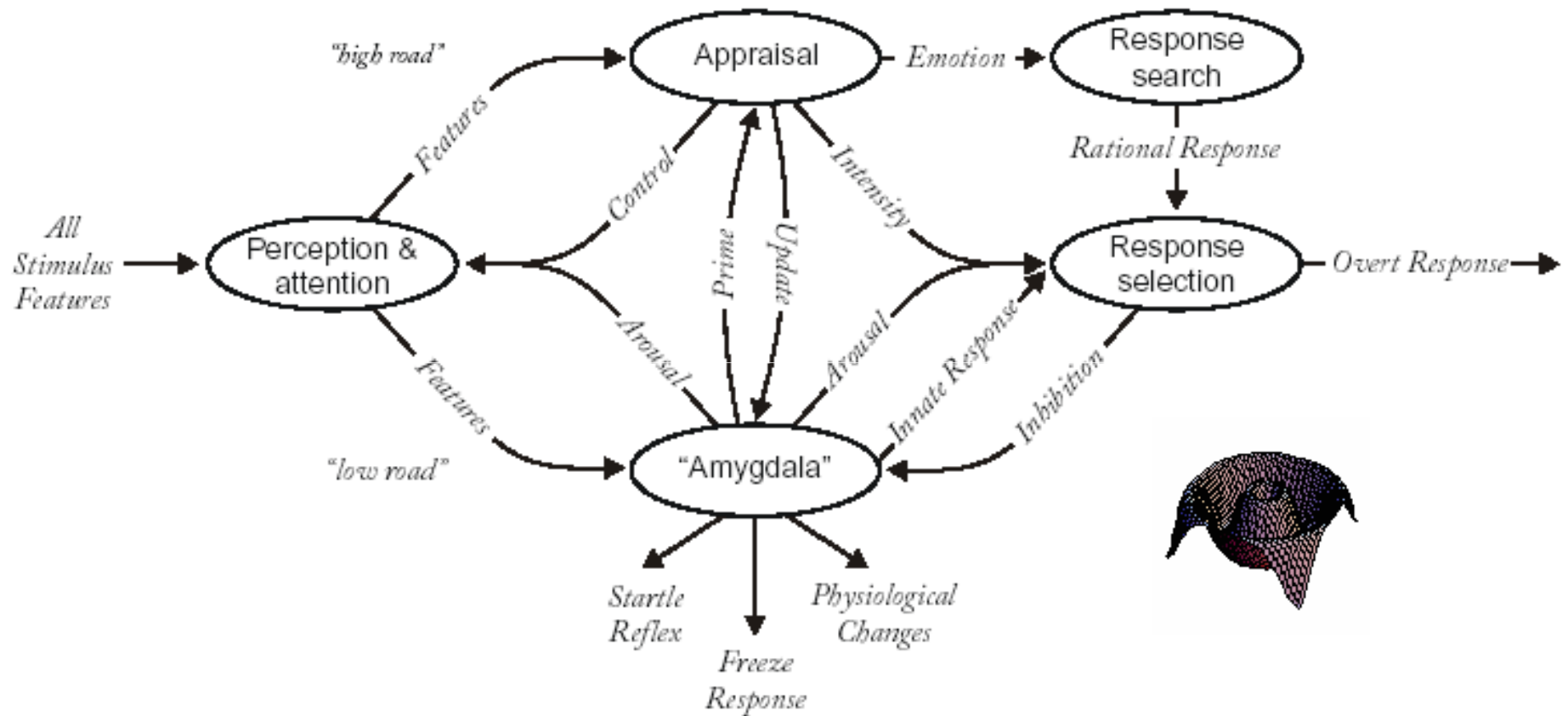
Summary global situation analysis



© Joe Ferguson, 2003

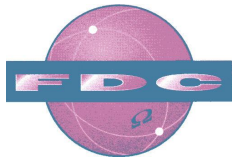


The Cognitive Engine

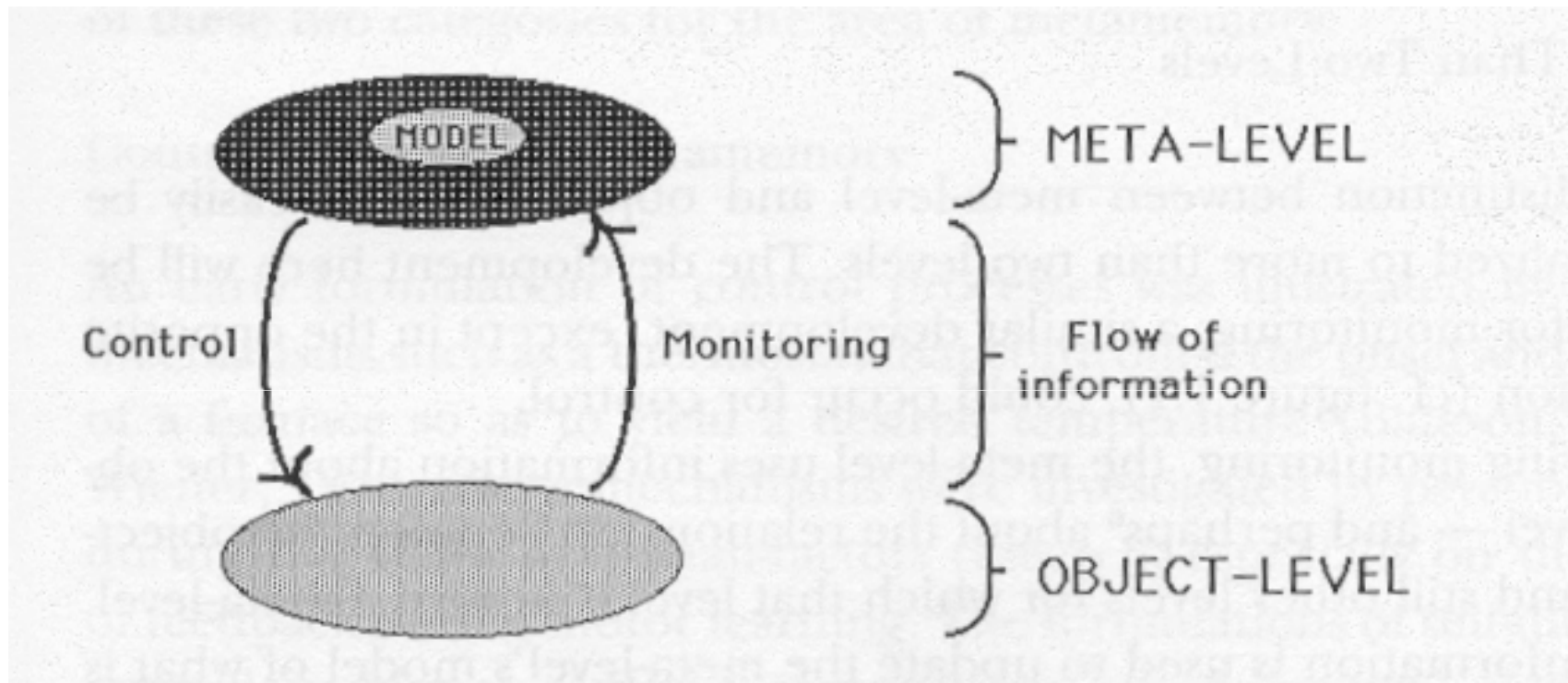


Newell, A. (1992). Unified theories of cognition and the role of Soar. In J. A. Michon & A. Akyurek (Eds.), *Soar: A cognitive architecture in perspective: A tribute to Allen Newell*. New York, NY, US: Kluwer.

Emotion & cognition are deeply intertwined



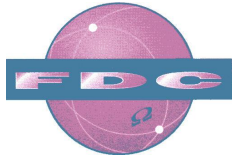
Metacognitive Hierarchies



Metcalfe, J., & Shimamura, A. P. (Eds.). (1994). *Metacognition: Knowing about knowing*. Cambridge, MA, US: The MIT Press.

Nelson, T. O. (1997). The meta-level versus object-level distinction (and other issues) in formulations of metacognition. *American Psychologist*, 52(2), 179-180.

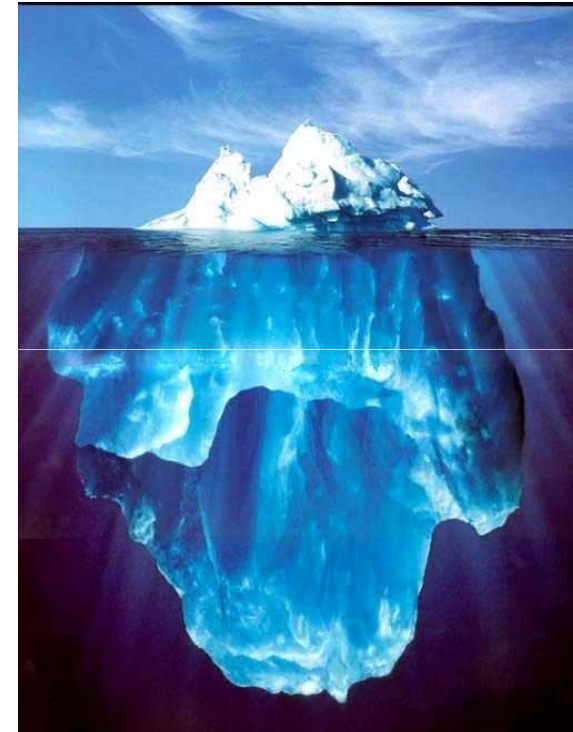
Applies to control processes at every level



Summary Metacognition

Renders thinking tractable

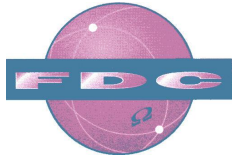
- Tip-of-tongue
- Feeling-of-knowing
- Intuition
- Emotion
- Self-efficacy



Nelson, T. O. (Ed.). (1992). *Metacognition: Core readings*.
Needham Heights, MA, US: Allyn & Bacon.

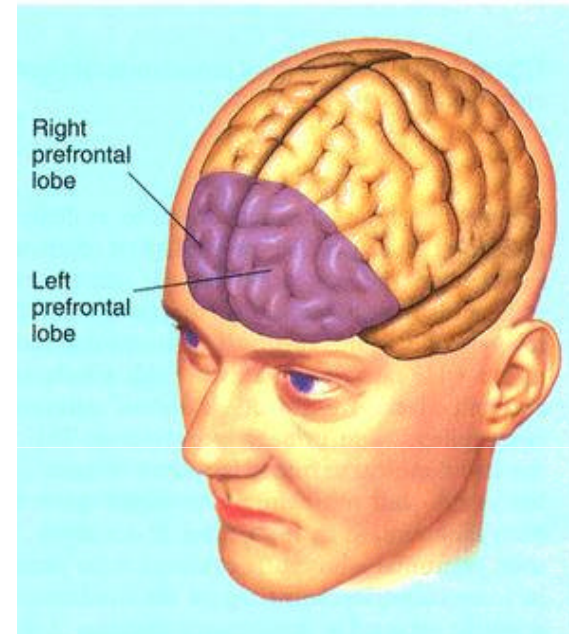


Quick...What do you know?
What can you do?



Executive Metacognition

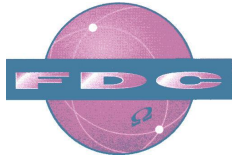
Components of Executive Functioning



Goldberg, E. (2001). *The executive brain : frontal lobes and the civilized mind*. Oxford ; New York: Oxford University Press.

Metcalfe, J. (1998). Insight and metacognition. In G. Mazzoni & T. O. Nelson (Eds.), *Metacognition and cognitive neuropsychology: Monitoring and control processes* Mahwah, NJ, US: Lawrence Erlbaum Associates.

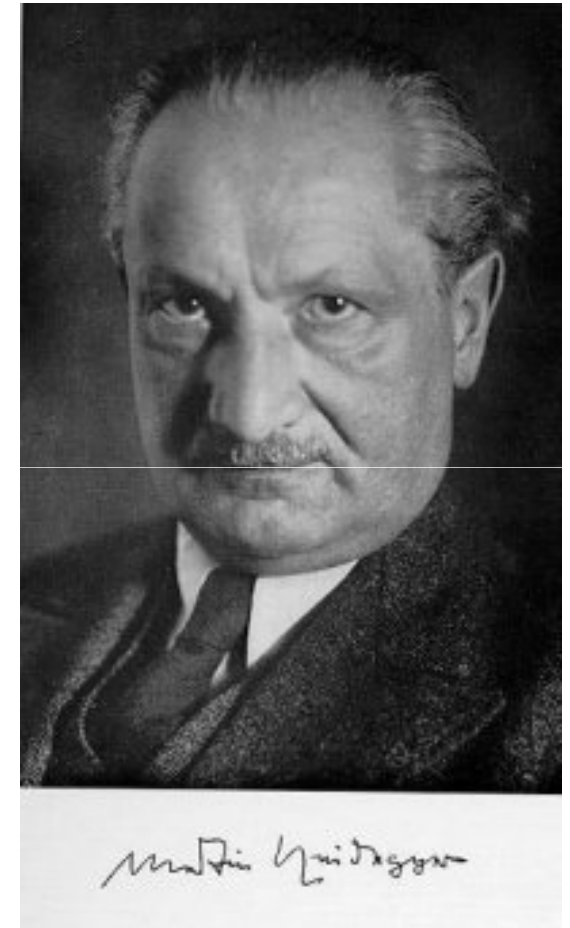
Requires more time and attention



What Is Called Thinking?

➤ The Discovery of Method

- ❖ Thinking
- ❖ Hunting
- ❖ Fire starting
- ❖ Farming
- ❖ Writing
- ❖ Science
- ❖ Phenomenology
- ❖ Psychotherapy
- ❖ Management

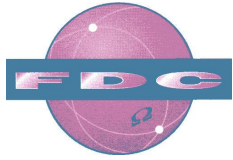


Heidegger, M. (1968). *What is called thinking?* New York,: Harper & Row.

Complex imitation is essentially human



© Joe Ferguson, 2003



Poodle in the Microwave

There was some woman who had a dog, which she would put in the oven to dry off after giving him baths. I thought this was stupid enough, but then the woman gets a microwave oven.

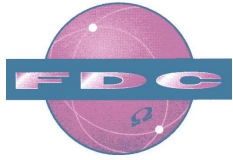
While being "dried off" in the microwave, the dog explodes and (obviously) dies.

That's stupid enough, But the woman sued the company which made the microwave for some obscene amount of money -- and won. Because there was no warning label on the microwave oven.



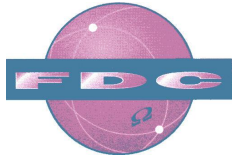
Collected on the Internet, 1998

<http://www.snopes2.com/horrors/techno/micropet.htm>

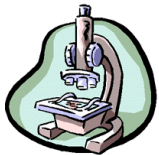
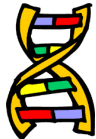
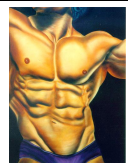


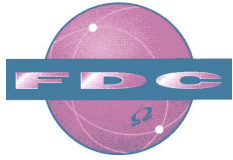
The Meme Meme

Intention Alliance Gratification Usefulness Obligation Novelty Threat Promise Beauty	Procedure Intention Skill Decision Action	Force Control Influence Alliance Skill Fame Obligation Authority Advocacy Interpretation Arbitration
	Information Meaning Truth Reference	
	Affect Emotion Valance Potency	

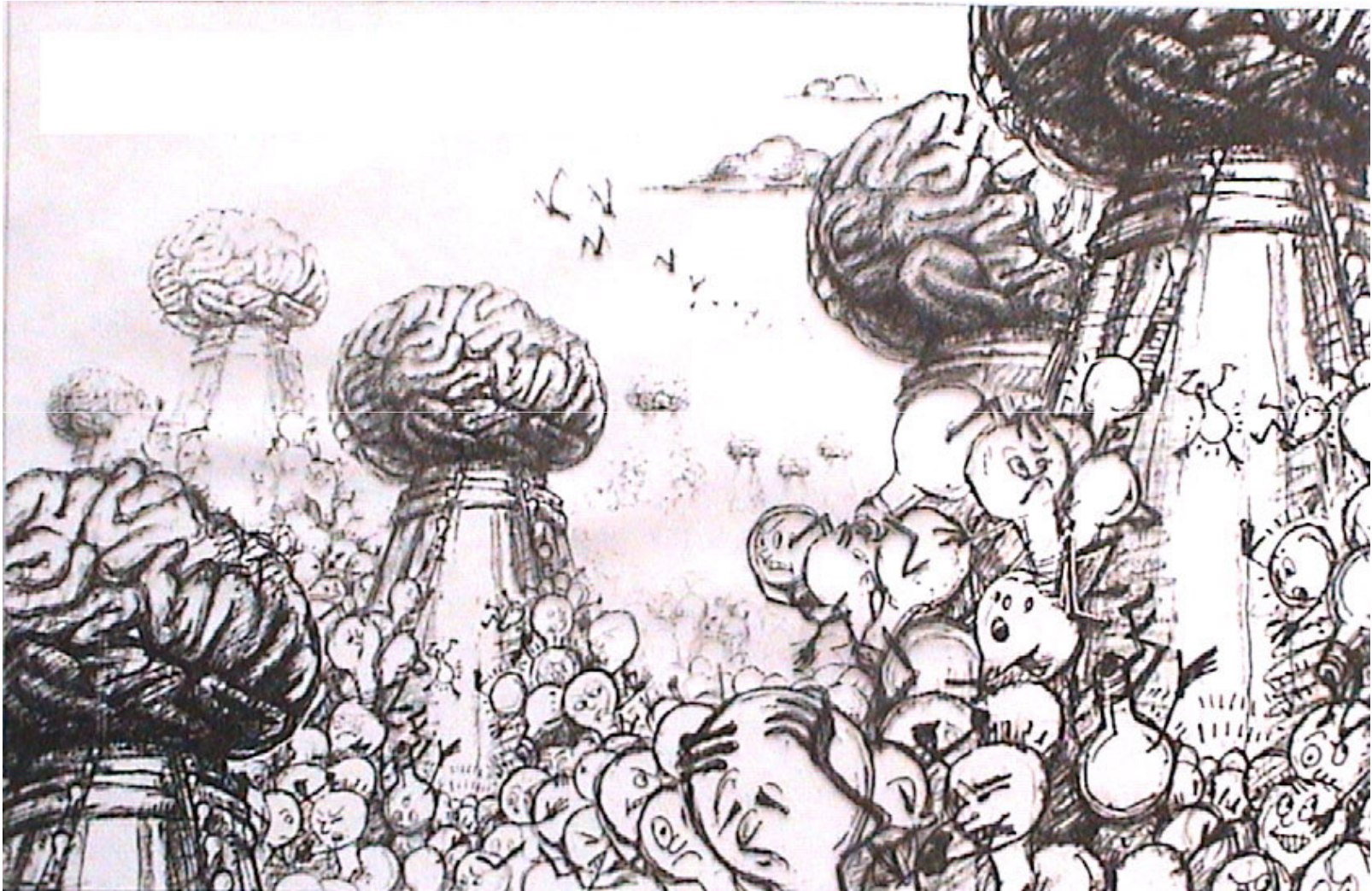


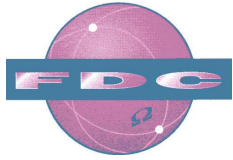
A Few Famous Memes

					
Tool	Joke	Education	Talk Show	Elvis	Dating
					
Death	Science	Gene	War	Psychology	Writing
					
Fitness	Money	Job	Technology	Religion	Computer
					
Math	Democracy	Slavery	Sports	Music	Art

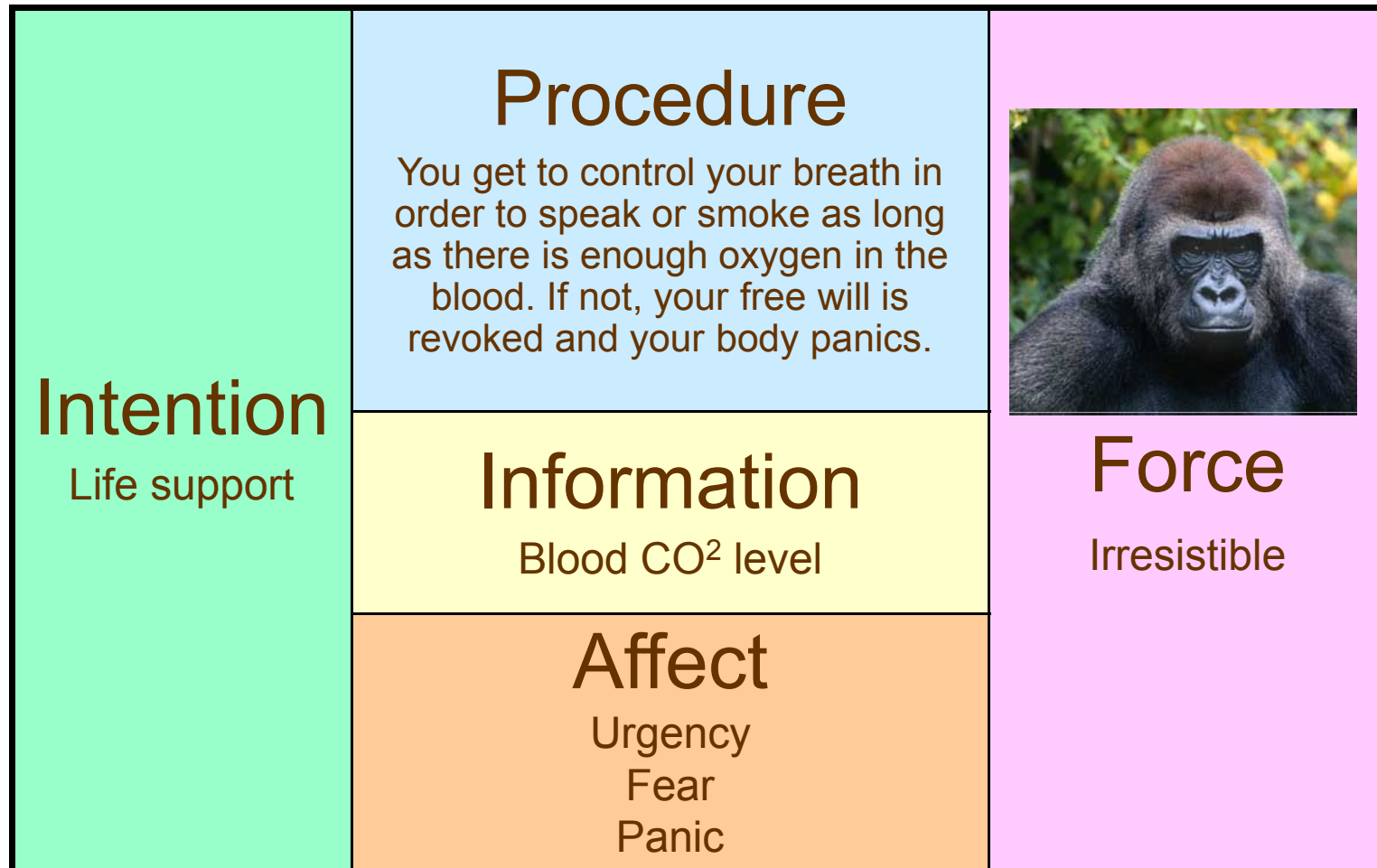


Memes Compete

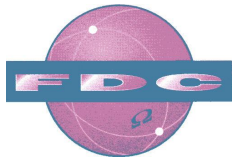




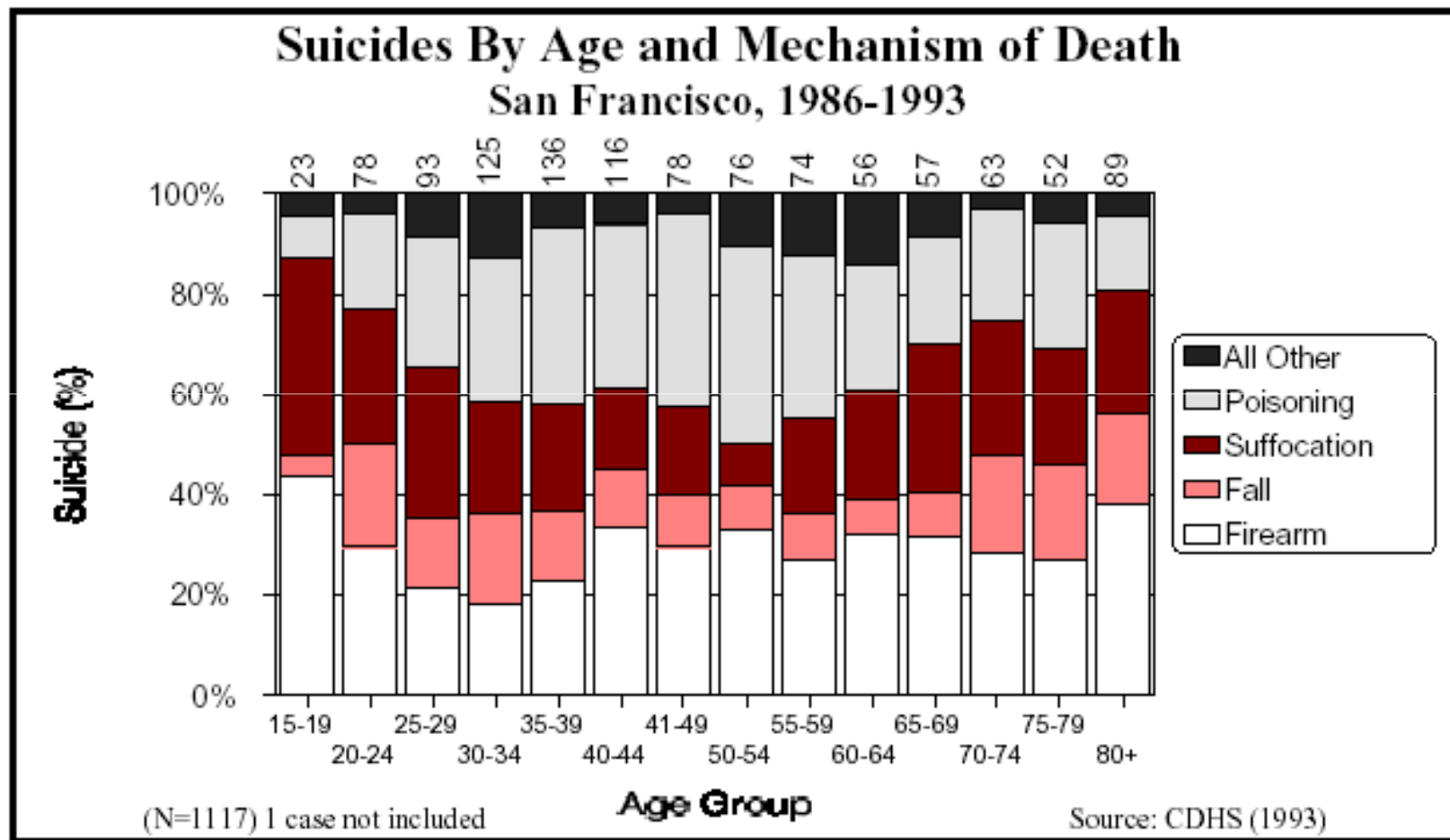
The Respiration Meme



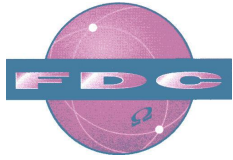
The limit of cognitive influence?



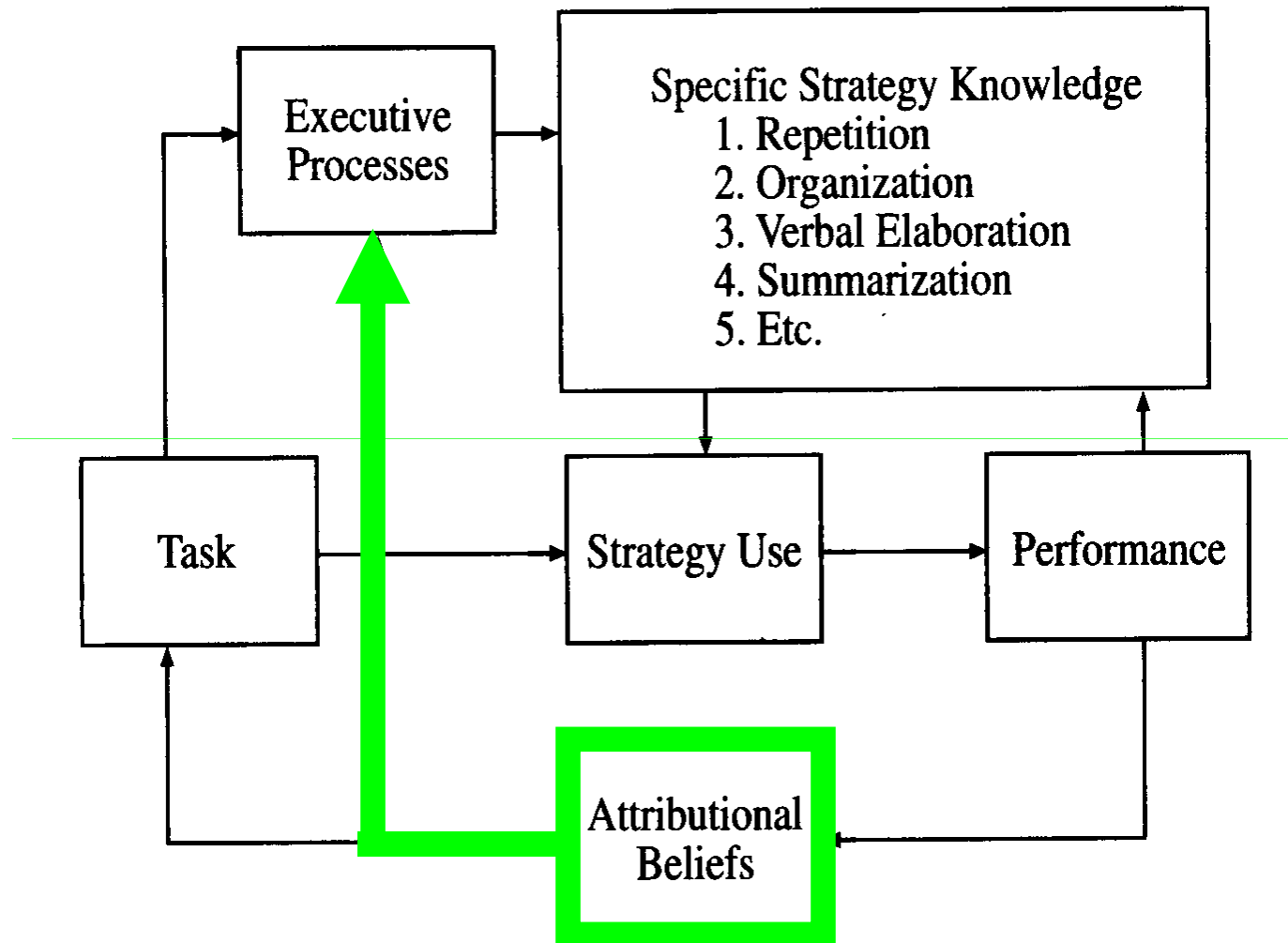
Respiration Overcome



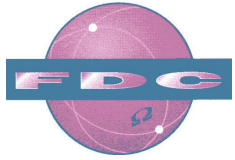
If you can't be disciplined, be clever



Metacognition & Self-Efficacy



When success is attributed to strategy



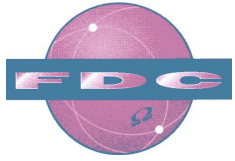
Deviant Cognition Is Effective

- Pathological interpretation of deviant behavior (the medical model) implies defective processing
- Psychotherapy assumes that processing is effective and correct, but that perception, interpretation, knowledge, or procedure may be defective or sub-optimal

Szasz, T. S. (1974). *The myth of mental illness: Foundations of a theory of personal conduct*. New York, NY: Harper & Row.

GIGO: A cognitive interpretation of psychopathology





Social Learning Model of DV

Aggression is learned in two basic ways:

1. Observing aggressive models
2. Receiving or expecting payoffs following aggression



The payoffs may be in the form of:

1. Stopping aggression by others
2. Getting praise or status or some other goal
3. Getting self-reinforcement and private praise
4. Reducing tension

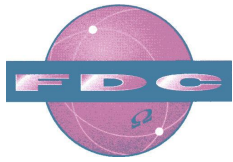


Bandura, A. (1973). *Aggression: A social learning analysis*. Oxford, England: Prentice-Hall.

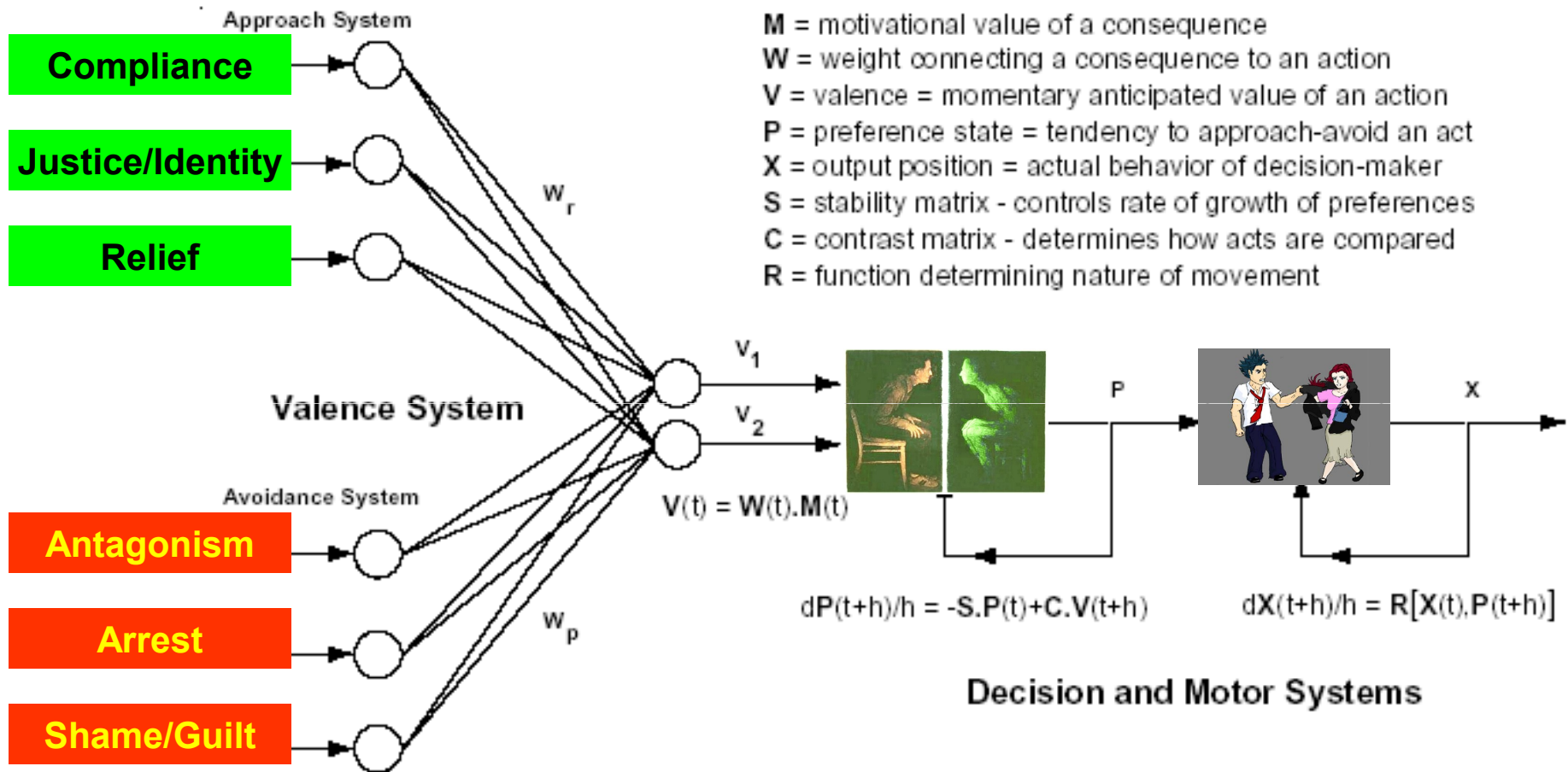
A decision is made in every case



© Joe Ferguson, 2003



Bounded Rationality

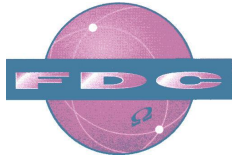


Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression, and coercive actions*. Washington, DC, US: American Psychological Association.

Is intimate partner violence rational?



© Joe Ferguson, 2003

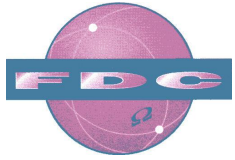


Benefits of Partner Violence

- Establish immediate agenda
- Display power
- Control the situation
- Suppress opposition
- Relieve tension



Immediate reinforcement

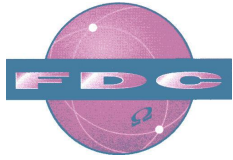


Costs of Partner Violence

- Arrest
- Prison
- Antagonism
- Fines
- Shame
- Anxiety



Delayed consequences



Anger Disrupts Analysis

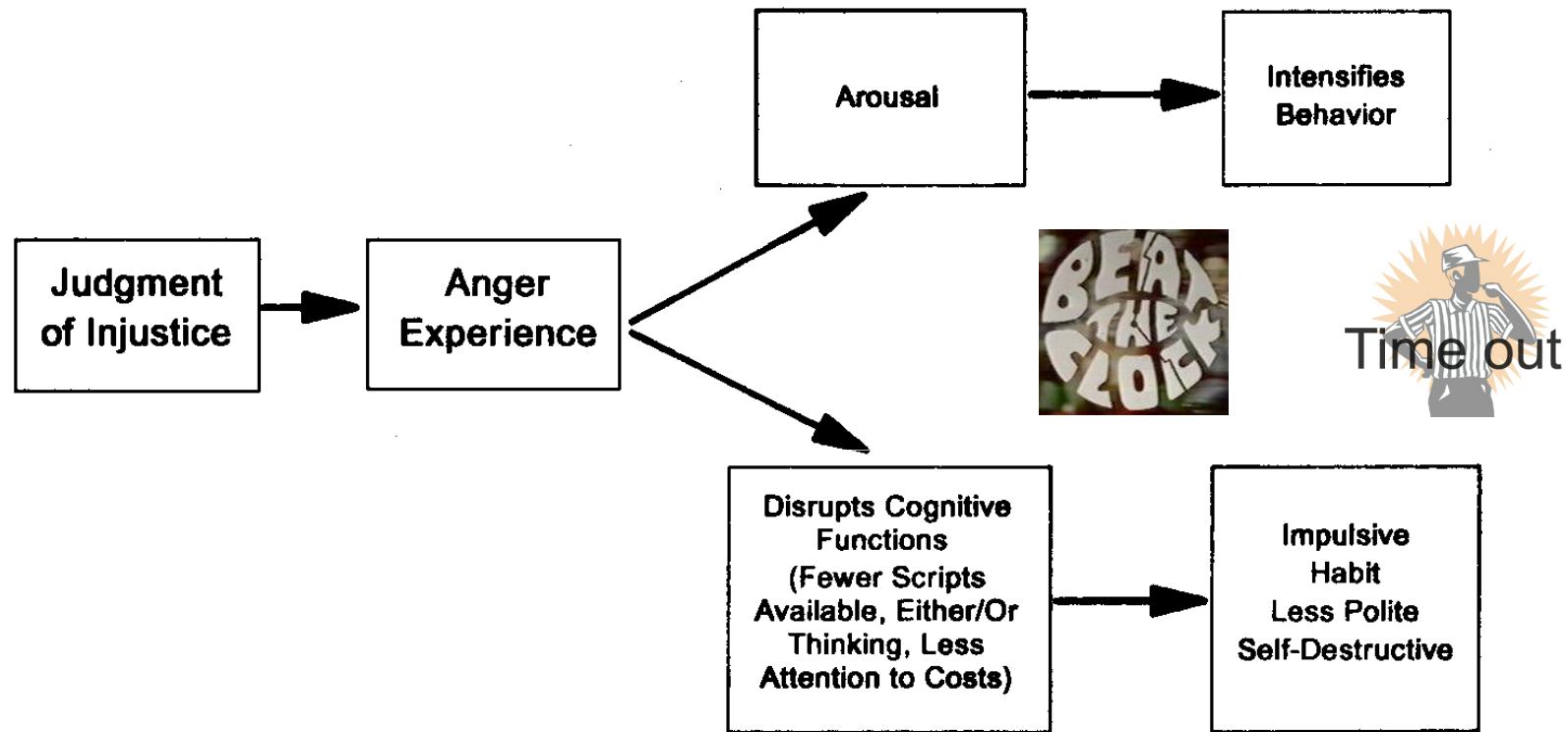
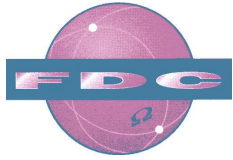


Figure 8.3. The effects of anger experiences on subsequent actions.

Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression, and coercive actions*. Washington, DC, US: American Psychological Association.

Wyer, R. S., Jr., & Srull, T. K. (Eds.). (1993). *Perspectives on anger and emotion*. Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.



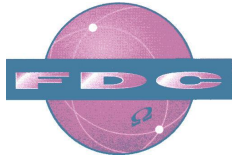
The Role of Alcohol

- Cognitive impairment
- Problem solving ability
- Sensitivity to social cues
- Risk tolerance



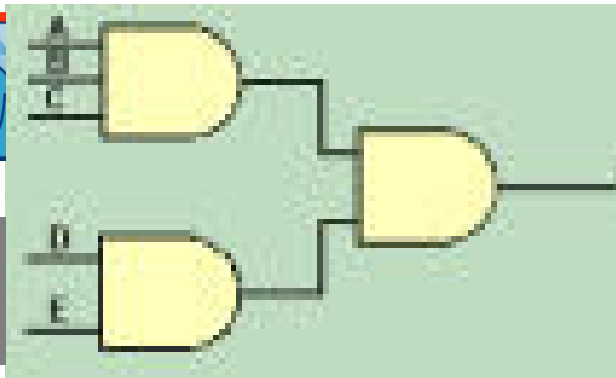
Pernanen, K. (1991). *Alcohol in human violence*. New York, NY, US: Guilford Press.
Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression, and coercive actions*.
Washington, DC, US: American Psychological Association.

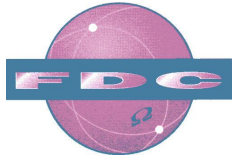
Even expectancy effects are significant



Repertoire & Efficacy

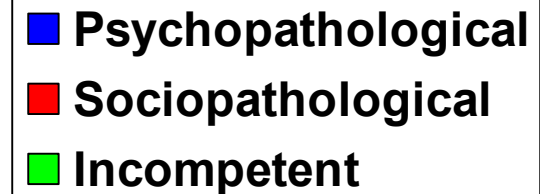
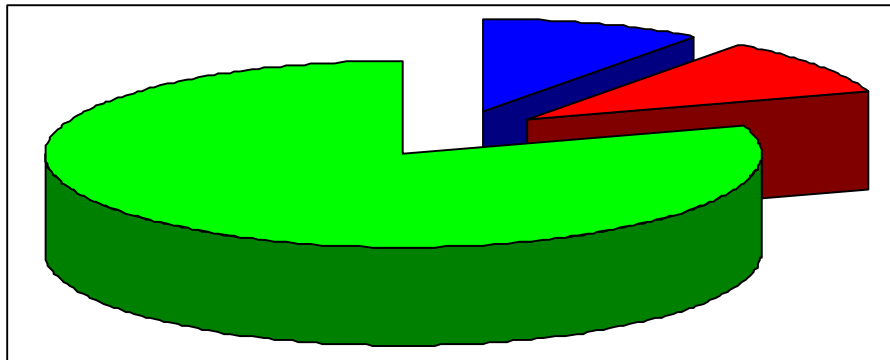
Approach	Desirability	Confidence	Weight
Negotiation (socially competent)	100	0%	0
Coercion (socially incompetent)	1	100%	1



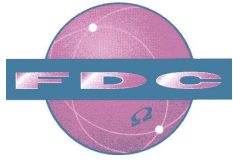


Tripartite Etiology *of Intimate Partner DV*

- Psychopathological IPDV
- Sociopathological IPDV
- Incompetent IPDV



Generic treatment for incompetence?



One-Size-Fits-All Interventions?



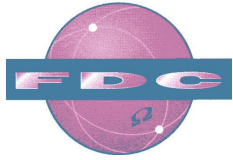
**99.999% effective
in the general population**



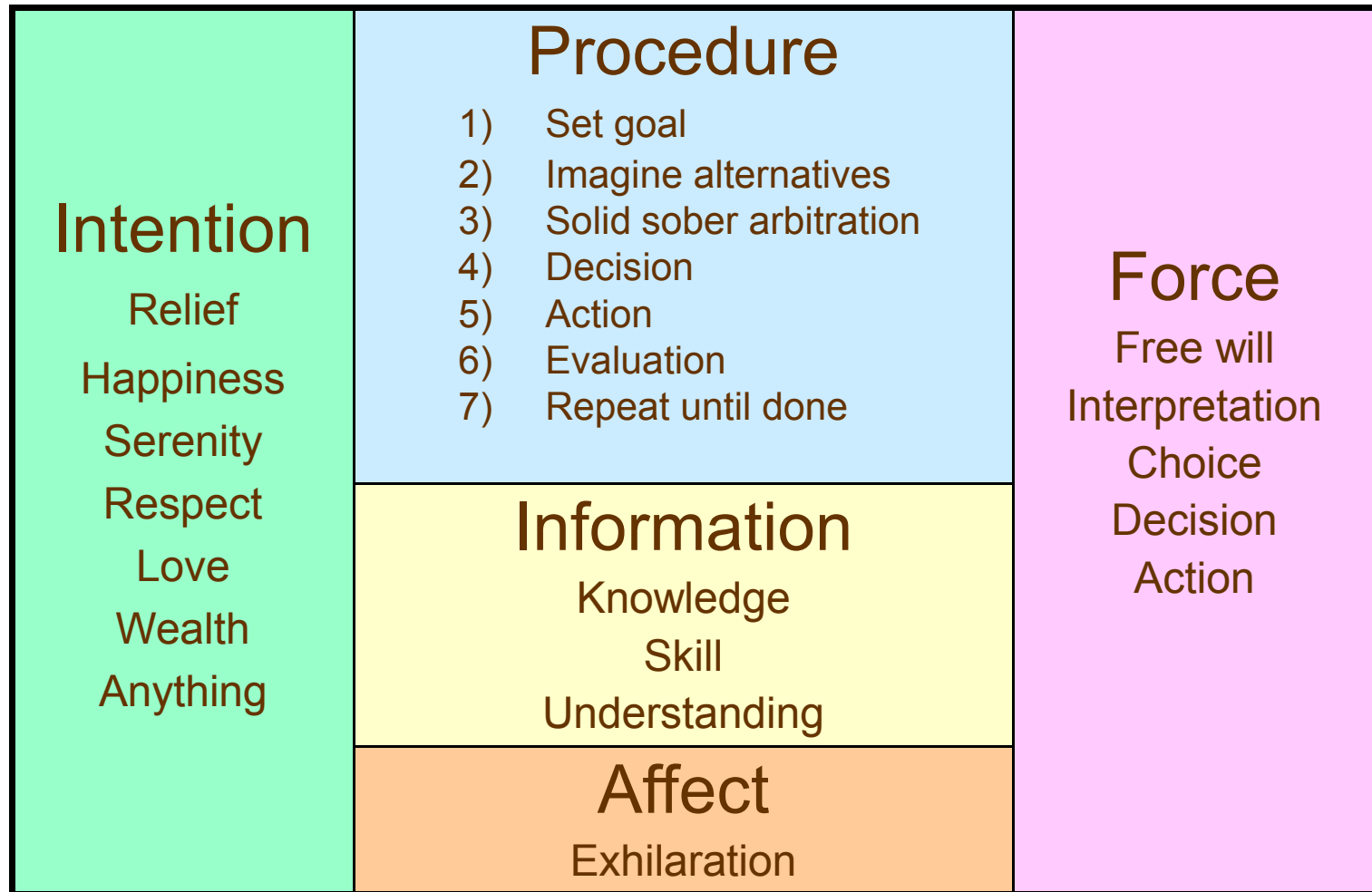
**32% effective
in the DV population***

***Gondolf, E. W. (2000). Mandatory court review and batterer program compliance.
Journal of Interpersonal Violence, 15(4), 428-437.**

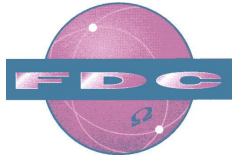
Of course there are generic factors



Actualization MetaMeme

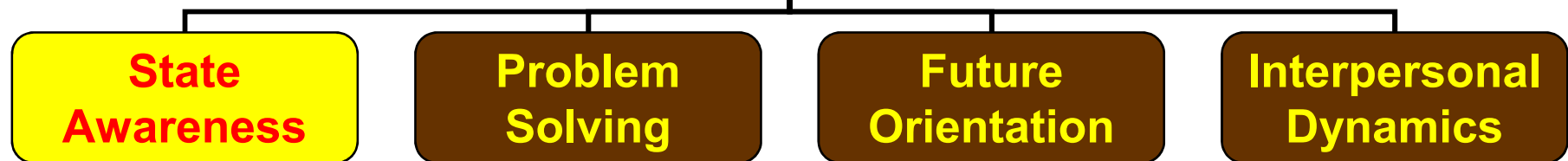


Generic executive skill



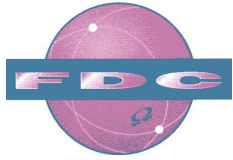
Batterer Action Protocol

Activation



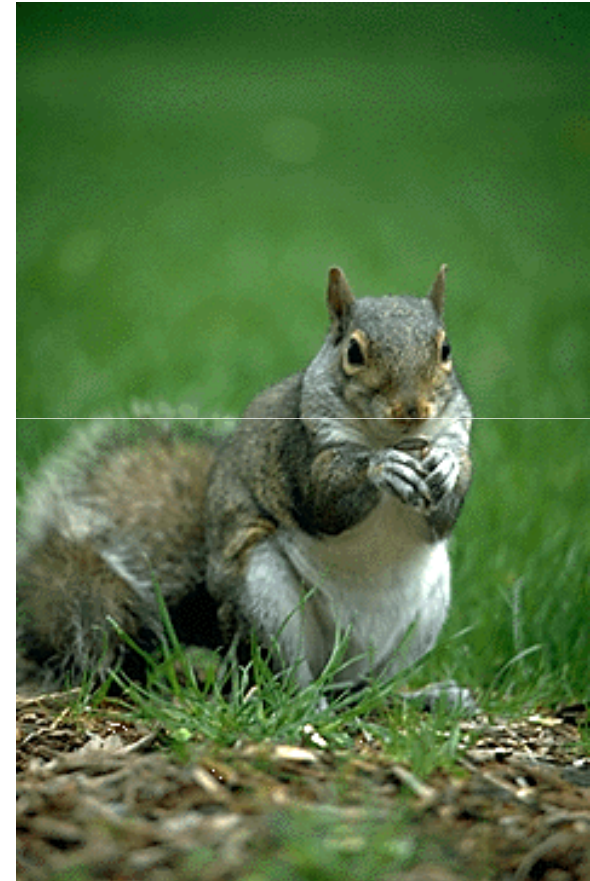
Actualization



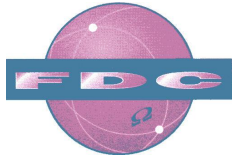


State Awareness

- Rocky is sitting quietly in a field of grass, thinking about eating one of the nuts that he has squirreled away
- Rocky is not really doing anything else
- Rocky is quite happy sitting there doing this



Squirrels are not complicated



At Ease



Neutral

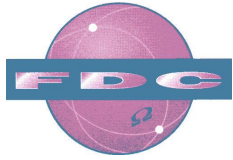


1. Calm
2. Comfortable
3. Hungry
4. Thoughts of television
5. Sleepy

Problem solving is optional

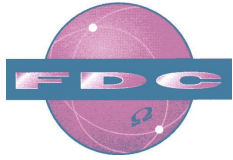
Watch TV, eat, read, think, listen to music, snuggle, make important decisions

Just hanging out



What Was That?

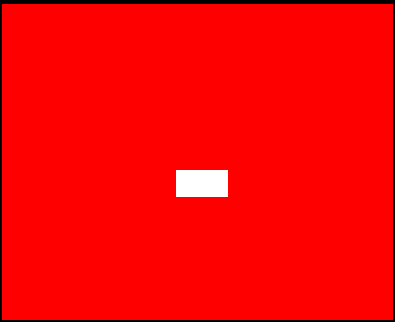




Waiting To Be Eaten



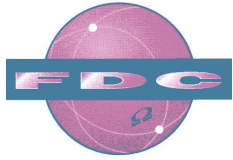
Anxiety

- 
1. Agitated
 2. Alert
 3. Suspicious
 4. Undecided
 5. Paralyzed

Problem solving is central

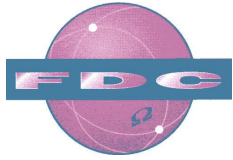
Investigate, interrogate, monitor, patrol, evaluate, plan for contingencies, get ready to run and get ready to fight

Figure out what's happening



Decision Time





Expecting To Be Eaten



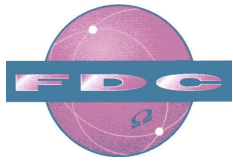
Fear

1. Sweat & blood
2. Images without thoughts
3. Muscular activation
4. Fixation on threat
5. Hair trigger

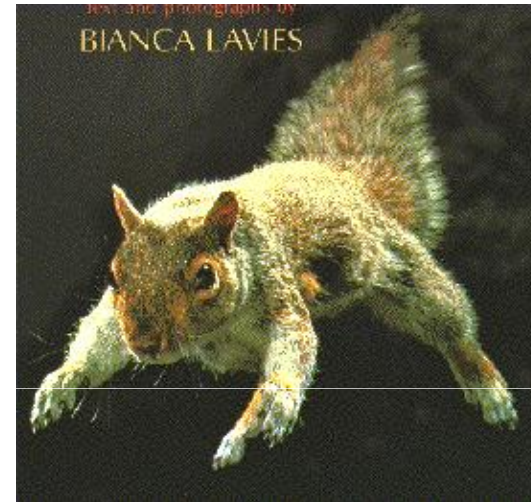
Reflex action only; no new solutions

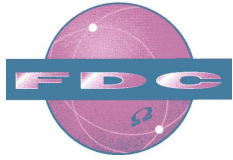
Scream & yell, run like hell, try to look tough, deny everything, take drastic action, panic if necessary

Escape if possible



No Way Out





Attack



Anger

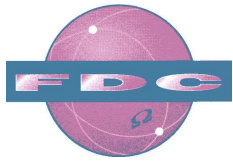


1. Sweat & blood
2. Images without thoughts
3. Muscular activation
4. Fixation on threat
5. Hair trigger

Reflex action only; no new solutions

Scream & yell, try to look tough, blame it on your target, attack *NOW*, freak out!

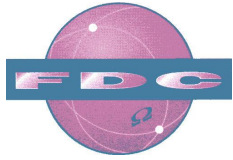
Ready to fight



Salvation!



Rescued by a beautiful angel!



Exploit Opportunity!



Exhilaration

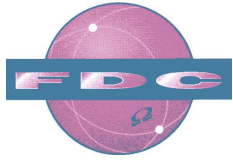


1. Agitated
2. Alert
3. Optimistic
4. Creative
5. Decisive

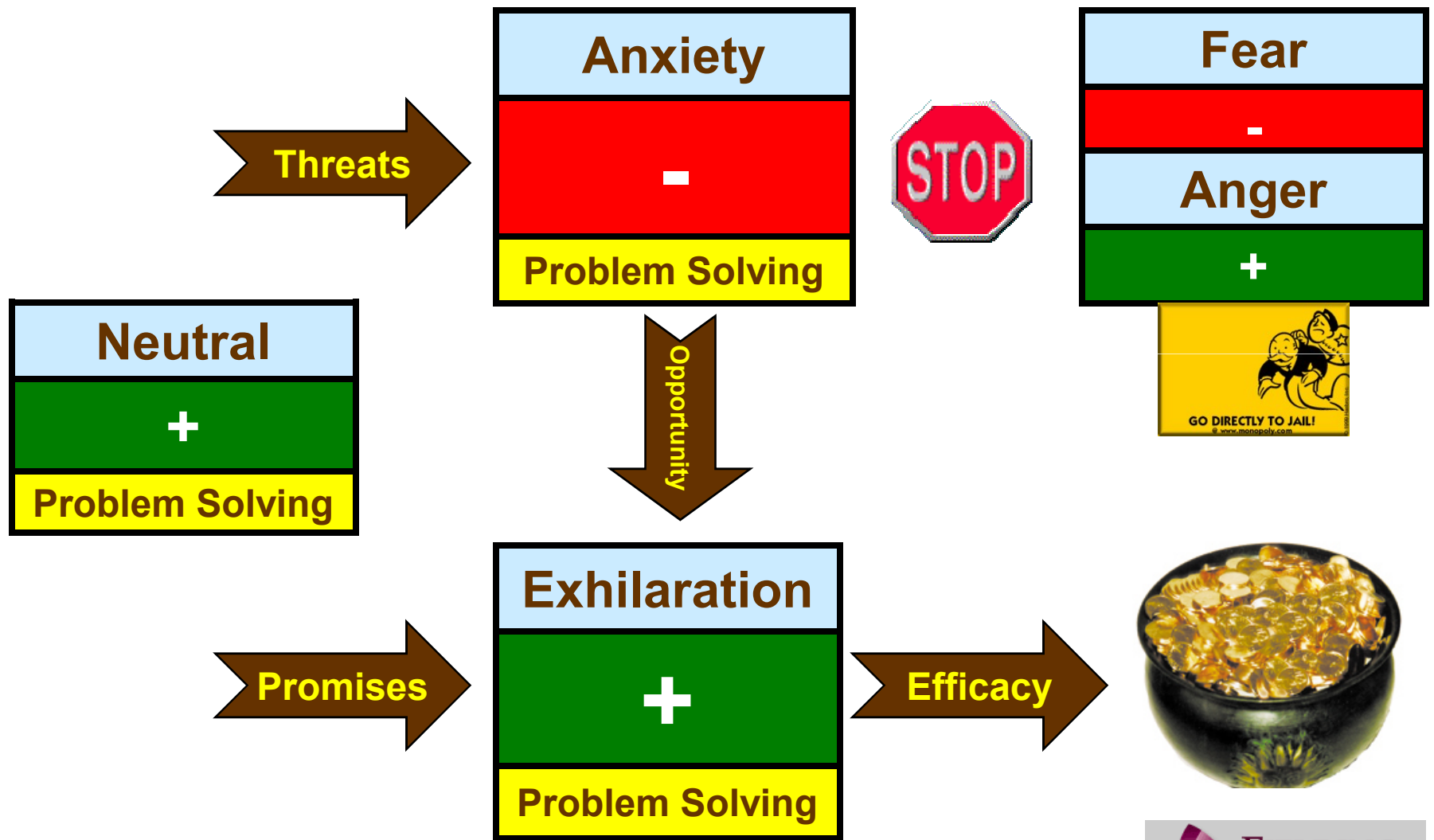
Problem solving is central

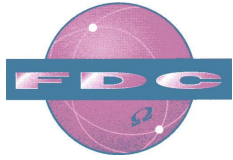
Investigate, speculate, experiment, evaluate, tinker, try, make decisions and take action

Ready to *Rock N' Roll*!!!!

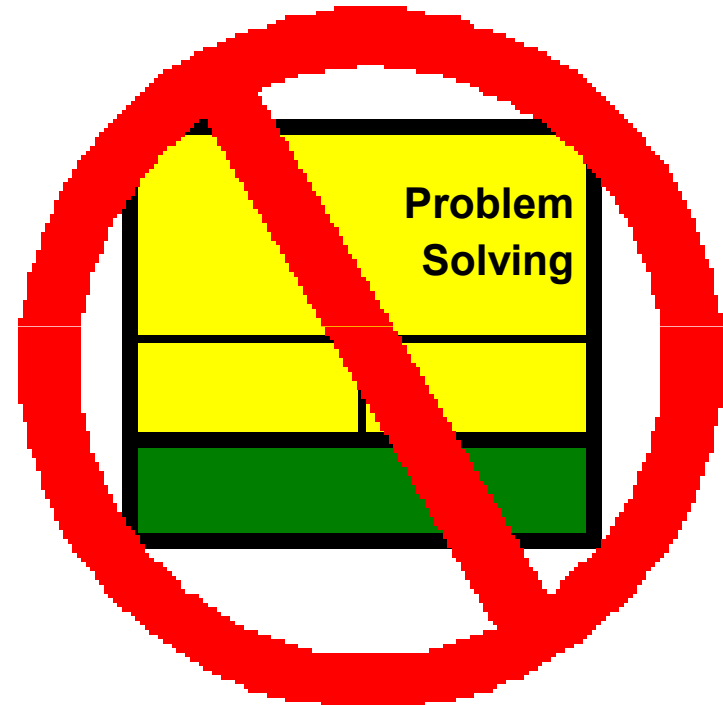
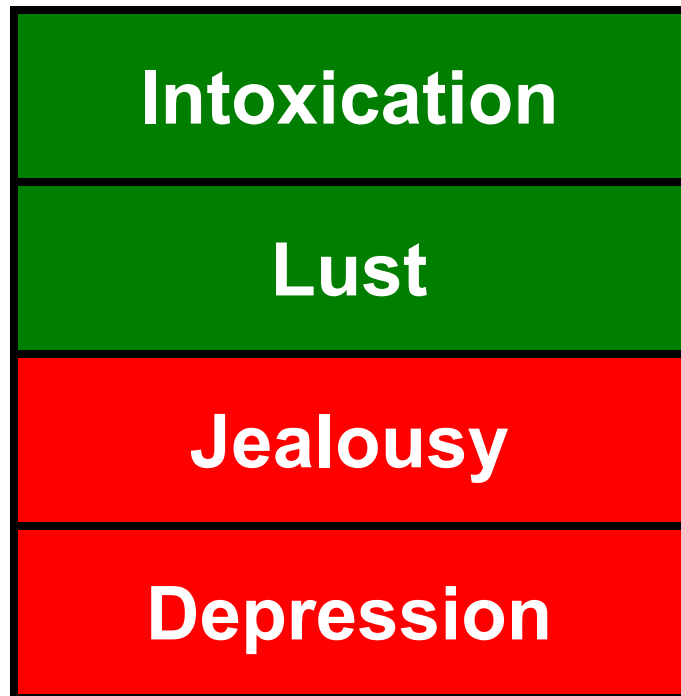


State Awareness





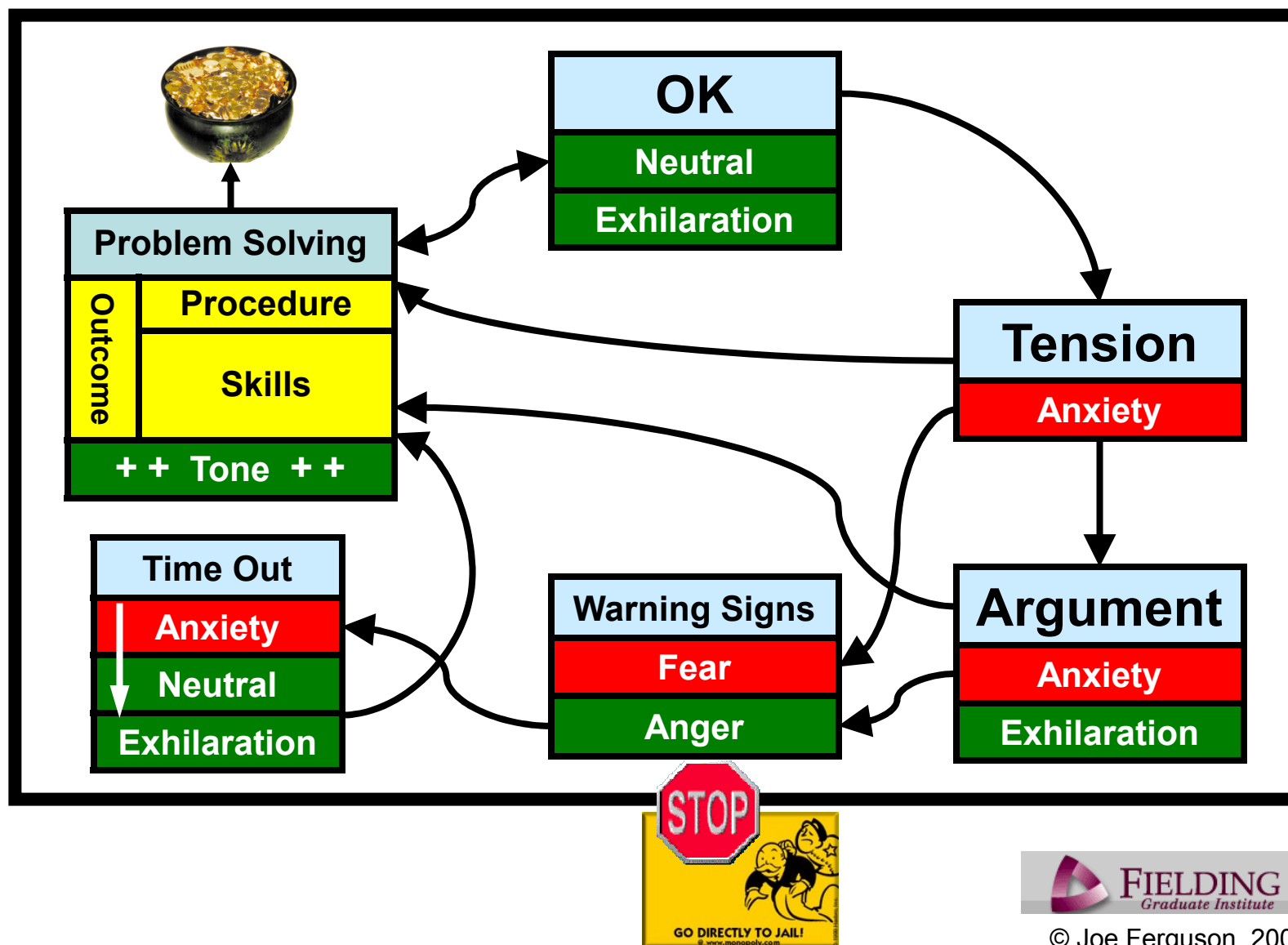
Other Important States

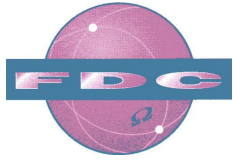


What are you capable of right now?



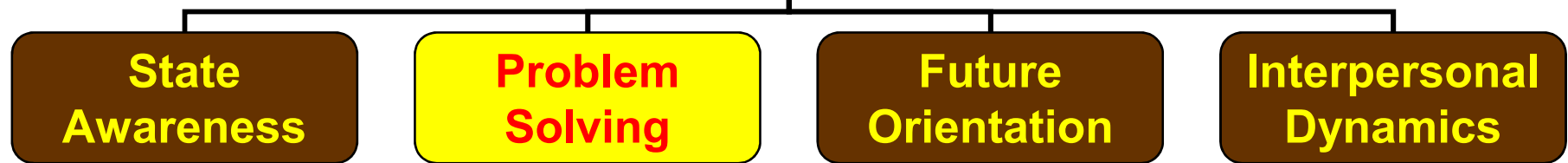
The Box



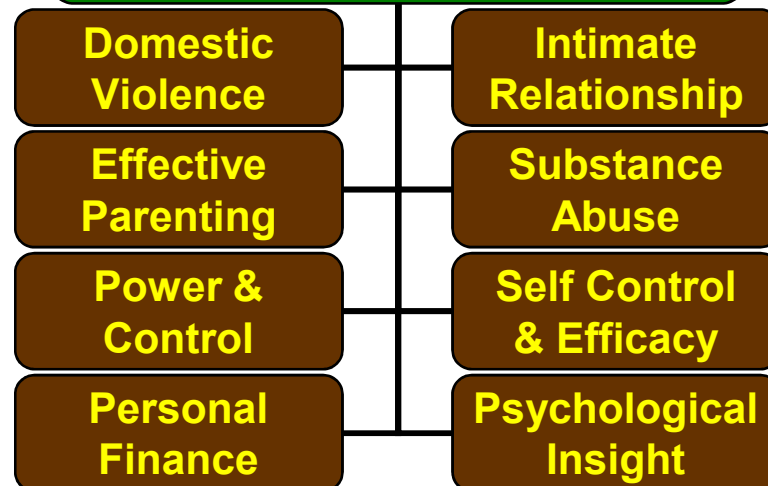


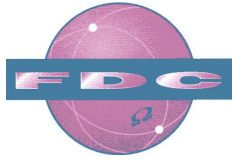
Batterer Action Protocol

Activation



Actualization

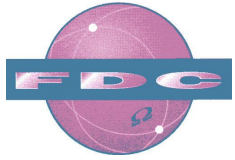




Landmines & Opportunities



This is your life



Identify Important Goals

➤ Some areas are common

❖ Relationships



❖ Violence

❖ Children



❖ Money

❖ Job



❖ Alcohol & drugs

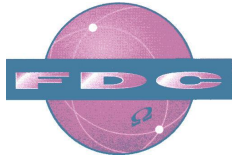


❖ Weight, fitness & health

❖ Department of Motor Vehicles



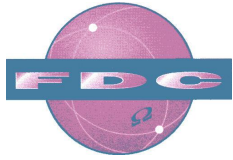
***There whether you know
about them or not***



Problem Solving

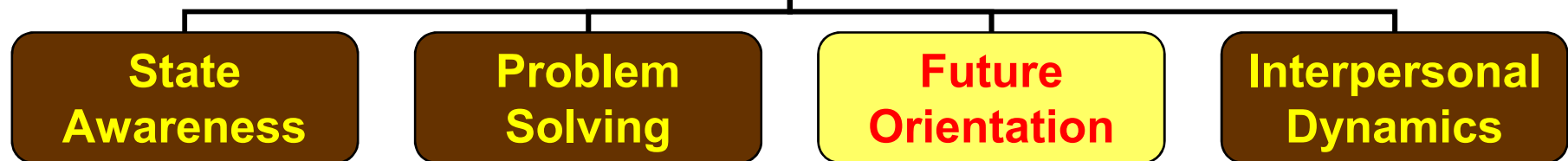
Outcome 1. Change 2. Acceptance 3. Resentment 4. Continue PS	Procedure 1) Identify the goal 2) Imagine alternatives 3) Make tentative decisions 4) Take action 5) Evaluate progress 6) Repeat until done	
	Skills	
	Knowledge	Procedure
	++ Tone ++ Exhilaration, Anxiety, or Neutral	

The box inside The Box

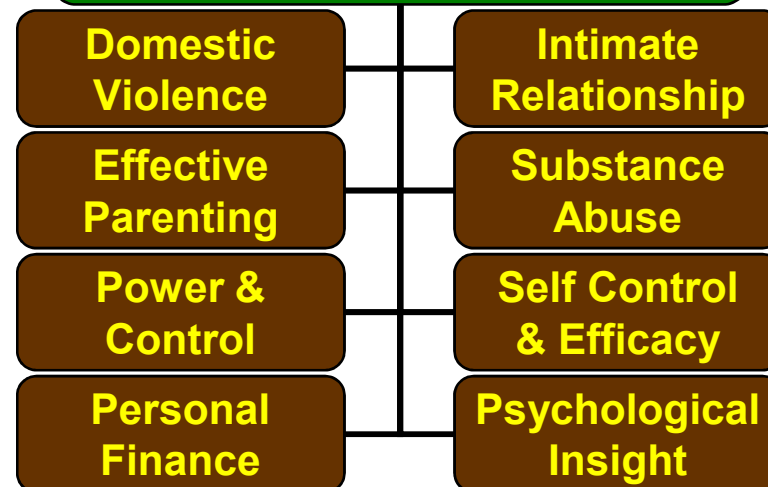


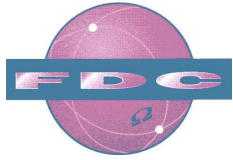
Batterer Action Protocol

Activation



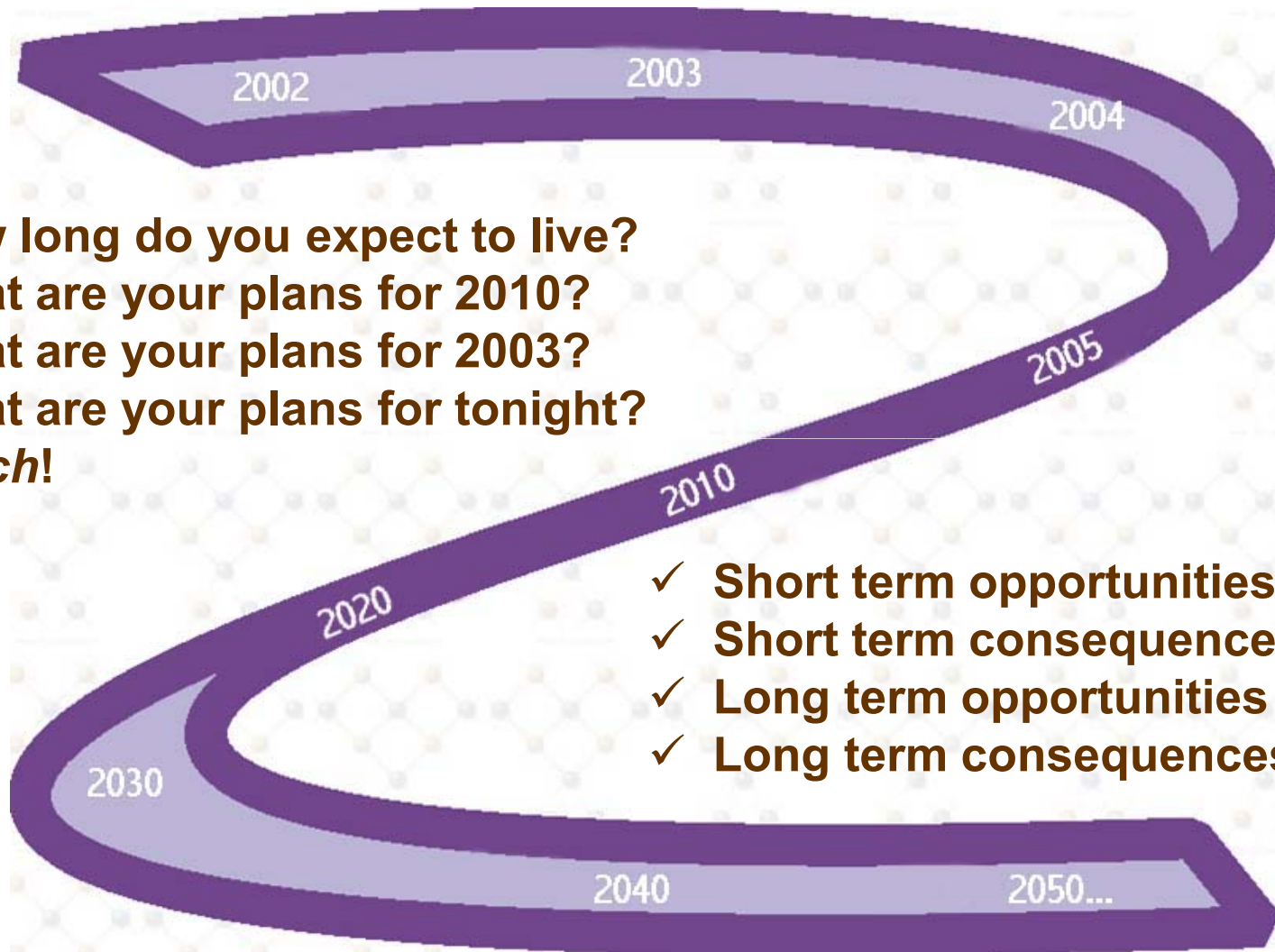
Actualization



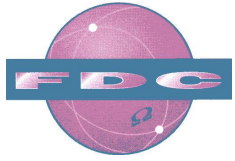


Future Orientation

- How long do you expect to live?
- What are your plans for 2010?
- What are your plans for 2003?
- What are your plans for tonight?
- **Catch!**

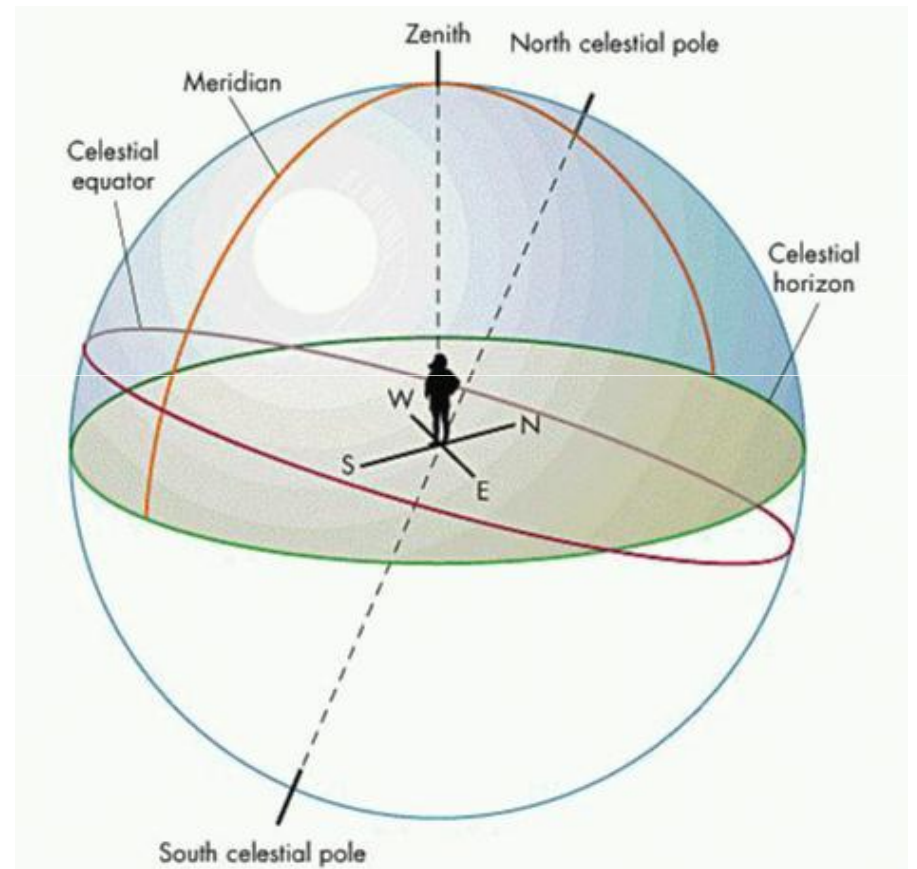


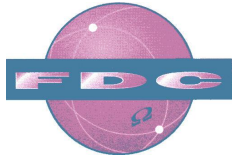
- ✓ Short term opportunities
- ✓ Short term consequences
- ✓ Long term opportunities
- ✓ Long term consequences



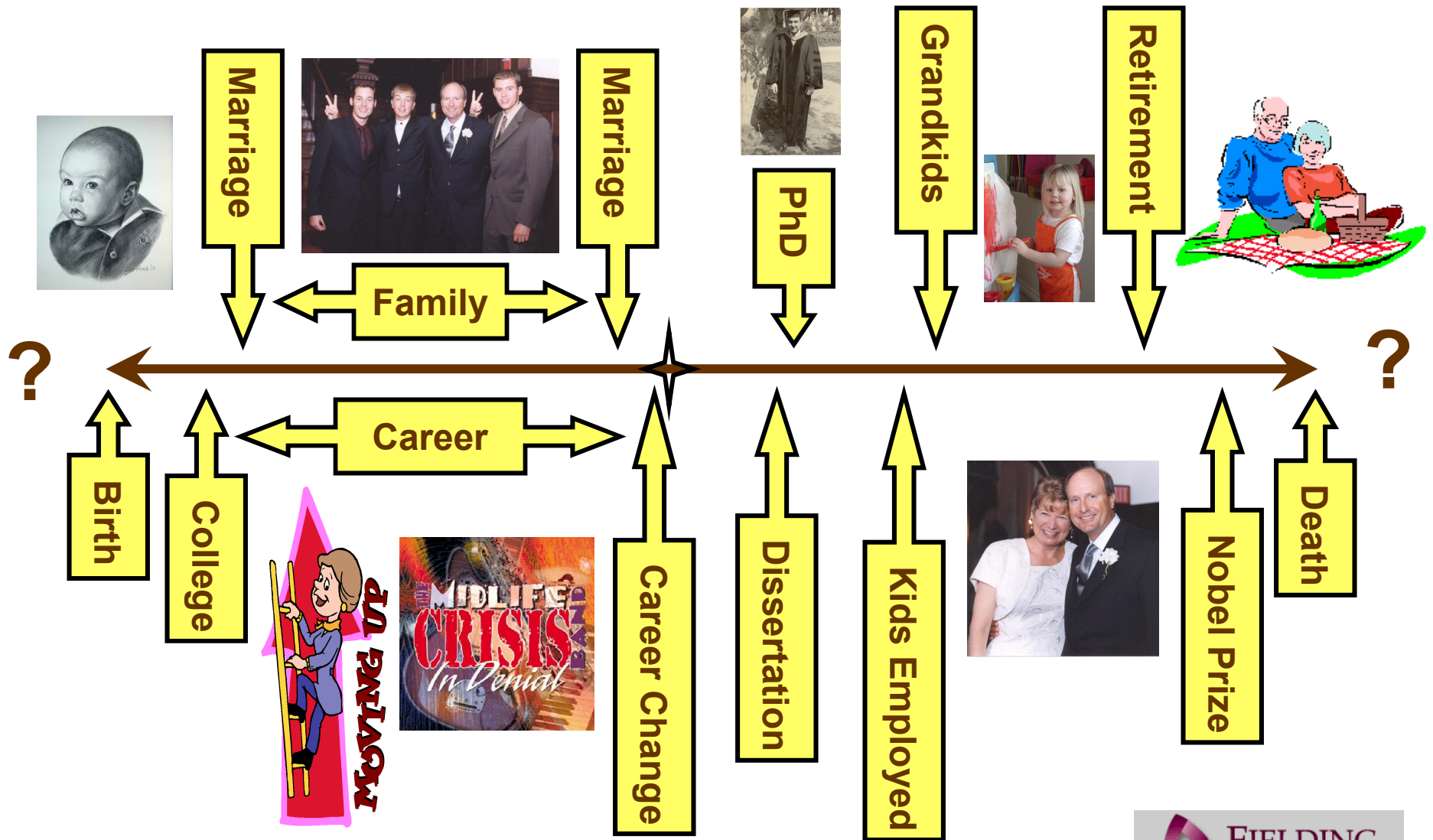
Planning Horizon Matters

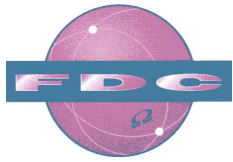
The distance to our horizon defines the scope of our ambitions.



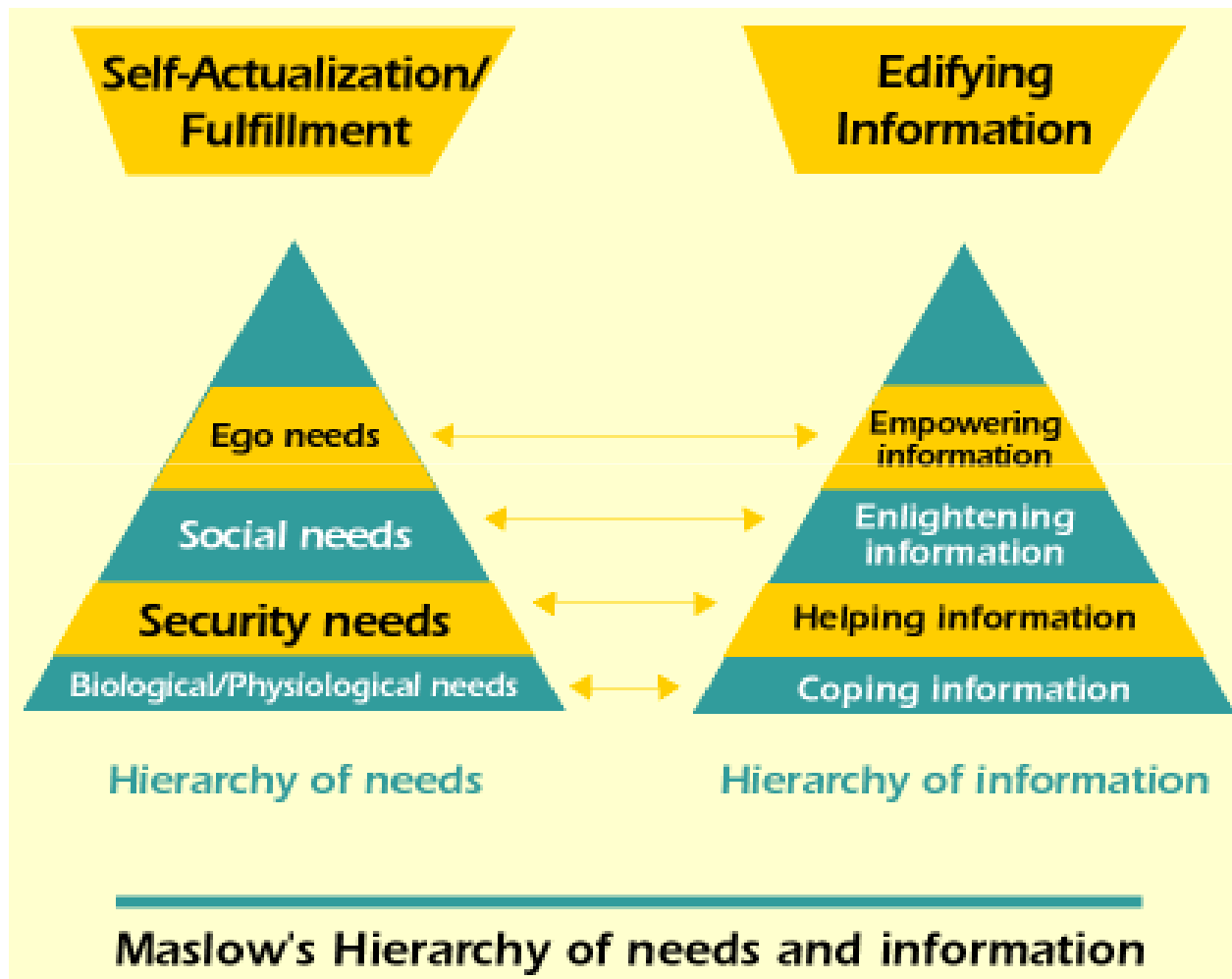


What are you up to?

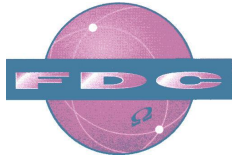




Hierarchy of Goals

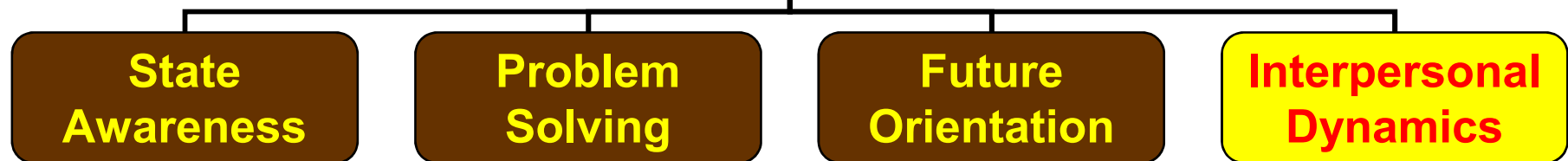


Violence not part of this picture

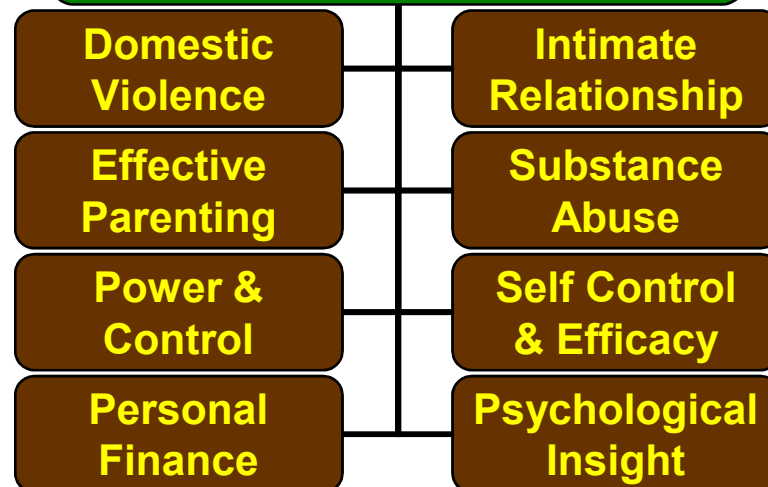


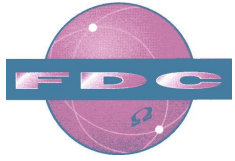
Batterer Action Protocol

Activation



Actualization



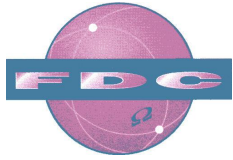


Intimate Relationship

- Admiration
- Intimacy
- Trust
- Support
- Understanding
- Tenderness
- Encouragement



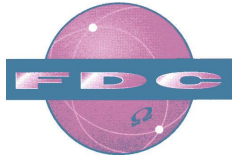
What strategy works here?



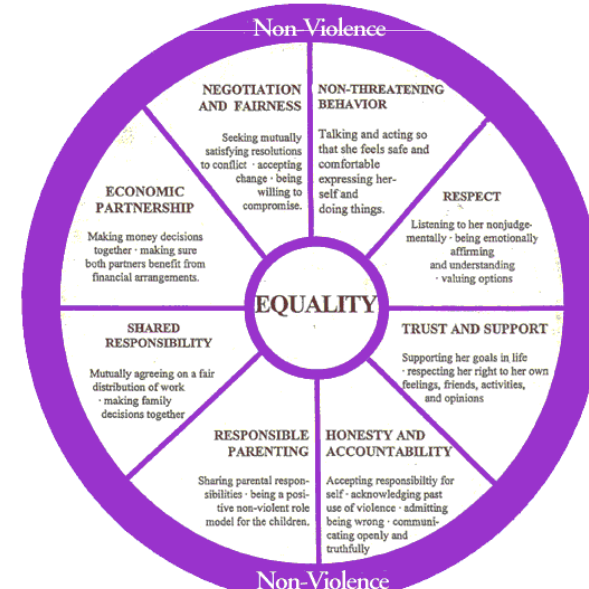
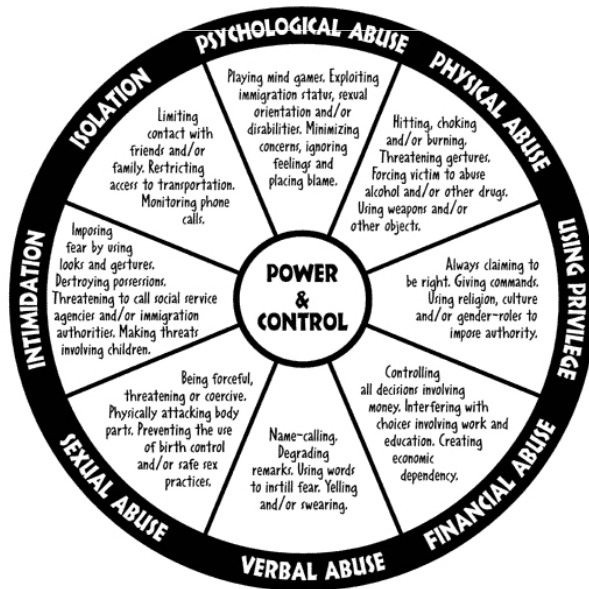
Integrity



***Do what you say
you are going to do.***



The Principle of Reciprocity



Relationships are negotiated



© Joe Ferguson, 2003