

# Autism

```
graph LR; A[Autism] --> B["First described: early 1900s.  
Offshoot of schizophrenia"]; A --> C["1970s: 'Developmental disabilities'  
(this is where I come in)"]; A --> D["Schools (70s/80s)  
1) interfered with academics  
2) socially disruptive"];
```

First described: early 1900s.

Offshoot of schizophrenia

1970s: “Developmental disabilities”

(this is where I come in)

Schools (70s/80s)

1) interfered with academics

2) socially disruptive

Kids I knew in school that did have autistic characteristics were drugged into submission -we called them zombies.  
Or they were kept in separate classrooms/closet away from the normal kids

# Joseph McLaughlin

As an infant – hydrocephalus - water on the brain

Autism had just been separated from Schizophrenia

typically, only diagnosed in school age adolescents

Undiagnosed autistic adults were:

- Leaders and innovators in the field
- Nerds who stayed at their desk
- People who refuse to follow the program
- Institutionalized
- Hot heads that no one wanted around
- Still treated as schizophrenia or some other mental disease
- End up with poor/illegal/addictive coping mechanisms

My family tree has all of those people



You aren't different!  
You are just trying to be different!



Why are you so different?

Spent 40+ years thinking I was broken

In my 40s, family members started showing up with my characteristics

Hydrocephalus is non-transferable

Diagnosed in my 50s for work related purposes

# Hinderances to diagnosis:

- Unawareness - what it is
- Negative stigmas
- Masked by other conditions
  - was better to be labeled as brain damaged than autistic
- School budget restraints
- Various Socio-economic hinderance

# In communicating with people, realize: Most People Don't Know What Autism Is

- **Behavior?**

- Why do they gravitate towards abstract and schematic, the absurd and the eccentric.
- Why are they aloof and detached from their environment,
- What's wrong with their motor skills, their speech, and their facial expressions?

- **Meltdowns**

- Were they temper tantrums?
- Were they psychotic outbreaks?
- Were we supposed to rationalize with people melting down? Spank them? Constrain them? Lock them away? Punish them? Scream them into submission? Ignore them?

**Simply saying** “they are autistic” lets people decide what it means (usually erroneously)

Instead: Let people know **specifics**:

- don't like loud noises
- don't like moving things
- easily distracted
- like to randomly break out singing Hamilton songs

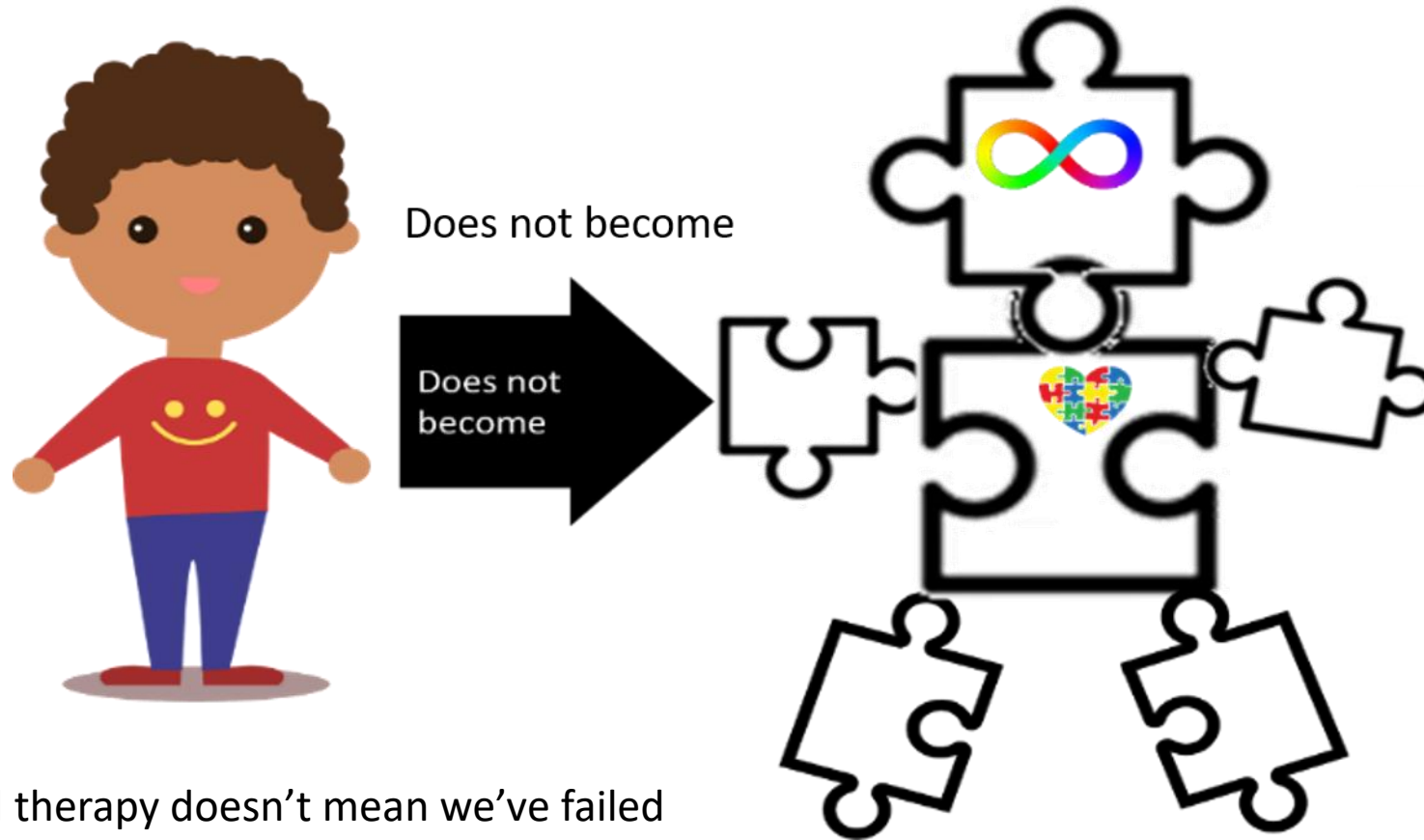
# Autism is NOT increasing:

(with the exception that some of our traits are being found beneficial, so we are having more kids)

- 1) It is constantly **being redefined, moving from**
  - a. Schizophrenia
  - b. Autism/PPD-NOS/Aspergers/etc
  - c. Autism Spectrum
- 2) A **growing awareness** beyond simply “a mental deficiency”
- 3) As **social stigmas are being addressed**, people are less likely to eschew a diagnosis.

it's “less negative” than it used to be.

Diagnosis/labels do not change who I am



It simply means I have technical terms to describe what is going on and a working paradigm to help me develop healthy coping mechanism



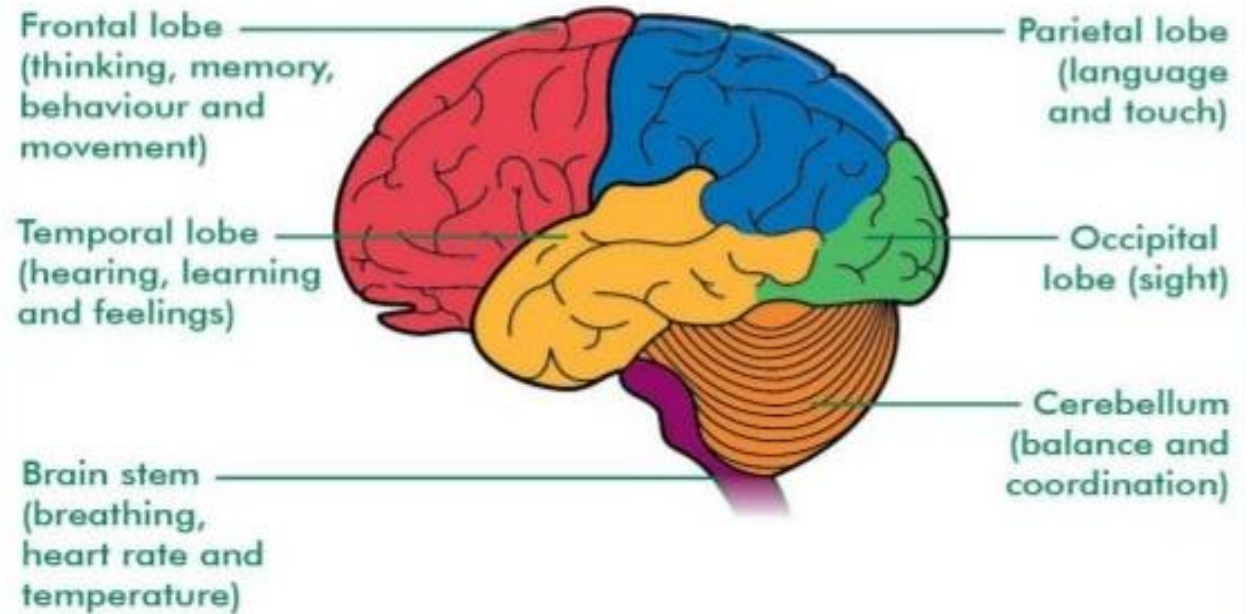
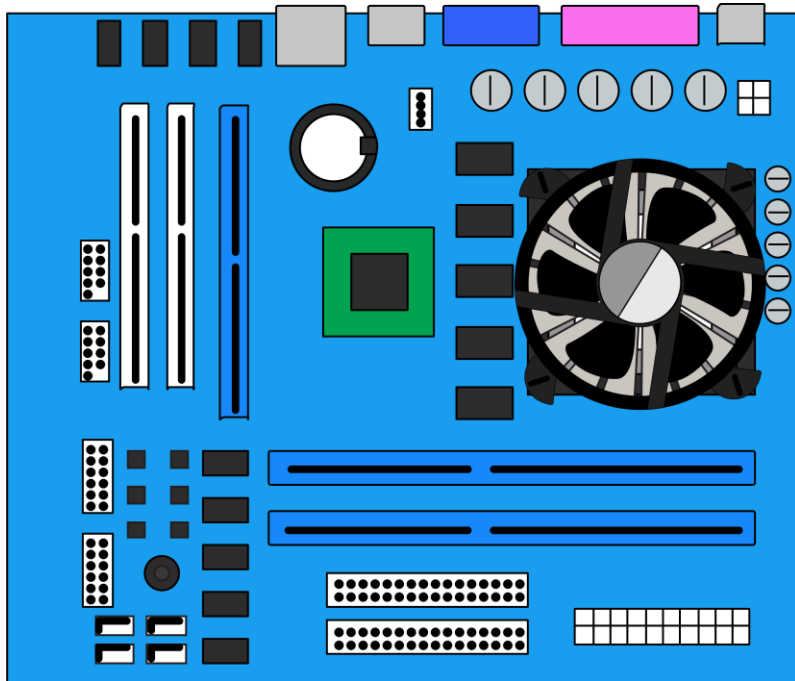
It means that I understand who I am

And that I'm not simply broken

How it works

# Brain Filters

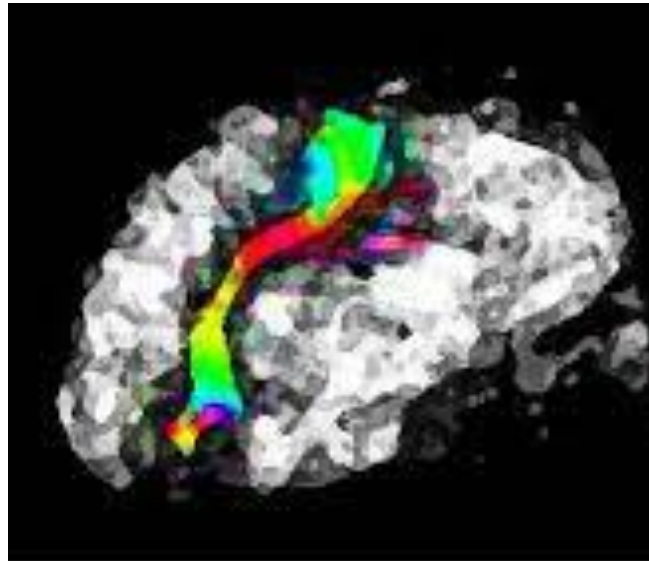
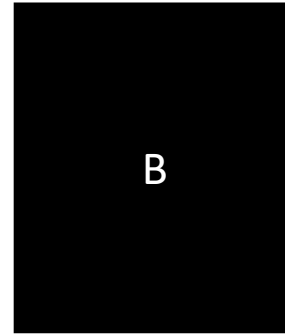
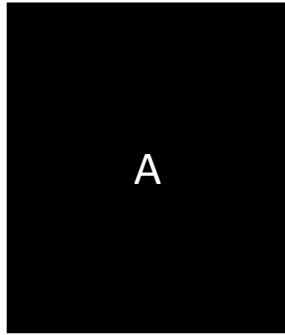
1. Controlling the amount of signals
2. Directing signals where to go.



# Where the signals go

Aka "Channeling"

Expected



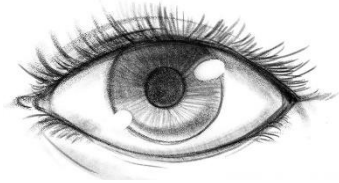
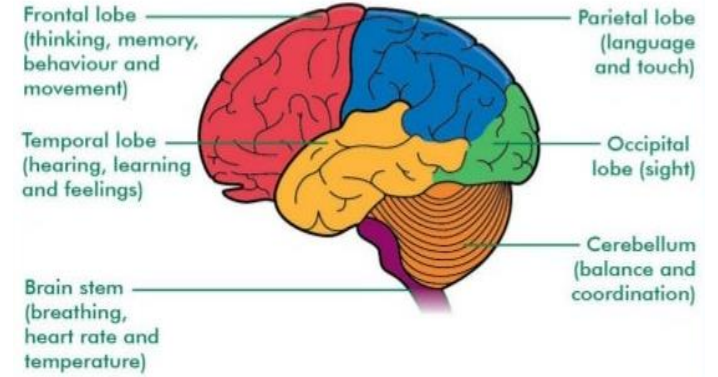
# Where the signals go

Aka "Channeling"

A



B



Optic Processor



$$\frac{1}{\sqrt{C^2 - V^2}}$$



Area(s) where math is stored



Internal calendar

Sad Event



Area(s) where "sadness" is processed

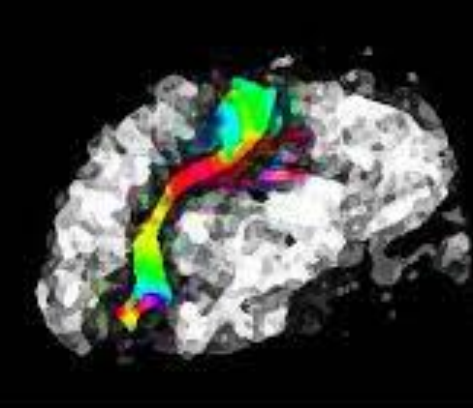
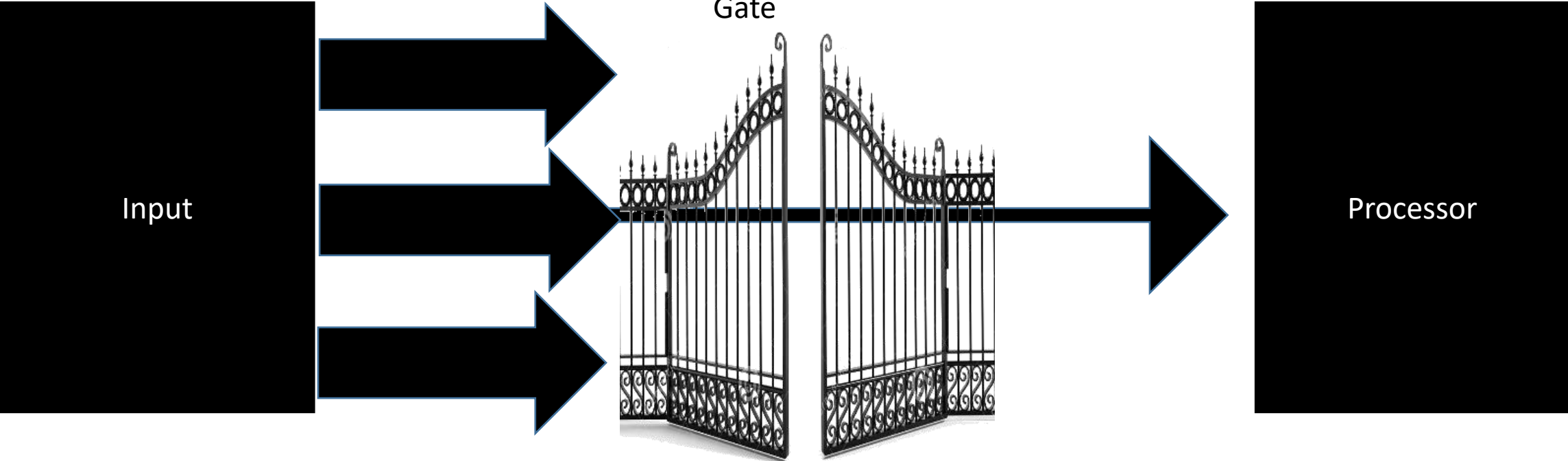
Something Implied



Area(s) where "implied" is processed

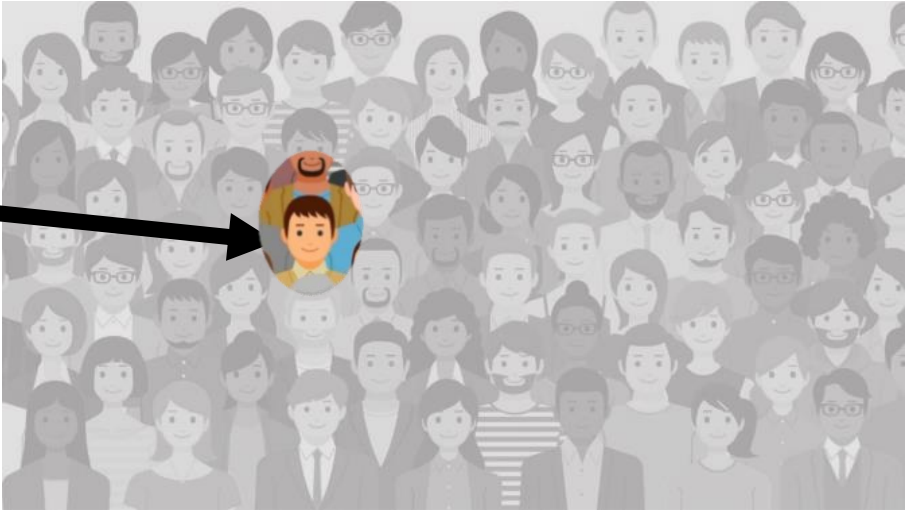
# Filtering the signals

Aka "Gating"



# Filtering the signals

Aka "Gating"

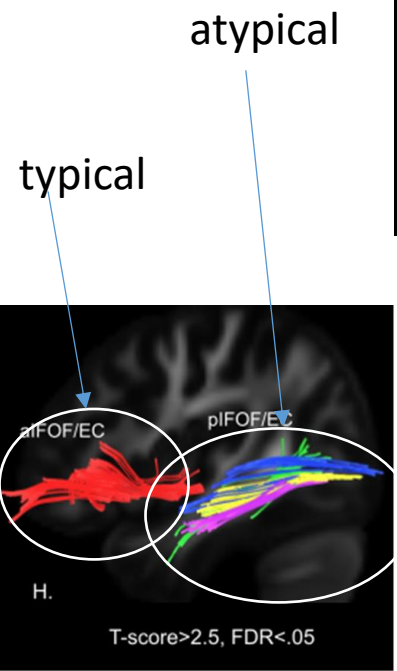
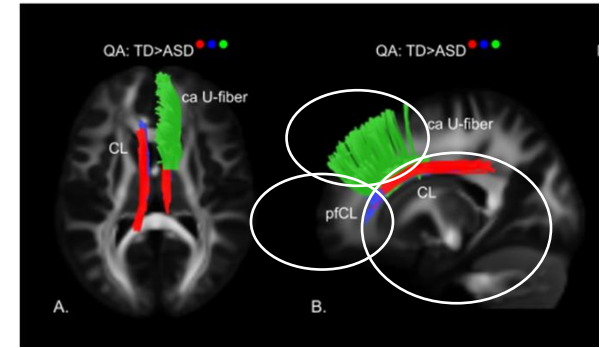
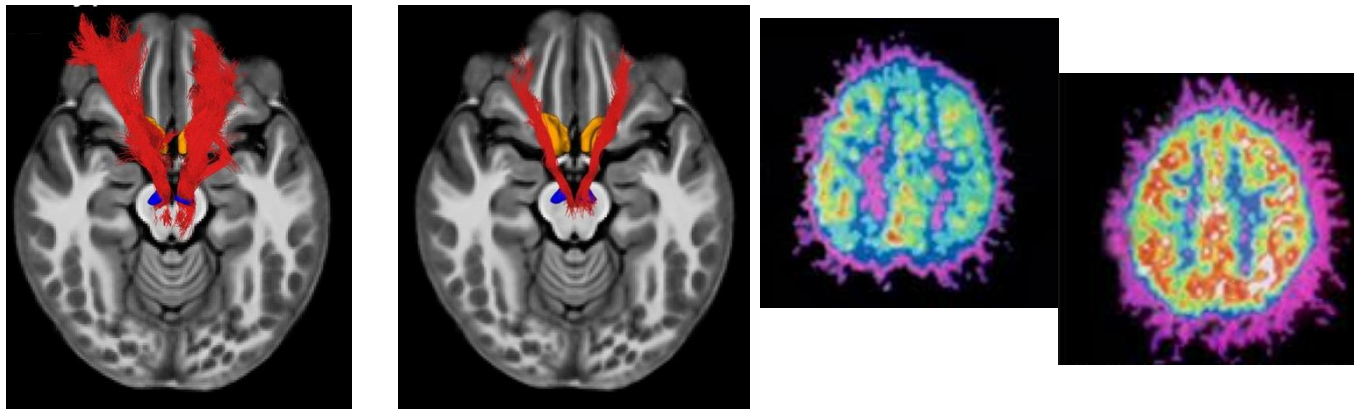


Hi. I'm Bob



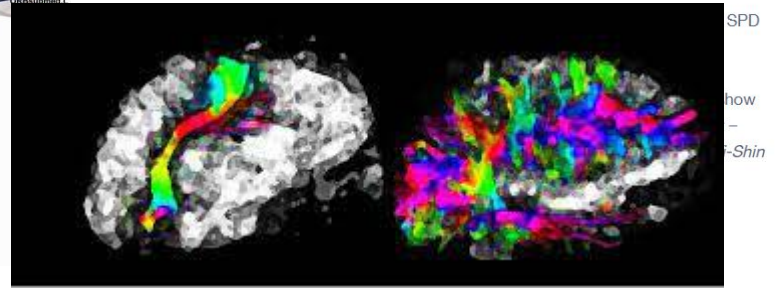
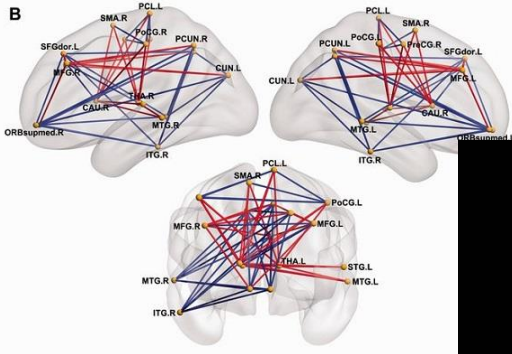
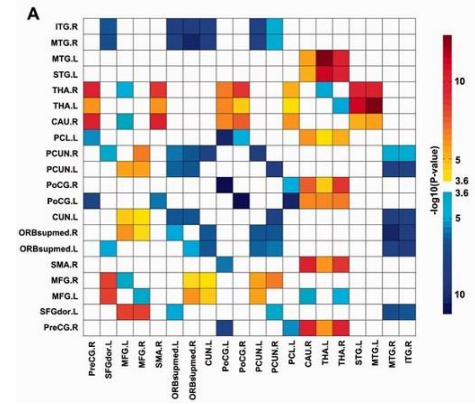
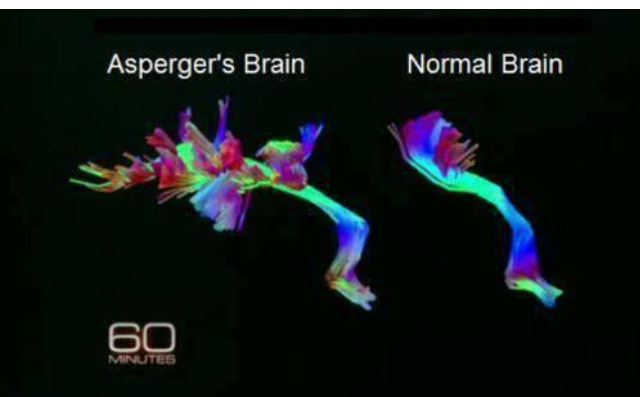
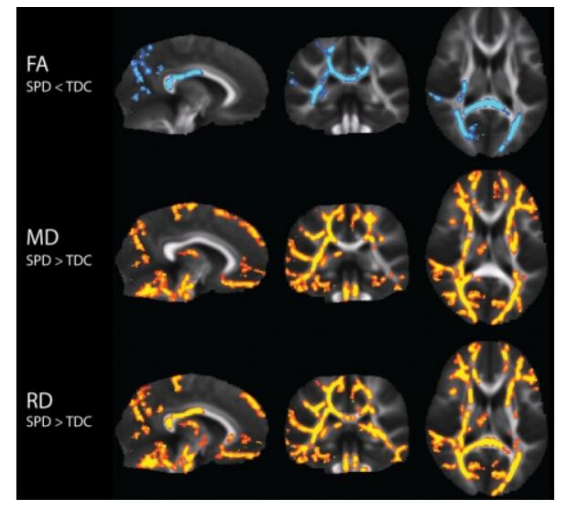
Filtered out noises





There is no definitive line between all the unique spectrum variants. Each person experiences there own unique design. Hence, the term "Spectrum" is used.

There is no "little bit autistic".



SPD  
how  
-  
Shin

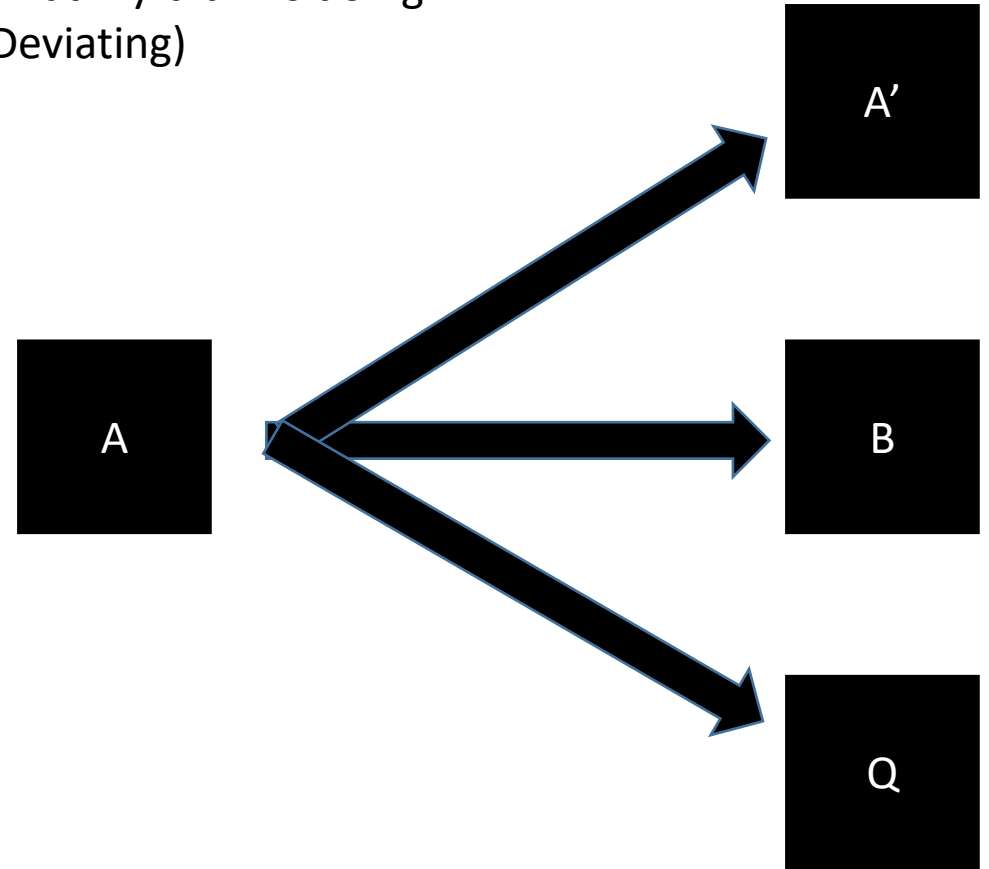


# Augmentation 1: Deviated signals, where the signals are sent outside the expected receiver

What I expect my brain to do  
(Channel)



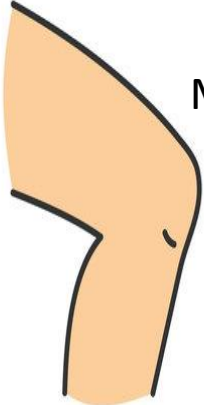
What my brain is doing  
(Deviating)



# Channeling



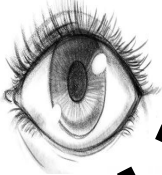
I hear and see a spinning wheel.



My knee just gave out



Click



Spin



My joints itch



Optic Processor



auditory Processor



Optic Processor says "see green"

Signal may cause my entire body to tingle and completely consume the individual

I lose my balance and the room start to spin

Treated with Stimulants

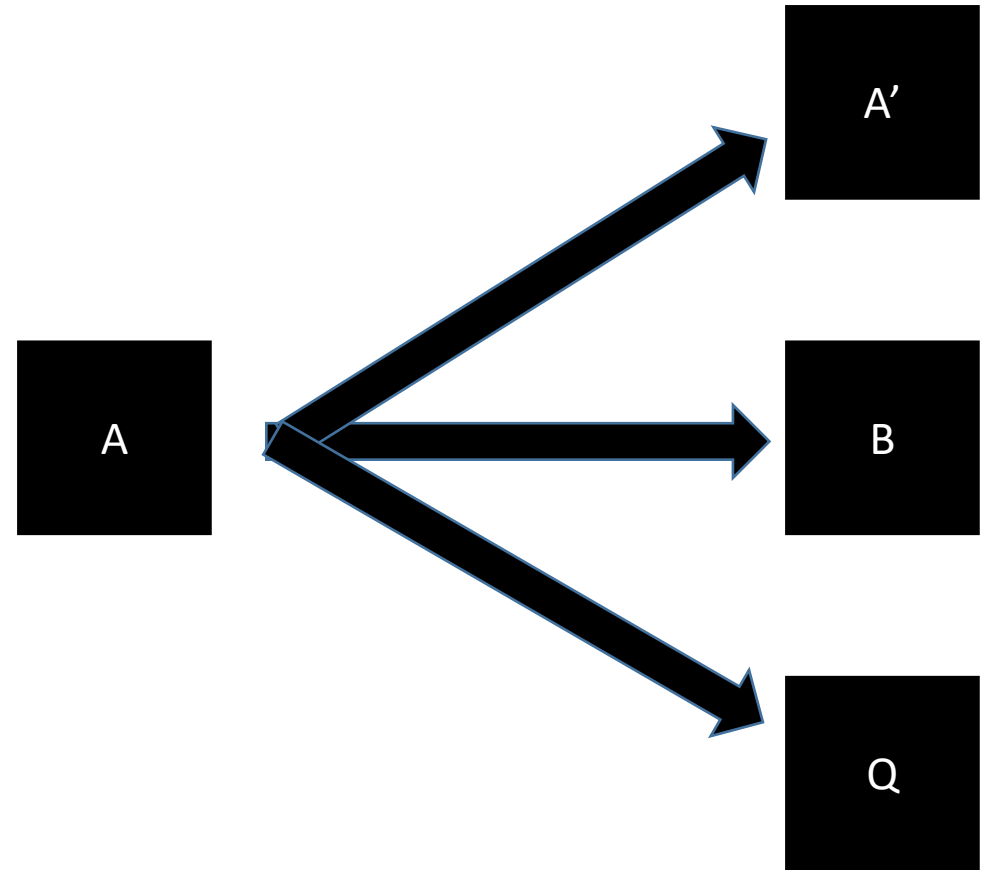
Prescribed: Ritalin, Focalin

Self-medicated: Caffeine, pseudoephedrine

“it helps put everything together/make sense”

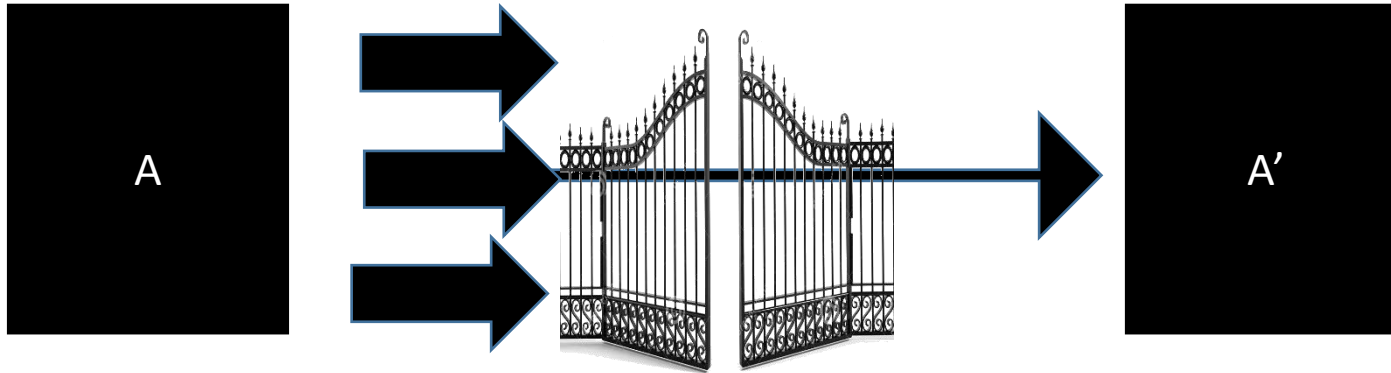
Theoretically: encouraging the parts of the brain we  
use to sort and organize data

What it's not doing: telling the signals where to go.



## Augmentation 2: overload – not controlling signals the amount of signals

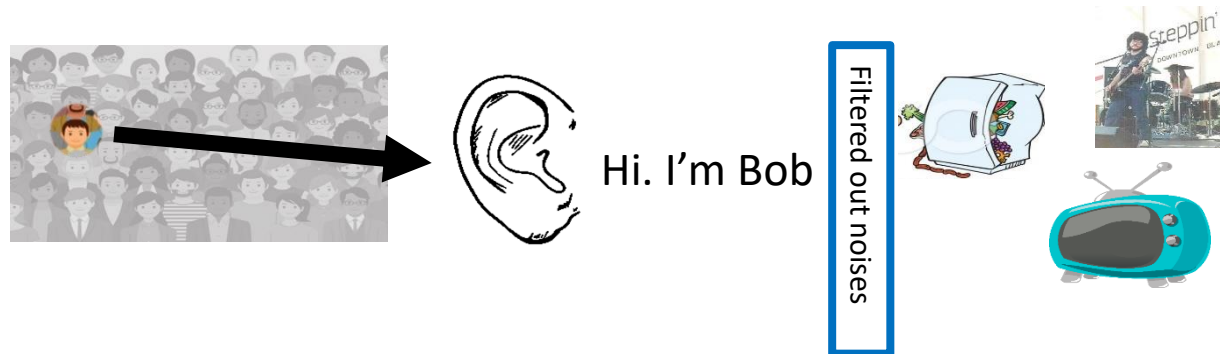
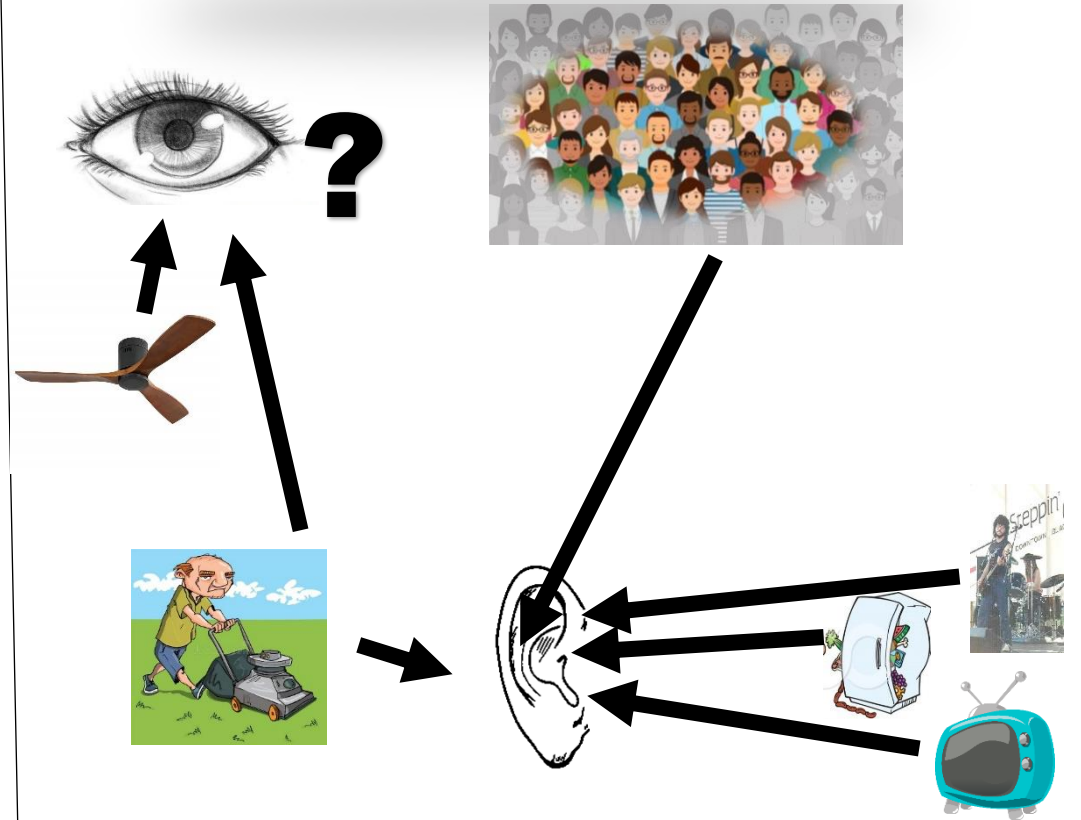
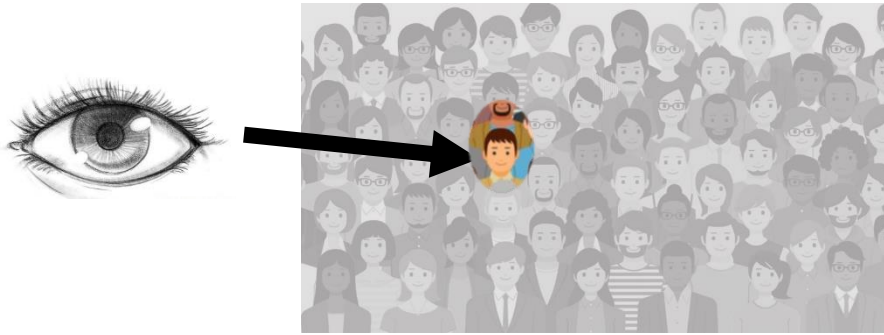
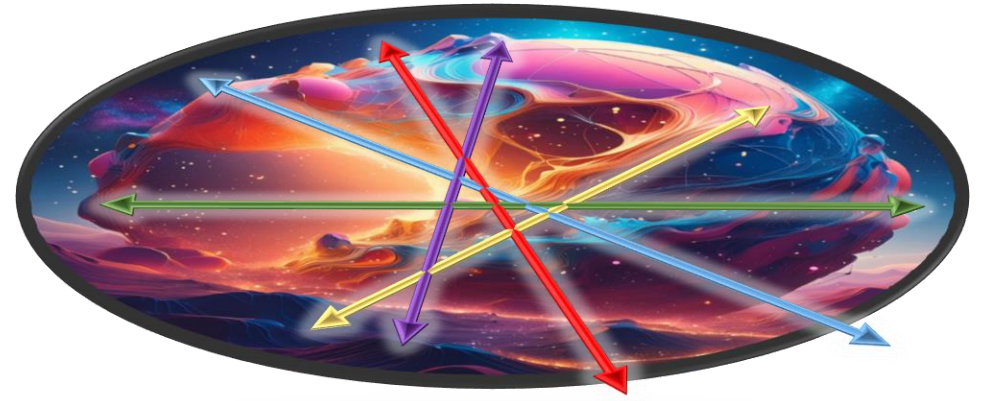
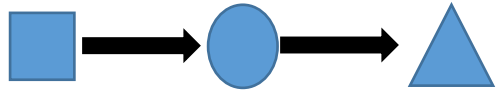
What my brain is expected to do (Gated)



What my brain is doing (overloaded)



# Gating





**Treated** with anti-psychotics

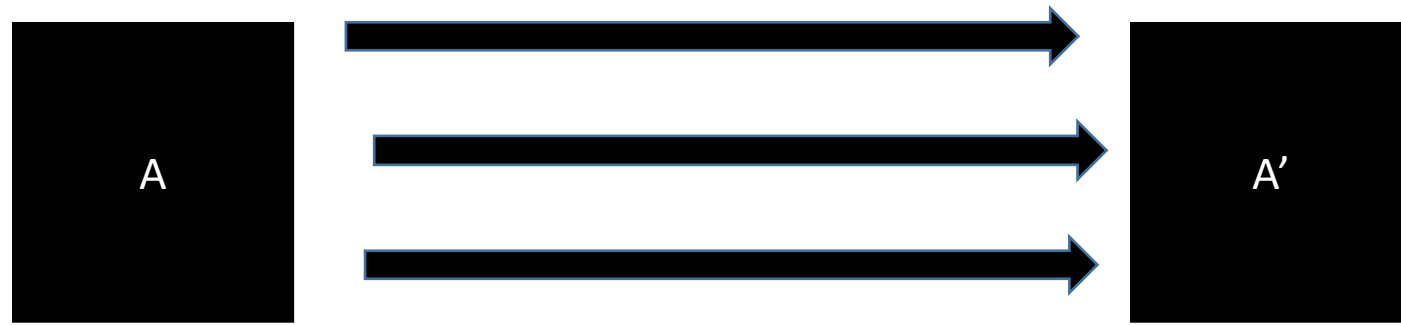
Prescribed: Abilify, Haldol, Latuda

Self-medication: anything that “helps relax/reduce anxiety” that is not a stimulant

(“it cuts out all the noise”)

Theoretically: reducing the chemicals that transport signals in the brain

Not doing: telling signals where to go or which signals to weed out



Big flag



ing wheel.



My joints itch



Religion

History

Enterta:

Theories

# I don't understand why I am so overwhelmed!

("I would do anything to fix this")

Still experiencing this in my 40s in a job that fit me and I loved.

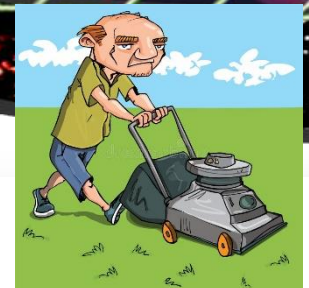


auditory Processor

"Click, Bang, Bang, Click"

Science

Computers



...consume the individual

...and lose my balance and the room start to spin

Processor sees it spin



# Filtering the signals



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Think: recording a conversation in a busy mall and then taking it home and transcribing it.  
Or trying to read a book with all the lights flashing and a strobe light.  
The brain has to fight to determine what signals are significant.





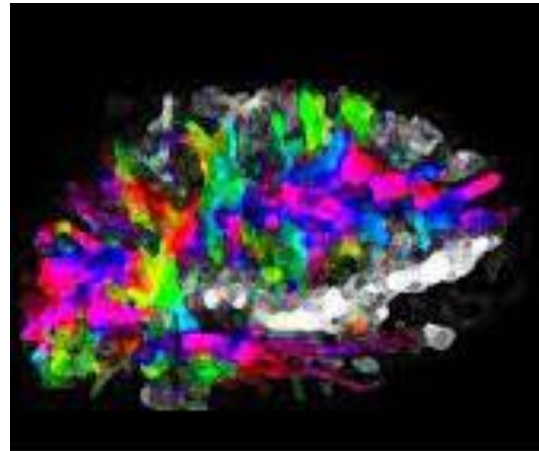
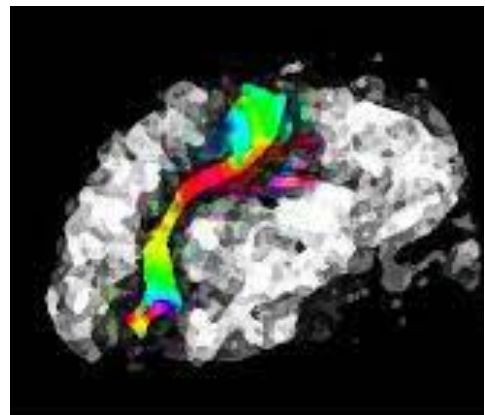
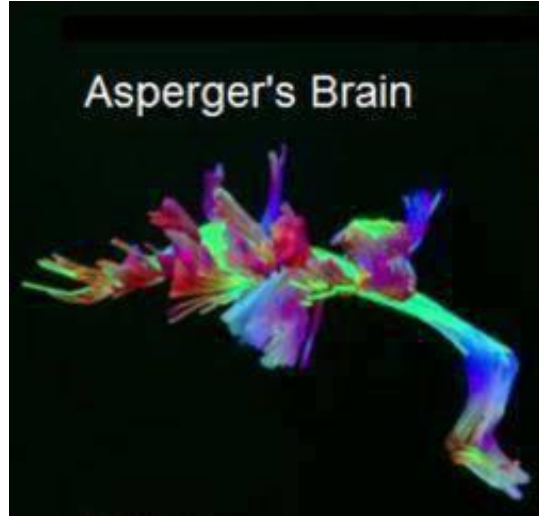
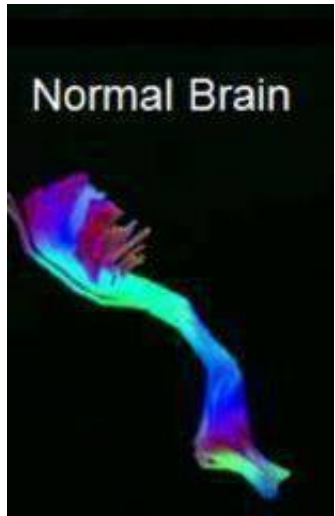
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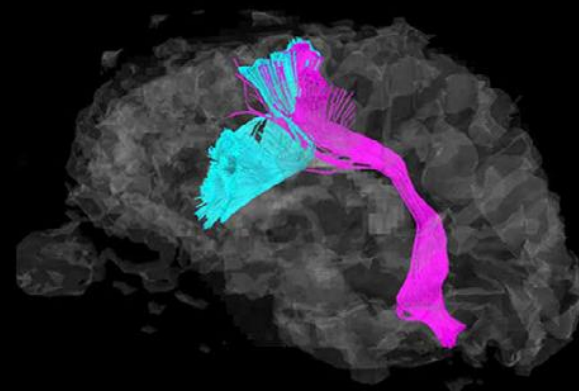
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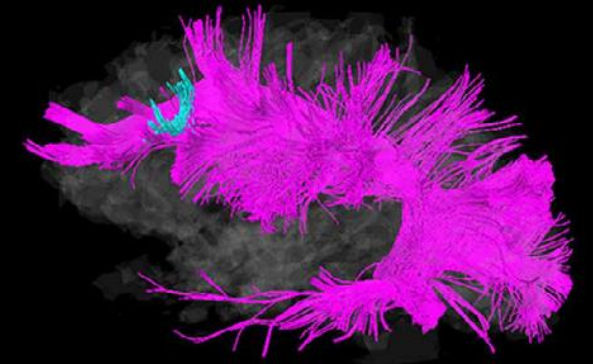


**This is a normal brain.**

**This is an Aspergers brain.**



10x more powerful

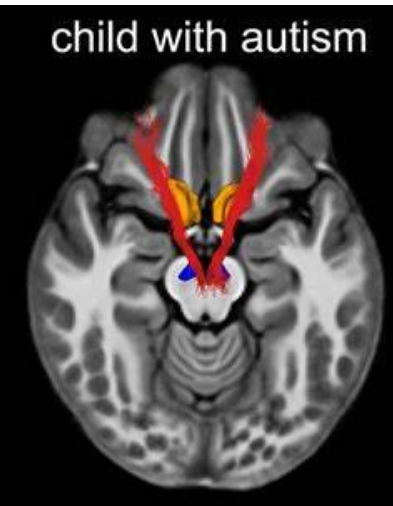
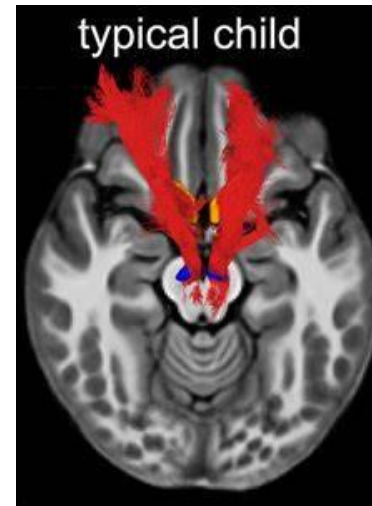


10x more powerful

Ability to process  
what is heard.

Ability to process  
what is seen.

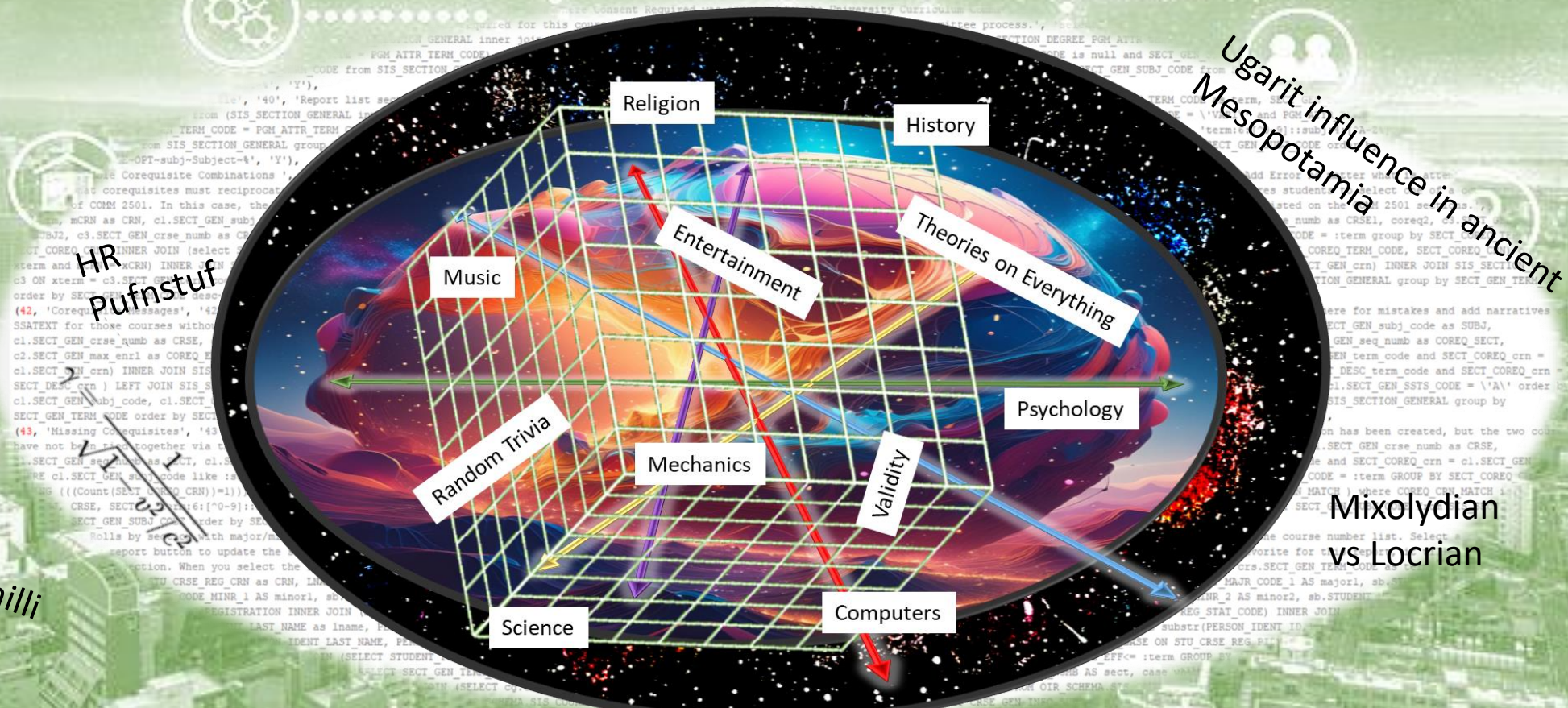
 cyndimccoy



Metallica vs Chopin

Don't forget your towel

Like tears in the rain



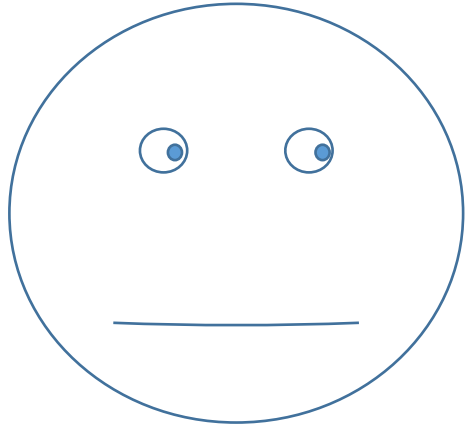
Ugarit influence in ancient Mesopotamia

Mixolydian vs Locrian

HR pufnstuf

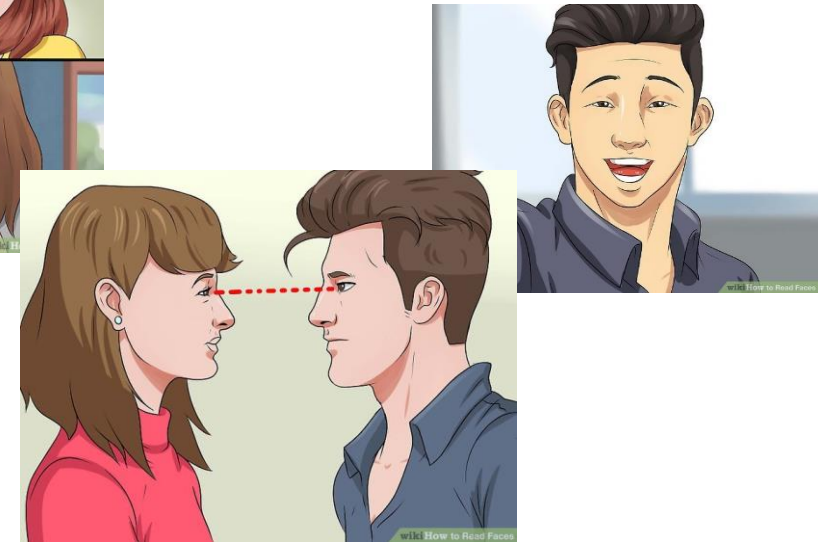
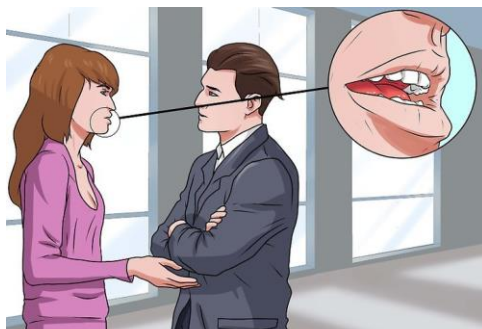
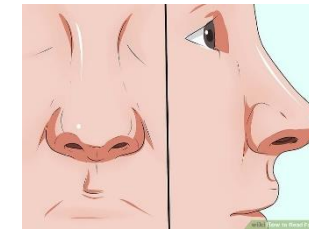
Milli Vanilli

# Basic ways it interfere with day-to-day interaction

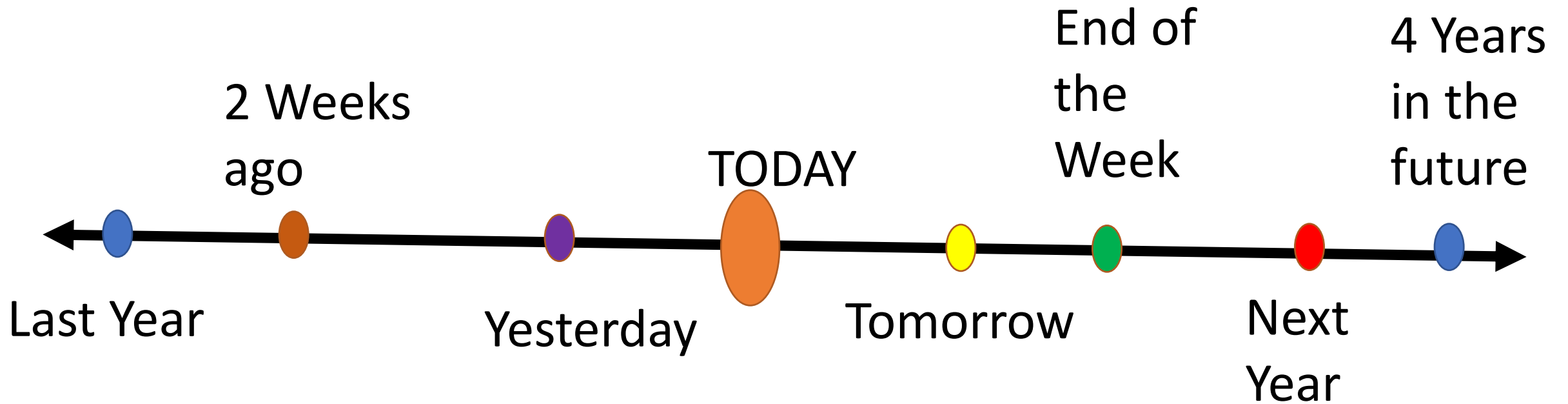


- The ability to read faces
- The ability to understand social cues:
- The ability to decipher innuendos and subtle hints/indirect “encouragement

people frequently read me wrong – usually as mad or discontent, even when I was fine.



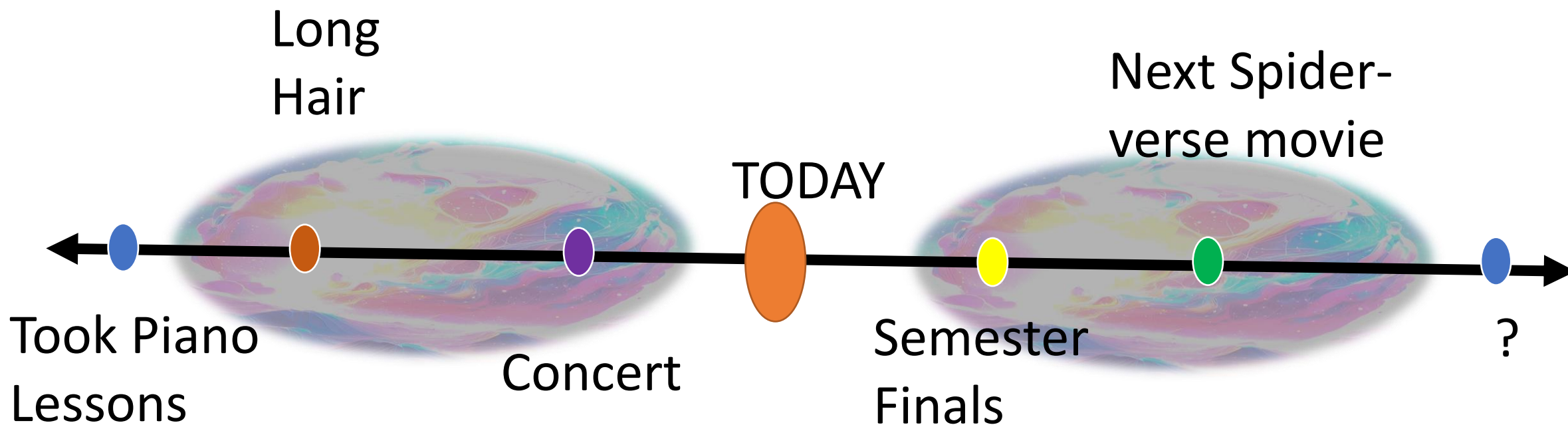
# Time



# Time



# Time/Benchmarks





Literally speaking, this is programming.

It is not “conditional” or “chemical”.

It is not “Learned behavior”.

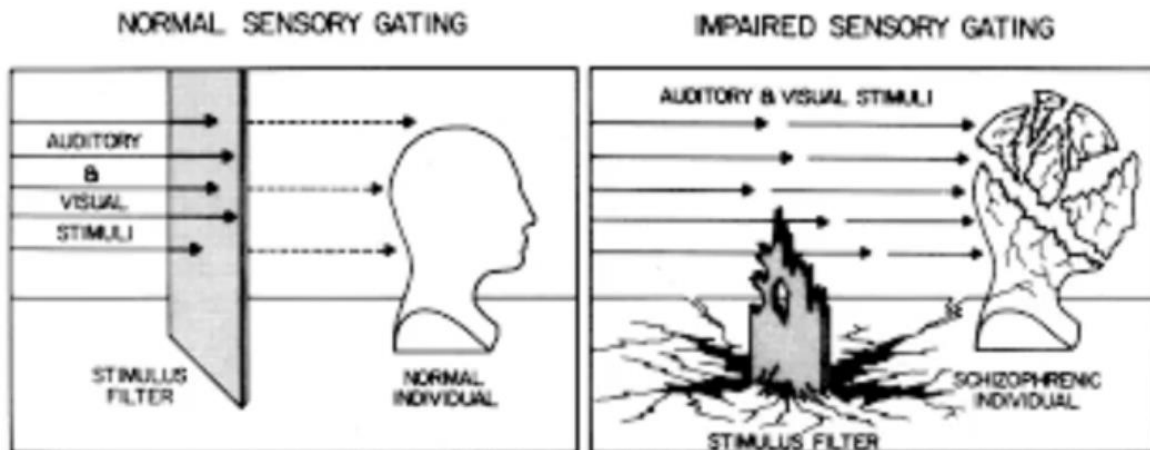
You cannot “unautism” someone.

It is not a “deficit”, it is “different”.

Meltdowns/overloads

A “Meltdown” is the brain’s response to being overloaded.

- Less “temper tantrums” and more "blown fuse"
- --> defense mode:
  - Think “Triggered into fight or flight” mode.
- Temper tantrums/anger/anxiety can lead to a melt down, but not reverse
  - Think "we are adding these things to an already overloaded system, not extracting them"
- Meltdowns are not always provoked.



# Meltdowns/overloads aren't always “screaming and yelling”

- Disorientation,
- Rage,
- Shutdowns (socially more acceptable, but internally destructive),
- Running Away,
- Hiding,
- Anything that the brain can try to use to defend itself.

# Meltdowns: what we can't do

Defense mode is NEVER rational. It is only looking for a means to alleviate the threat.

“additional external threats” do not work (yelling, anger, grounding, threat of punishment, etc)

Spanking: sometimes it "works" but not for the reason we think it does. it affects their sensory processes. This can lead to unhealthy coping mechanisms. (self-inflicting)

# Meltdowns: what we **MUST** do

Even in “fight or flight” mode, we can learn what the acceptable boundaries are.

A child who doesn't understand the boundaries will become an adult who doesn't understand the boundaries



I need to learn to “crash my truck” without destroying things, people or opportunities

Finally, brothers and sisters, whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever is admirable—if anything is excellent or praiseworthy—think about such things.

Philippians 4:8

# Meltdowns: boundaries

We must decide/learn what is acceptable and unacceptable:

Yelling: OK.

Being verbally abusive: Not ok.

Jumping up and down: OK.

Breaking things: not ok.

Moving around: OK

Hitting people: not ok

These things **have** to be taught when they are calm and **reinforced** when they melt down/overloaded



# Meltdowns: boundaries

It is also important to see how our actions affect others:

- if it is making someone cry, we need to understand...
- If it makes someone uncomfortable, we need to understand ...
- If we break something, we don't get a new one/pay for it.

We need to understand the cost of our meltdown and how we express it.

# WHAT IS OUR GOAL

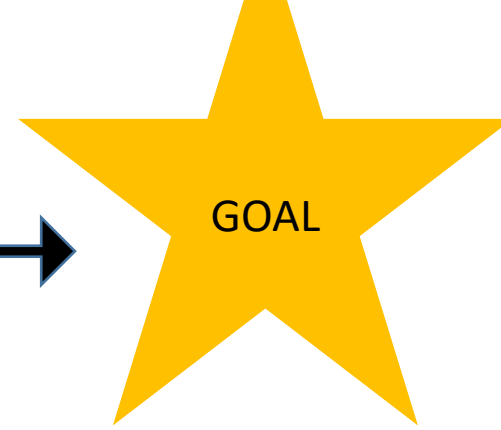
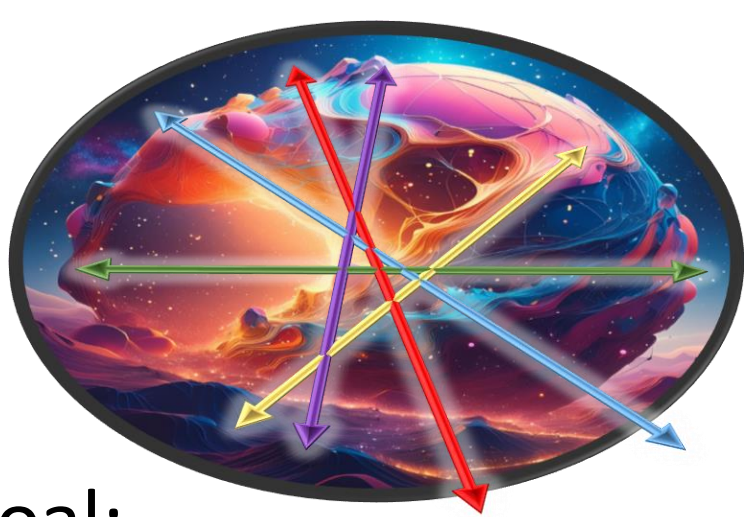
Goes for:

- Medicine
- Meltdowns
- Discipline
- Therapy
- Education
- ...

# WHAT IS OUR GOAL

## NOT:

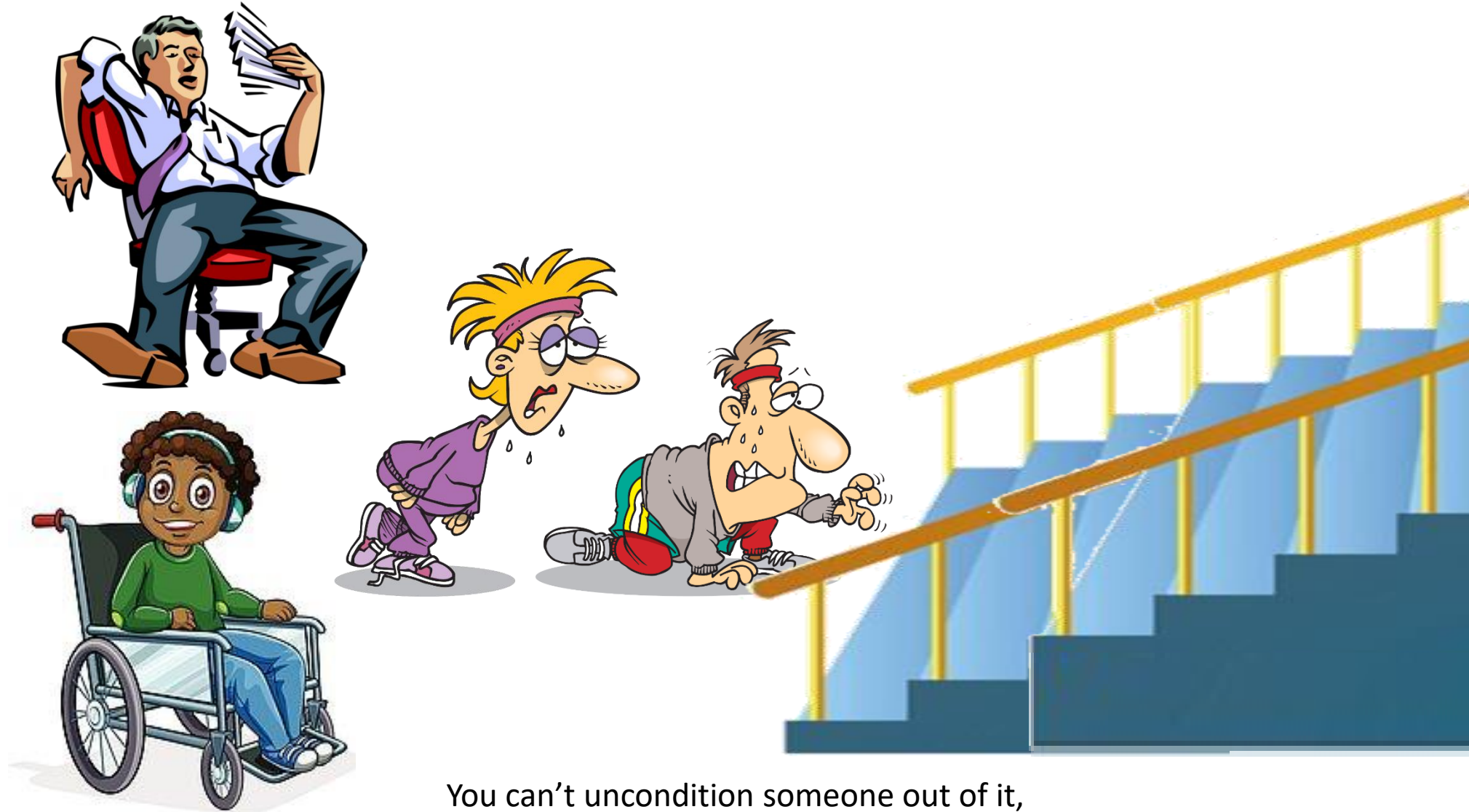
- Trying to make us like everyone else
- Trying to make us fit into a box
- Make sure we do things like everyone else
- Trying to hide autism/differences
- Taking obstacles completely away



Any goal:

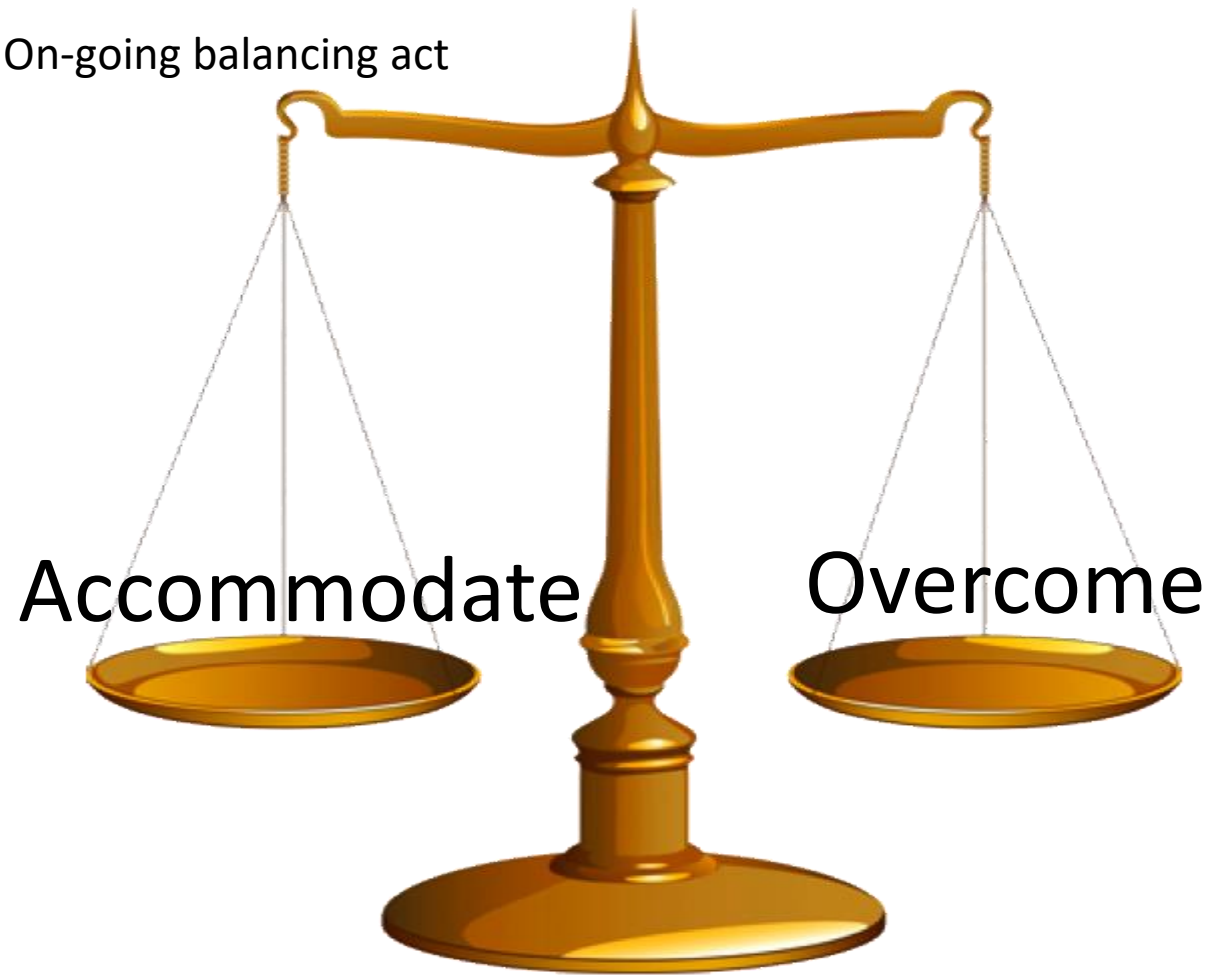
- maximize the things that make us unique.
  - Especially the obscure and unexplored
- learning to navigate environments.
  - Turn the environment into a tool vs the environment as the enemy/oppressive system
- Know how to address our deficiencies, and if possible, turn them into strengths

There is a difference between having issues doing something and not being able to do it.



You can't uncondition someone out of it,  
People shouldn't be punished for it.  
"Coping Skills and Accommodate"

The Ever On-going balancing act



Sometimes there will be things we cannot do,  
and we can't expect others to suffer because we can't

But this is where innovation and adaptation comes in:  
if we can't do one thing, we develop something else that fits our unique circumstance.

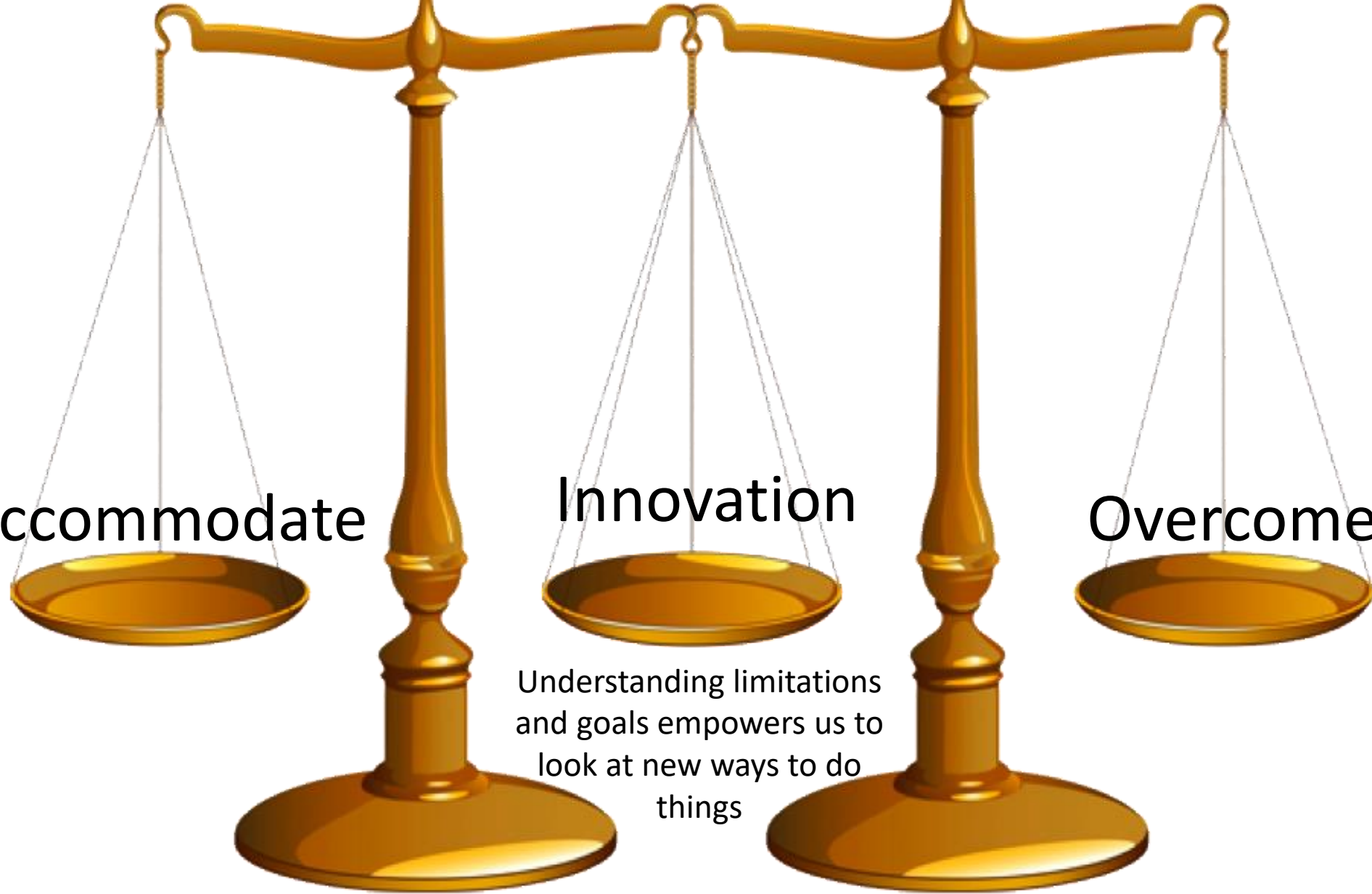
The Ever On-going balancing act

Accommodate

Innovation

Overcome

Understanding limitations  
and goals empowers us to  
look at new ways to do  
things

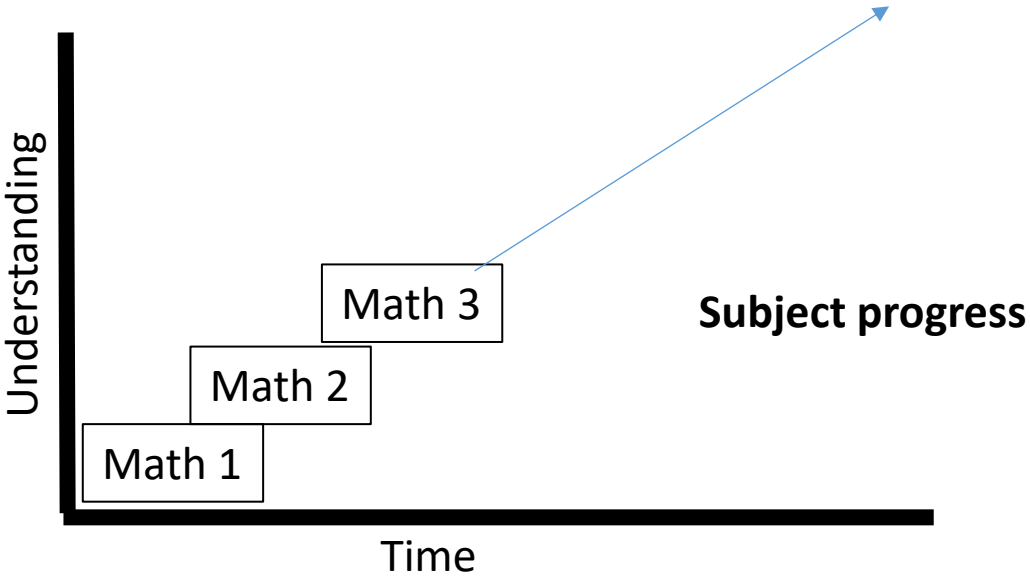
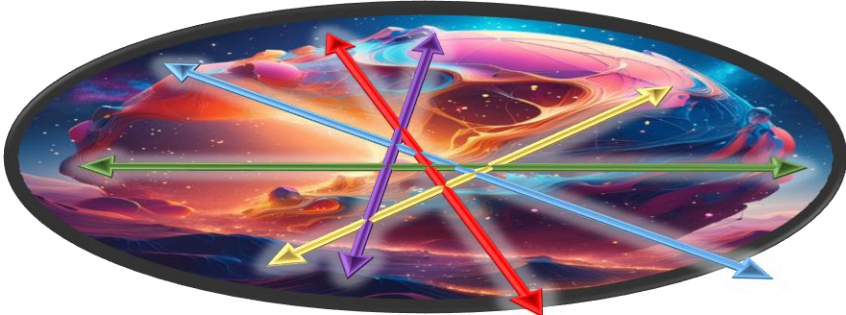


How I learn



U1 Learning 01

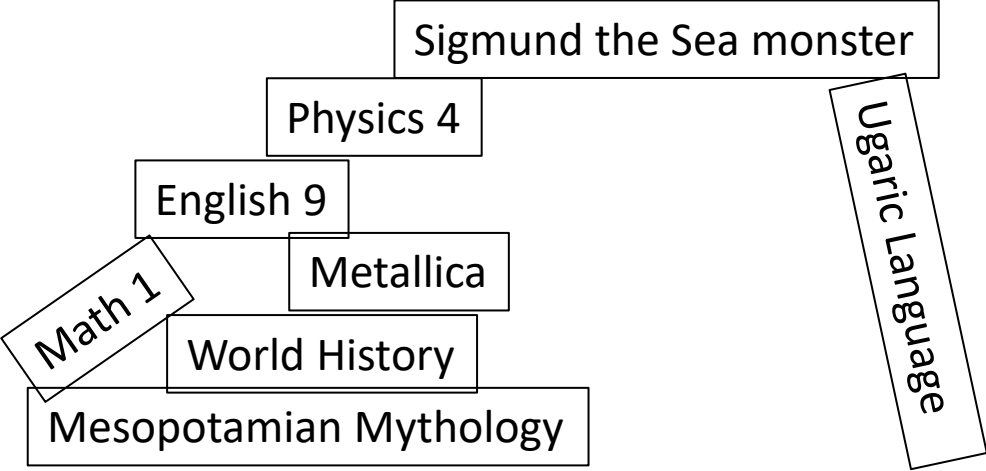
Following Topics



**Staying within topic**

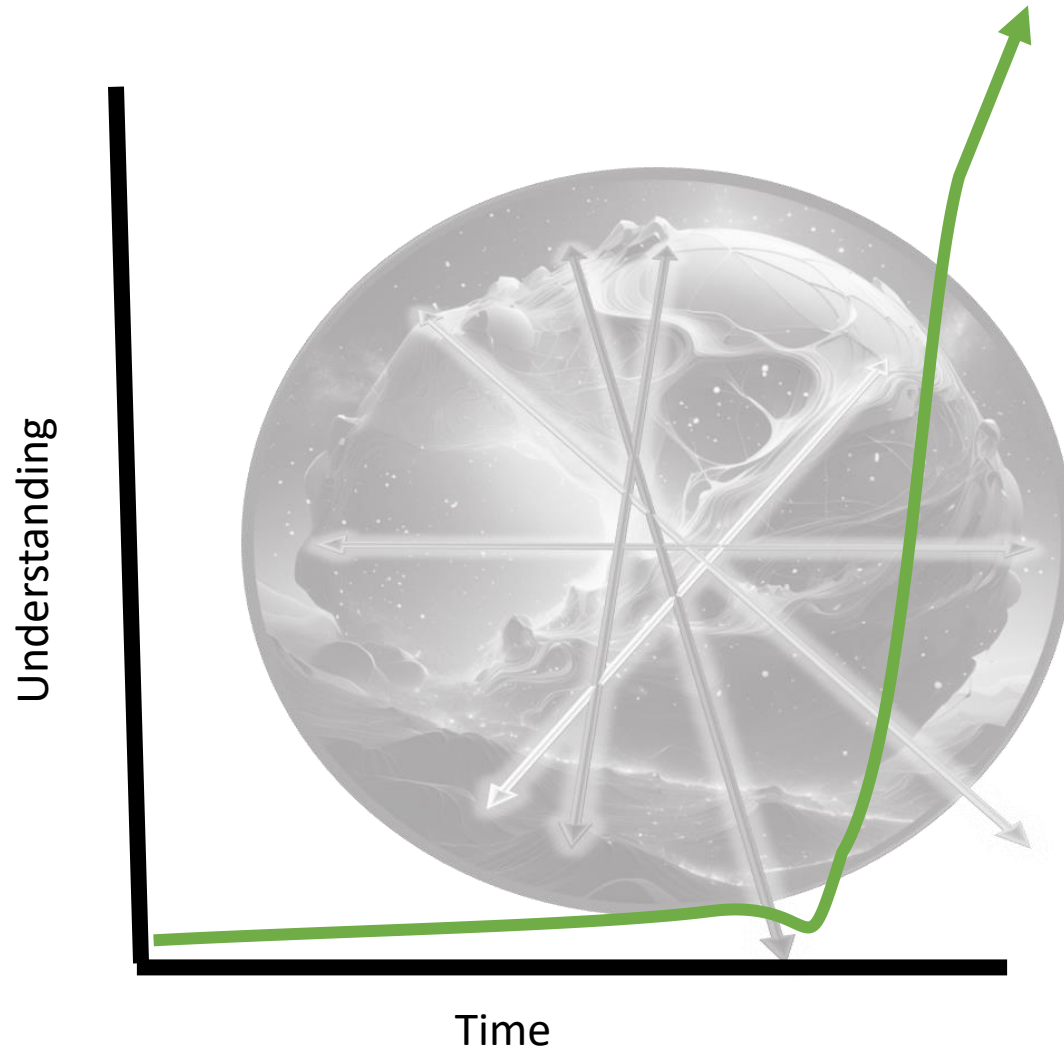


U2 Learning 02



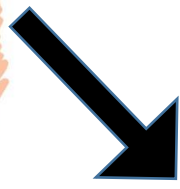
“And this is how I derived that Mount Vesuvius was glucose intolerant”

I'm typically not "following along".  
I'm absorbing.



Including deriving unique  
correlations and connections

# What is supposed to happen



Grasp that I hear something



Interpret what I hear



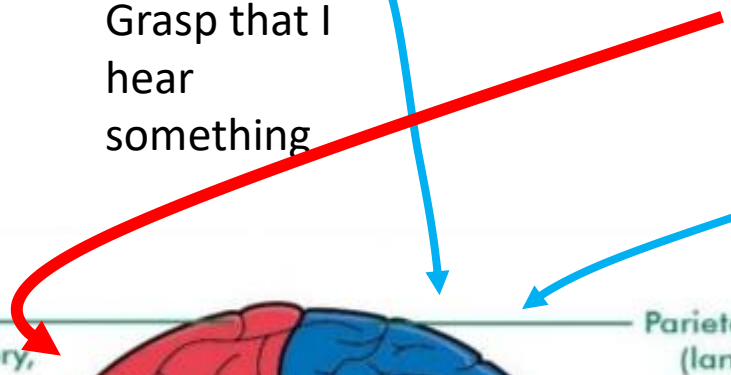
Determine response



Determine how to communicate response



Communicate back



Frontal lobe (thinking, memory, behaviour and movement)

Parietal lobe (language and touch)

Temporal lobe (hearing, learning and feelings)

Occipital lobe (sight)

Brain stem (breathing, heart rate and temperature)

Cerebellum (balance and coordination)

Including what words to use and what words to not use: what is proper to use based on the audience

Reads "body language"

Communication 03



Interpret what I hear



I Hope to Communicate back correctly

Grasp that I hear something

Determine response

Determine how to communicate response

Including what words to use and what words to not use: what is proper to use based on the audience

Frontal lobe (thinking, memory, behaviour and movement)

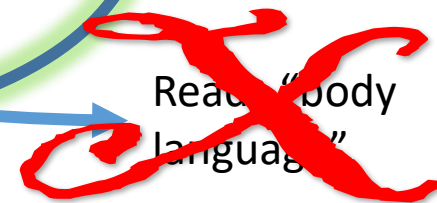
Temporal lobe (hearing, learning and feelings)

Brain stem (breathing, heart rate and temperature)

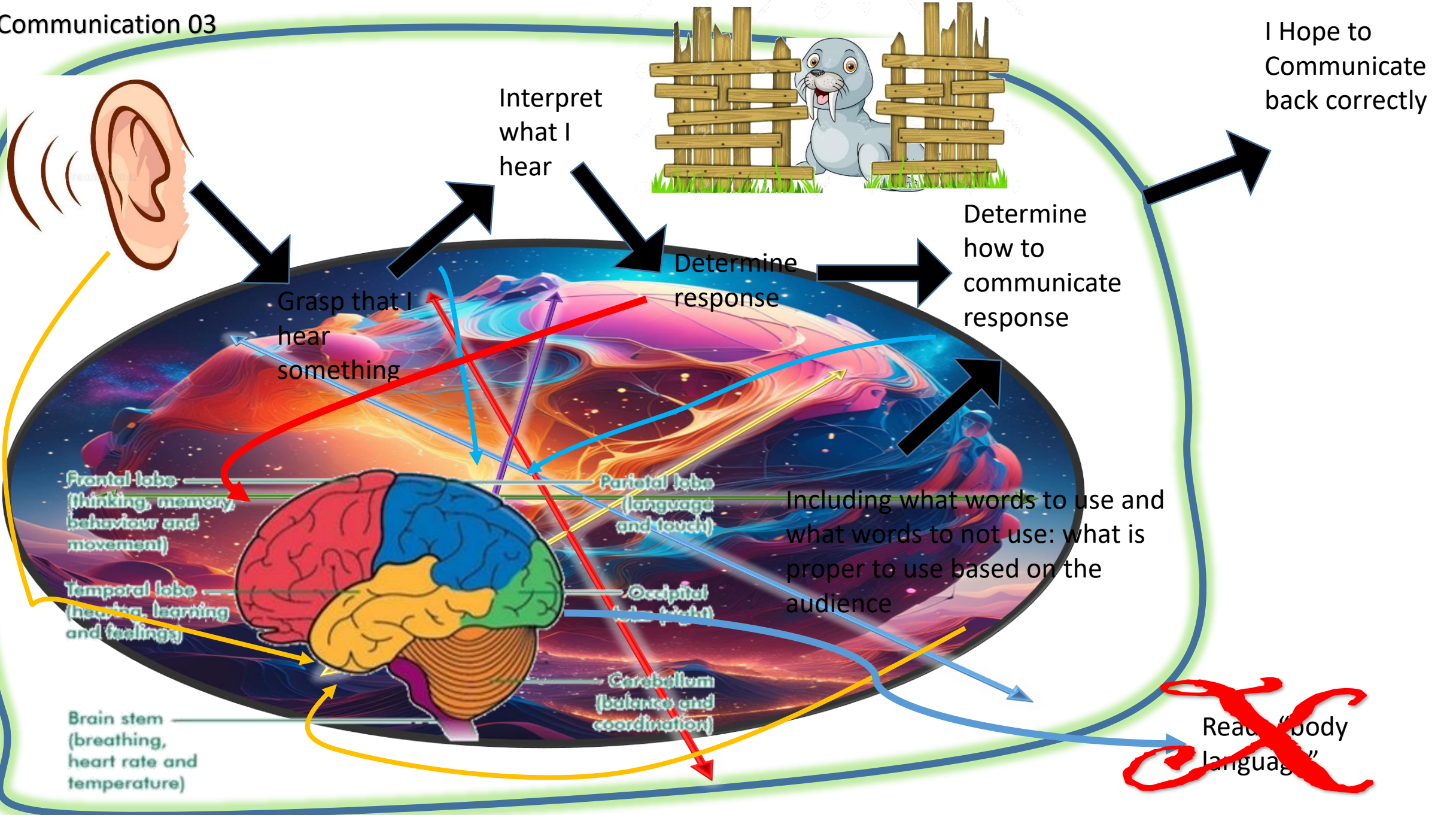
Parietal lobe (language and touch)

Occipital lobe (sight)

Cerebellum (balance and coordination)



~~Read "body language"~~



# Example in classroom/work

**Teacher is talking**

I hear Teacher talking

# Example in classroom/work

## Teacher is talking

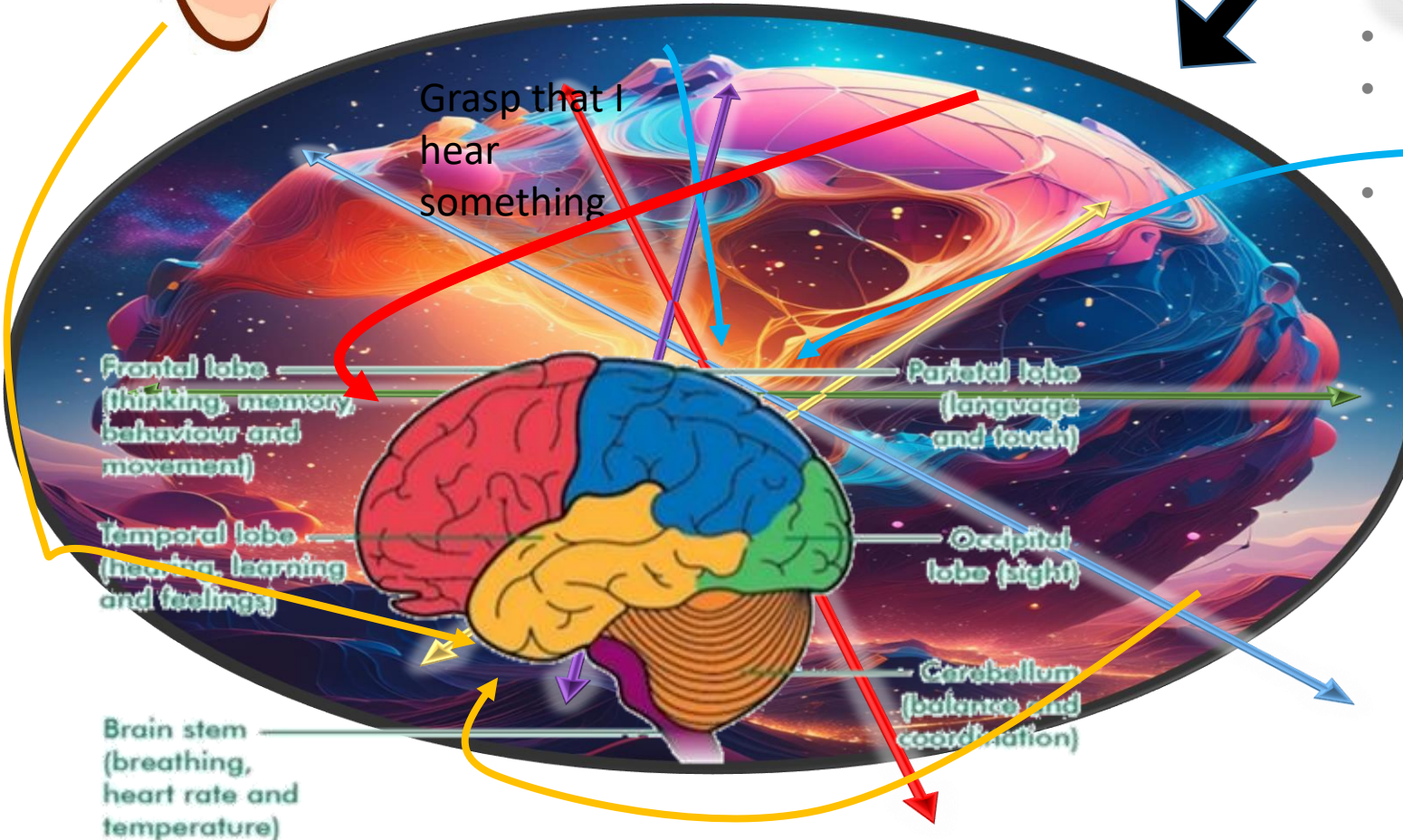
- Teacher talking
- spinning fans, paper shuffle, fingers and feet moving, flickering lights distract me **VISUALLY**
- The **AUDITORY** sound of air conditioners, mowers, people talking, static from intercom system, florescent lights, fingers popping and other noises are having a conversation with me
- The agitation of anything **TOUCHING** my chair disrupts my focus
- seams in my clothes irritate me
- the moving air is annoying
- changes in barometric pressure and humidity make me feel awkward/uncomfortable/on edge
- various **ODORS** (cut grass, perfume, b.o., etc) interfere with my attention
- changes in lights/ changing seats/ teacher changing locations disrupt my **PERCEPTION**
  - causes me to have to recalculate my interpretation of where I'm at.

All hits me at the same level of intensity

I'm not able to gate any of this out

Communication 04

“what was the last thing I said”



- What you said.
- What I read.
- What was happening on the tv/radio.
- What was happening in the car next to us
- What others were talking about.
- The sounds of air conditioning
- Myself talking to myself
- Personal activities
- The fan is spinning fast and making a lot of noise
- ...

Everything is going in here

What you said more-than-likely went in my head

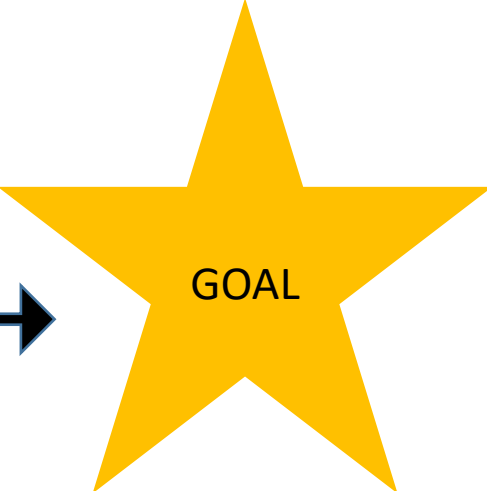
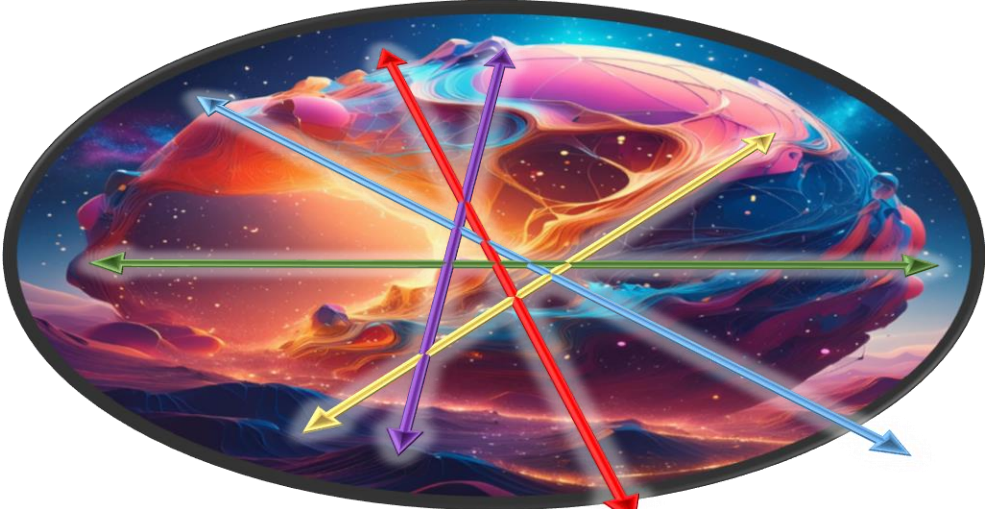
But my ability to spontaneously reiterate it is another issue. I have to pull it from everything else in my head.



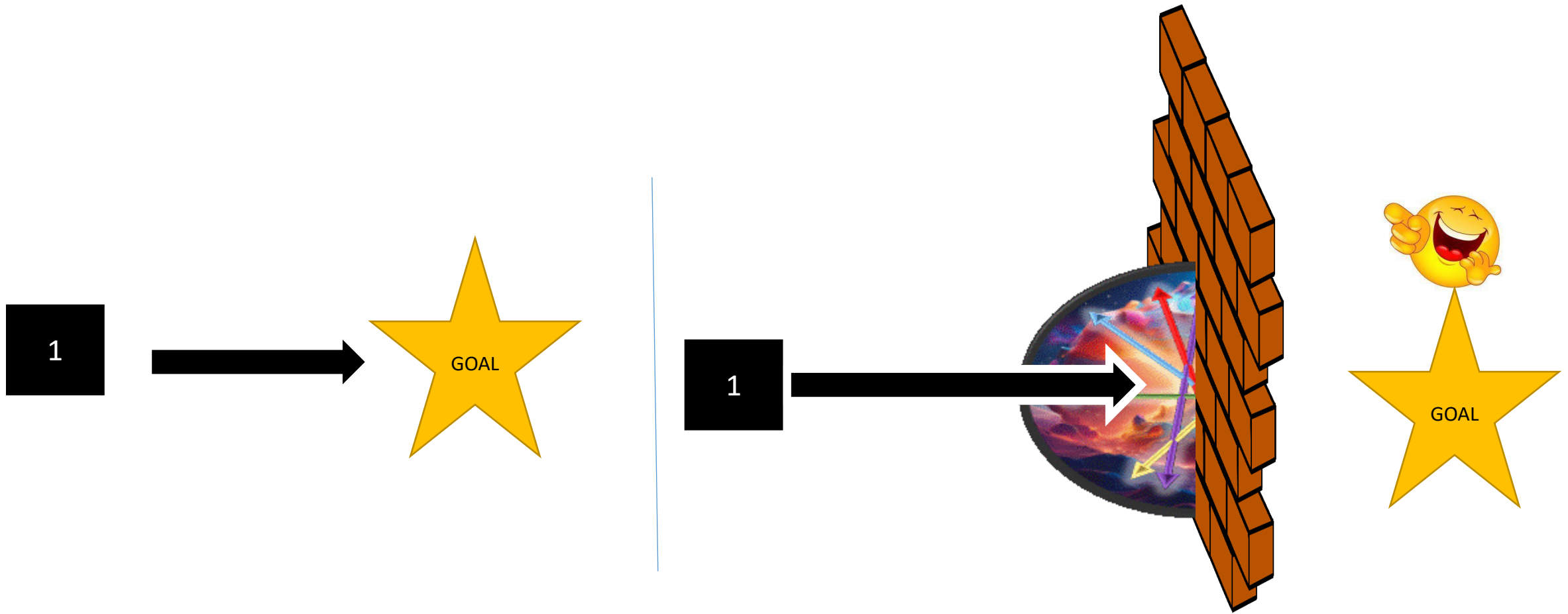
Instructions/procedures/stops/steps get lost in here



1



Ever try to stop someone on the spectrum mid process?  
We need the opportunity to reach the goal

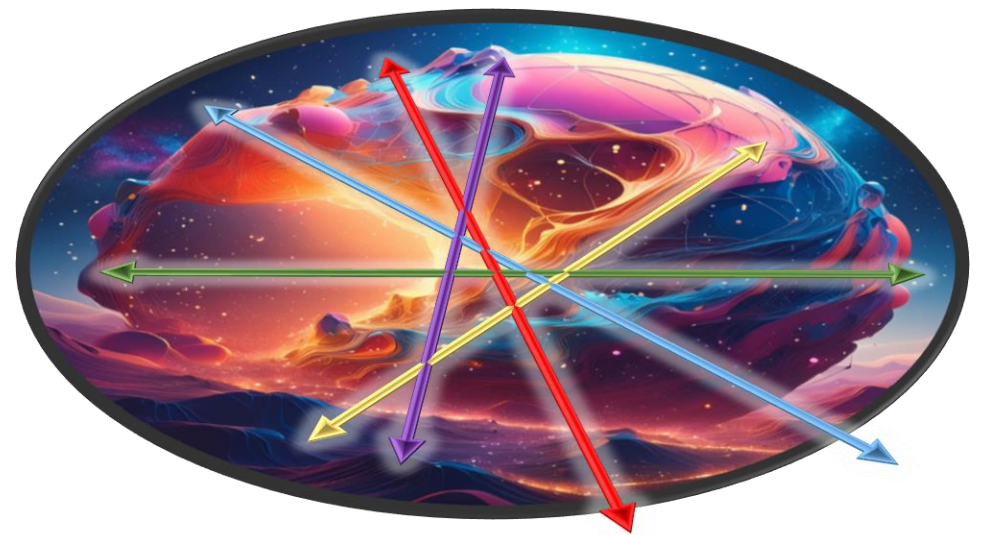


I do NOT handle stress well.

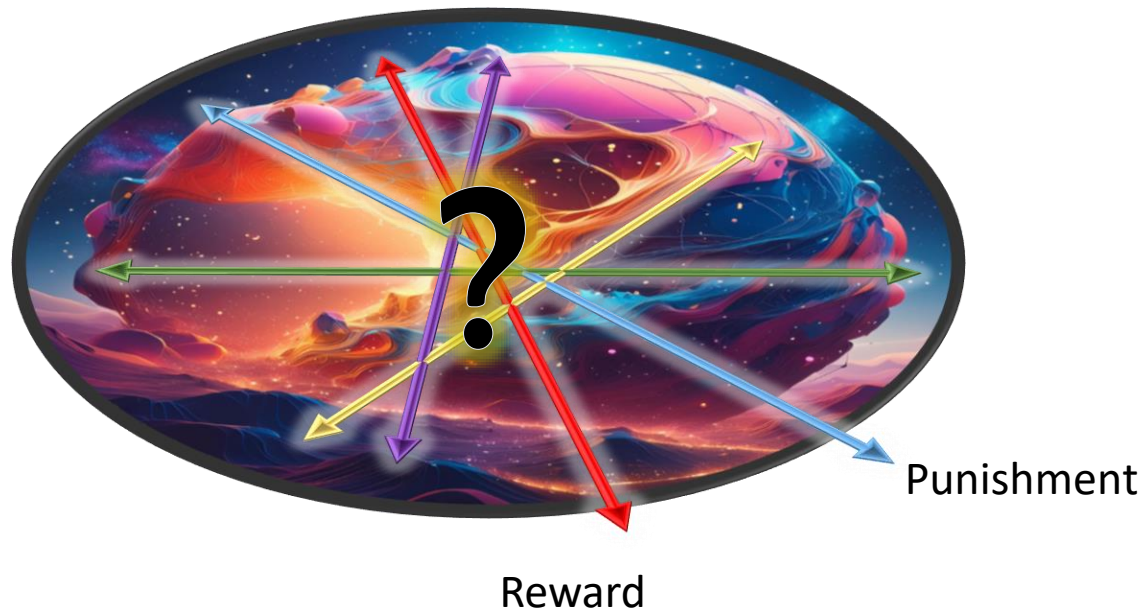
Communication becomes very hard when I am stressed.

- I lose words and things become scrambled.
- I have trouble reading or focusing.

I take time to process things (30 second. If I detect impatience...)



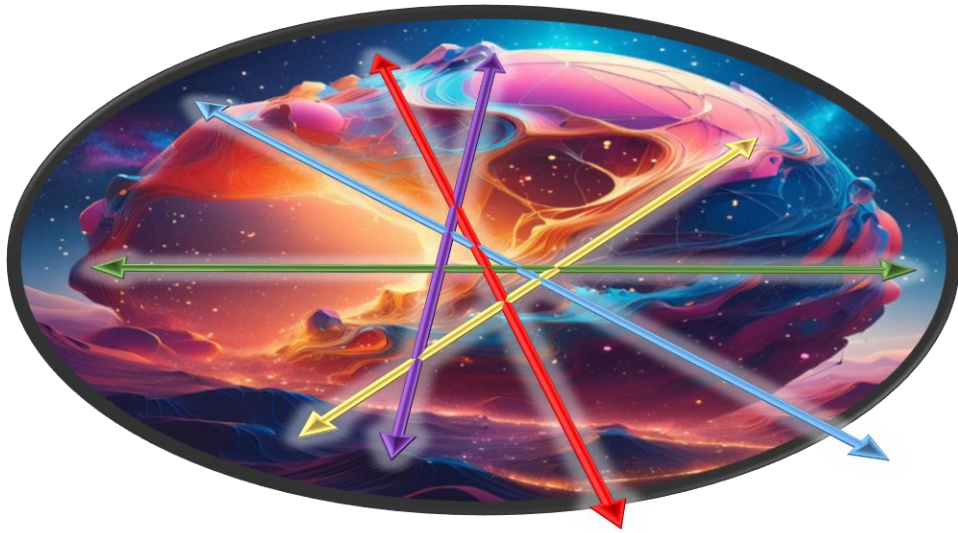
“punishment & reward” models use “you didn’t do it right/good enough”.



~~“Procedures”~~ vs **“Goal”**

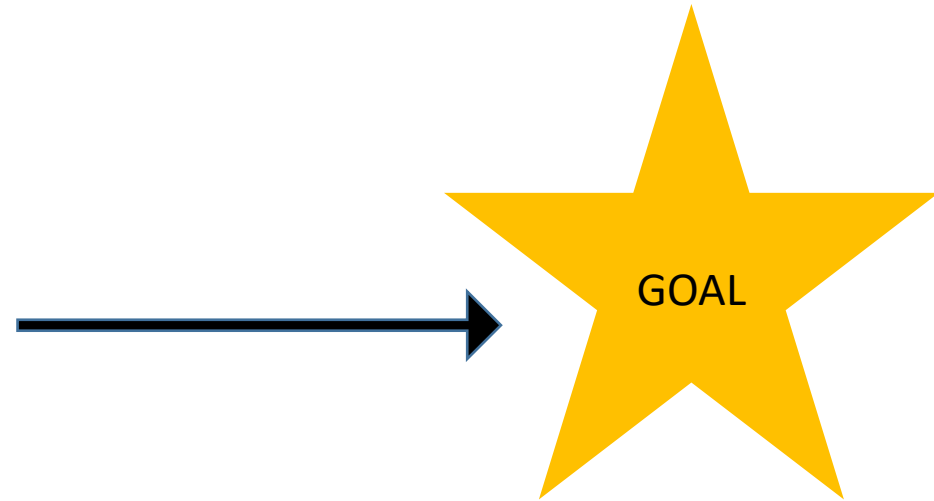
**“Accomplishment”** vs ~~“Reward and Punishment”~~

“normal experimentation/gathering of data” → goal.



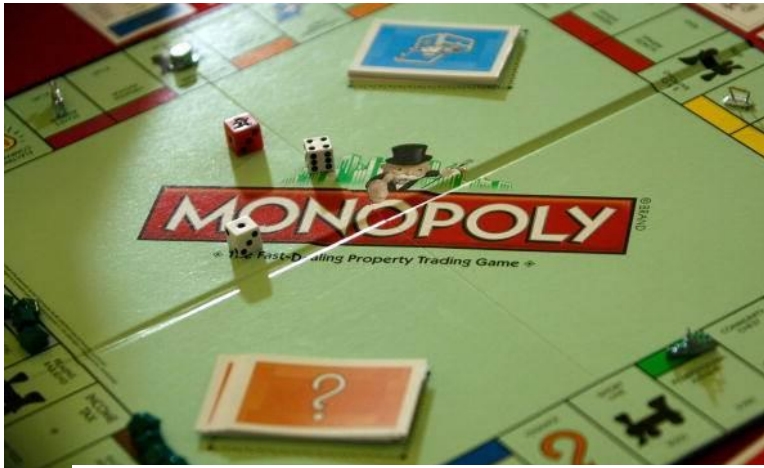
Place of School:

- More “what I want/end result”
- Less “here's how to do it”



Place of work:

- Here is what we have to use
- Here is the goal



## OFFICIAL MONOPOLY RULES

**OBJECT**...The object of the game is to become the wealthiest player through buying, renting and selling property.

**EQUIPMENT**...The equipment consists of a board, 2 dice, tokens, 32 houses and 12 hotels. There are Chance and Community Chest cards, a Title Deed card for each property and play money.

**PREPARATION**...Place the board on a table and put the Chance and Community Chest cards face down on their allotted spaces on the board. Each player chooses one token to represent him/her while traveling around the board.

Each player is given \$1500 divided as follows: 2 each of \$500's, \$100's and \$50's; 6 \$20's; 5 each of \$10's, \$5's and \$1's. All remaining money and other equipment go to the Bank.

**BANKER**...Select as Banker a player who will also make a good Auctioneer. A Banker who plays in the game must keep his/her personal funds separate from those of the Bank. When more than five persons play, the Banker may elect to act only as Banker and Auctioneer.

**THE BANK**...Besides the Bank's money, the Bank holds the Title Deed cards and houses and hotels prior to purchase and use by the players.

The Bank pays salaries and bonuses. It sells and auctions properties and hands out their proper Title Deed cards; it sells houses and hotels to the players and loans money when required on mortgages.

The Bank collects all taxes, fines, loans and interest, and the price of all properties which it sells and auctions.

The Bank never "goes broke." If the Bank runs out of money, the Banker may issue as much more as may be needed by writing on any ordinary paper.

**THE PLAY**...Starting with the Banker, each player in turn throws the dice. The player with the highest total starts the play: Place your token on the corner marked "GO," throw the dice and move your token in the direction of the arrow the number of spaces indicated by the dice.

After you have completed your play, the turn passes to the left. The tokens remain on the spaces occupied and proceed from that point on the player's next turn. Two or more tokens may rest on the same space at the same time.

According to the space your token reaches, you may be entitled to buy real estate or other properties — or obliged to pay rent, pay taxes, draw a Chance or Community Chest card, "Go to Jail @," etc.

Learn through experimentation

The only limits are those which the environment imposes

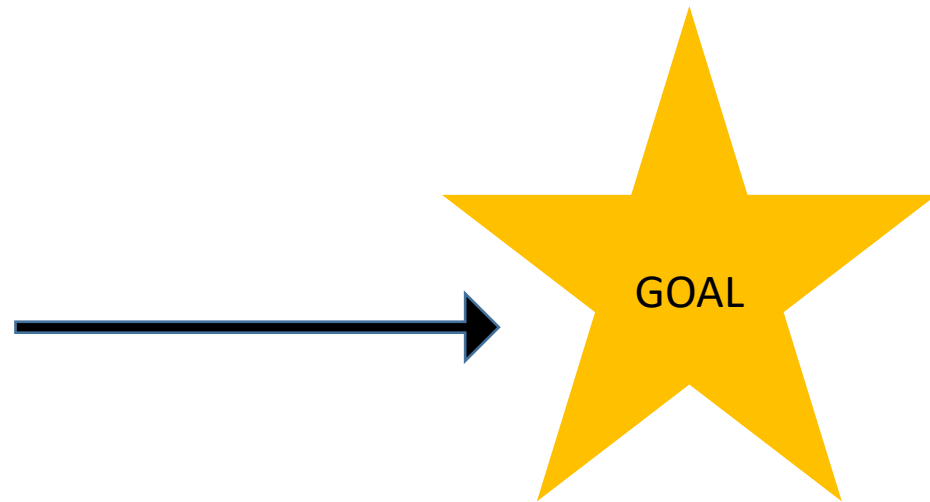
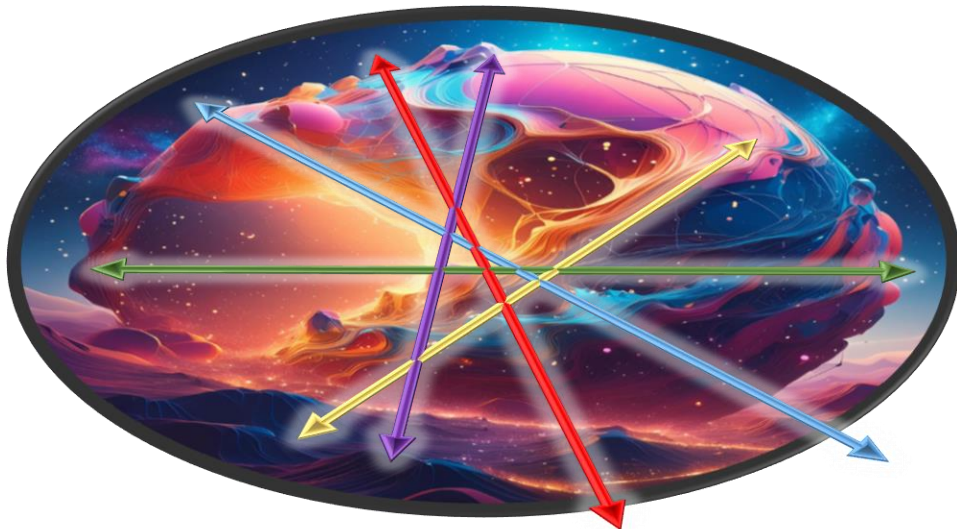


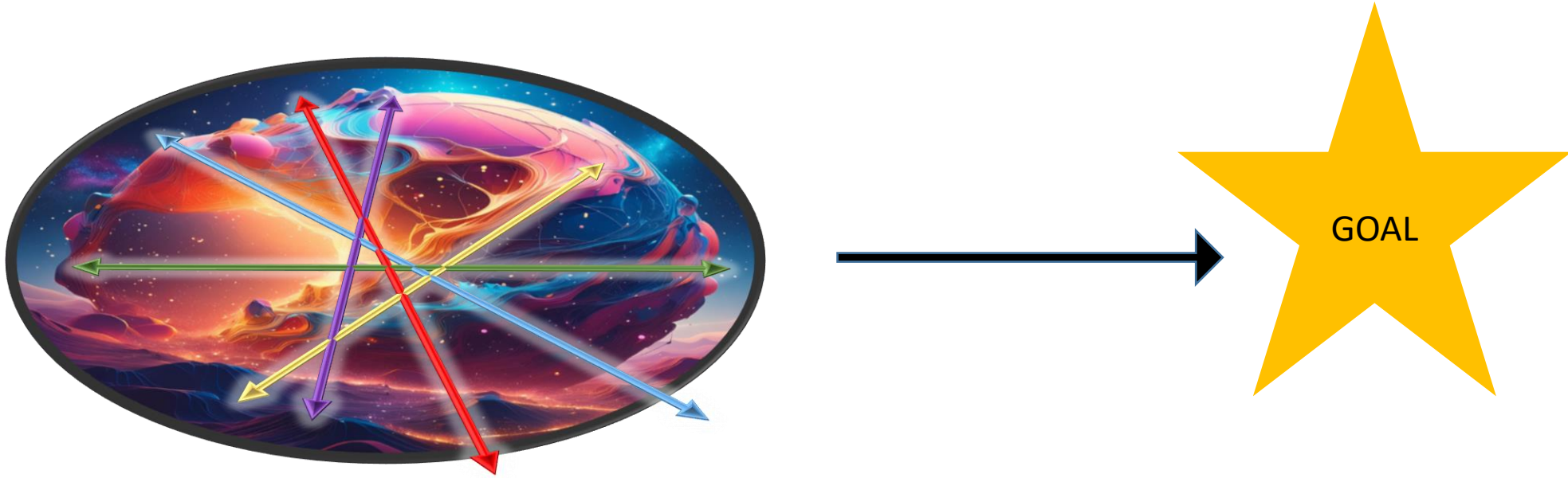
## CC2 Learning 09

How I learn the best:

- I need to see the goal.
- I need to see the tools I have first.
  1. **show me** the equation/buttons/forms first before teaching it to me.
  2. Then **teach me** how the symbols work.
  3. **Let me** break it.
  4. I need the room to be able to experiment and learn – to strive towards “accomplishment”  
– **Mistakes ARE the learning process.**

Grades to me were arbitrary at best.





- I want a goal,
- I want to feel that I have obtained that goal (or was an essential part in obtaining that goal).

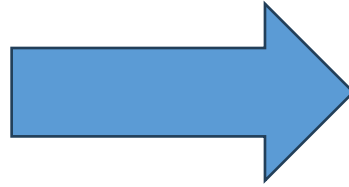


Bradley's  
Friends,  
Neighbors,  
And  
Family  
Daycare



Written By: Hee'Haw BananaChunks  
Illustrated By: Tyler BananaChunks

How Salt Met Pepper



By Carter, Jonathan,  
and Zeb



SEPTEMBER 20, 2011 | 2 MIN READ

## Foldit Gamers Solve Riddle of HIV Enzyme within 3 Weeks

The online game poses protein-folding puzzles, and participants provided insights recently that solved the structure of an enzyme involved in reproduction of HIV

BY MICHAEL J. COREN & FAST COMPANY

Technology ▾

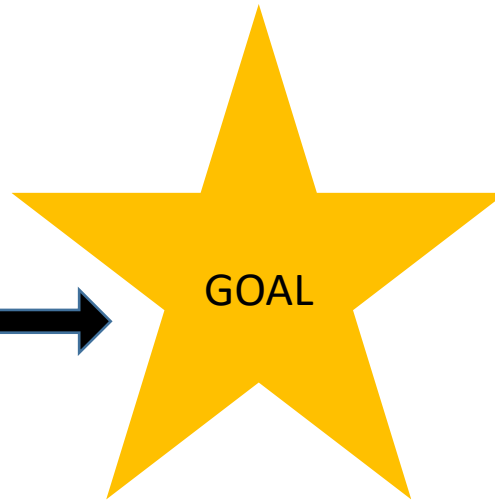
When video gamers armed with the world's most powerful supercomputers take on science and its most vexing riddles, who wins? Sometimes, it's the gamers.

Humans retain an edge over computers when complex problems require intuition and leaps of insight rather than brute calculation. Savvy programmers and researchers at the University of Washington have tapped into this human "supercomputer" with Foldit, an online game that poses complex puzzles about how proteins fold, one of the hardest and most expensive problems in biology today.

# Personal illustration

To show how fast students are registering after first day of registration

**Registration and Assessment:**  
6 Months and counting

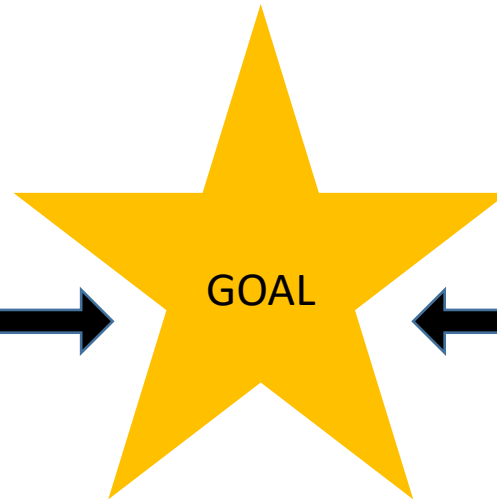


# Personal illustration

To show how fast students are registering after first day of registration

## Registration and Assessment:

- 6 Months and counting



Me building a working prototype

- 2 hours

Our goal should be **constructive discipline**.

- no free pass to do whatever.
- don't want to destroy the spirit and the things that make growth unique.

**Being strange and eccentric is fine. Being destructive or abusive is not.**

- We all have to come to grips with who we are and how we respond

Everyone, in the end, the only one that can understand what makes them tick and how they need to cope. Part of their growing is understanding how they function, learn, work, and interact with themselves and others.



Research is Key:  
Know yourself  
& how you function.

# QR Presentation



Grace Mosaic



Grace Mosaic

