

Connecting to Ourselves as Healthcare Professionals

Mindful Approaches to One Planet Thriving



Donal MacCoon, Ph.D.





Mindfulness

- Paying attention, on purpose, non-judgmentally
- Being aware of sensations, thoughts, emotions occurring right now without judgment



Mindfulness effective for...

- **Anxiety, depression, stress, burnout** (e.g., Cohen-Katz, Wiley, et al., 2005; Ma & Teasdale, 2004; Teasdale, Segal, Williams, et al., 2000)
- **Chronic pain** (Kabat-Zinn, 1982; Kabat-Zinn, Lipworth, & Burney, 1985)
- **Substance abuse** (Bowen, Witkiewitz, Dillworth, et al., 2006)
- **Arthritis** (Pradhan et al., 2007)
- **Diabetes** (Gregg, Callaghan, et al., 2007)
- **Fibromyalgia** (Sephton et al., 2007; Grossman, et al., 2007)
- **Psoriasis** (Kabat-Zinn et al., 1998)



Mindfulness effective for...

- Positive resting frontal alpha-asymmetry (Davidson, et al., 2003; Barnhofer et al., 2007)
- **Immune Function** (Davidson, Kabat-Zinn et al, 2003; Rosenkranz, et al., 2013)



...and different types of people

- **Cancer patients** (Specia, Carlson, et al., 2000; Monti, Peterson, et al., 2005; Carlson, Specia, et al., 2007)
- **Health care professionals** (Shapiro, et al, 2005)
 - **Medical Students** (Shapiro, et al., 1998)
 - **Nurses** (Cohen-Katz, Wiley, et al ., 2005)
- **Women with heart disease** (Tacon, McComb, Caldera, Randolph, 2003)
- **Prisoners** (Bowen, Witkiewitz, Dillworth, et al., 2006)
- **Borderline Personality Disorder** (DBT, Linehan, 1993)





Mindfulness

- Being aware is the act of integrating, connecting to all parts of ourselves
- It is re-mem-bering ourselves
- welcoming them into awareness without judgment
- the process of wholeness



“Why are you so afraid of silence...”
- Rumi

Because in silence,
we finally connect to all parts of ourselves.

Some are pleasant & we'd like to linger.

Some are unpleasant & we'd like to avoid.

This talk is my attempt to invite us connect to ourselves, our patients, and our planet

- by being present to the good, the bad, and the ugly
- the potential rewards are huge
 - Better individual life
 - Better interactions with others (including patients)
 - One planet thriving

reflection on kindness



Kindness

by Naomi Shihab Nye



December, 2005



June 25, 2008



2 months later



silence

i cannot breathe

Providence Mission

As people of Providence,
we reveal God's love for all,
especially the poor and vulnerable,
through our compassionate service.

Core Values

Respect, Compassion, Justice, Excellence, Stewardship

How do we honor this mission & these values
(1) as healthcare professionals
(2) while helping patients through a challenging illness?


By connecting to ourselves
by paying attention to all of who we are

Connecting to ourselves is a necessary precondition for:
Respect, Compassion, Justice, Excellence, Stewardship

Me

We

Big We



“One does not become
enlightened
by imagining figures of light
but by making the darkness conscious.

This procedure, however,
is disagreeable and
therefore not very popular.”

– Carl Jung “The Philosophical Tree” (1945). In CW 13:
Alchemical Studies, p. 335



Pop Quiz



A) Disconnect the nerves?

B) Remove your hand quickly?



Emotion as
information

Connect with yourself

We selectively disconnect from the parts of
ourselves (and others) that are unpleasant



Suppressing

- Repression
 - Report low anxiety but exhibit anxious physiology (Weinberger, et al., 1973, JAP)
- Defensive Deniers
 - higher (and medically significant) cardiovascular reactivity associated with higher distress relative to genuinely healthy individuals (Shedler, Mayman, et al., 1993)

automatic

red

white

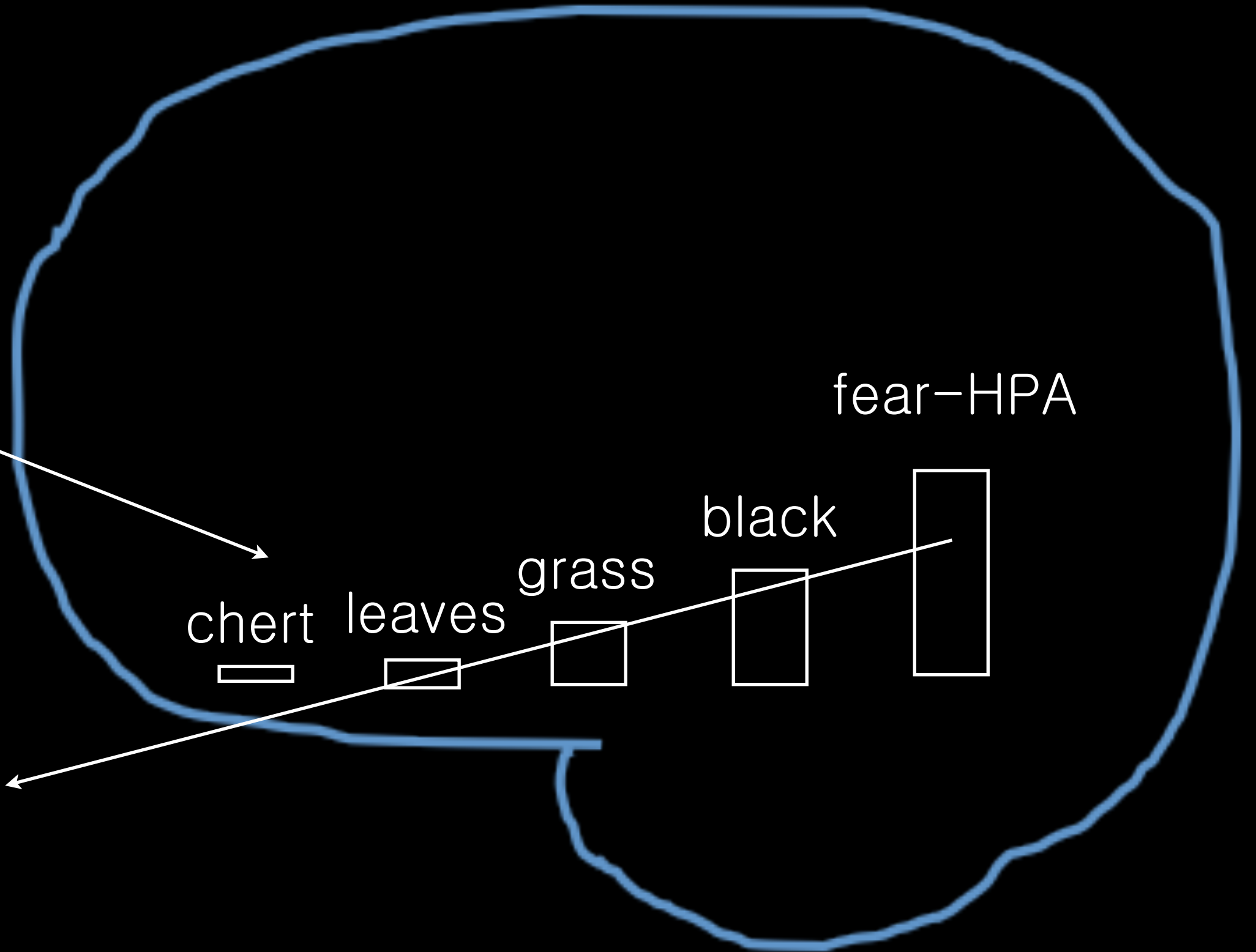
pepper

firetruck “red”

“red”



(c) Rkillcrazy



run away

- All relevant based on your learning history
- Not all equally relevant
- The neural landscape of networks is your best guess at reality in that moment



(c) Allice Hennema

fear-HPA
black
grass
leaves
chert

A diagram showing five white rectangles of increasing height and width, arranged in a row from left to right. The rectangles are labeled 'chert', 'leaves', 'grass', 'black', and 'fear-HPA' from left to right, with the labels positioned above the rectangles.

MacCoon, Wallace, & Newman (2004)

- All relevant based on your learning history
- Not all equally relevant
- The neural landscape of networks is your brain's best shot at reality in that moment

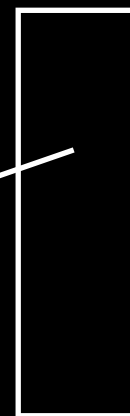


what if the automatic
response is not
appropriate for the
current situation?

automatic



worthless

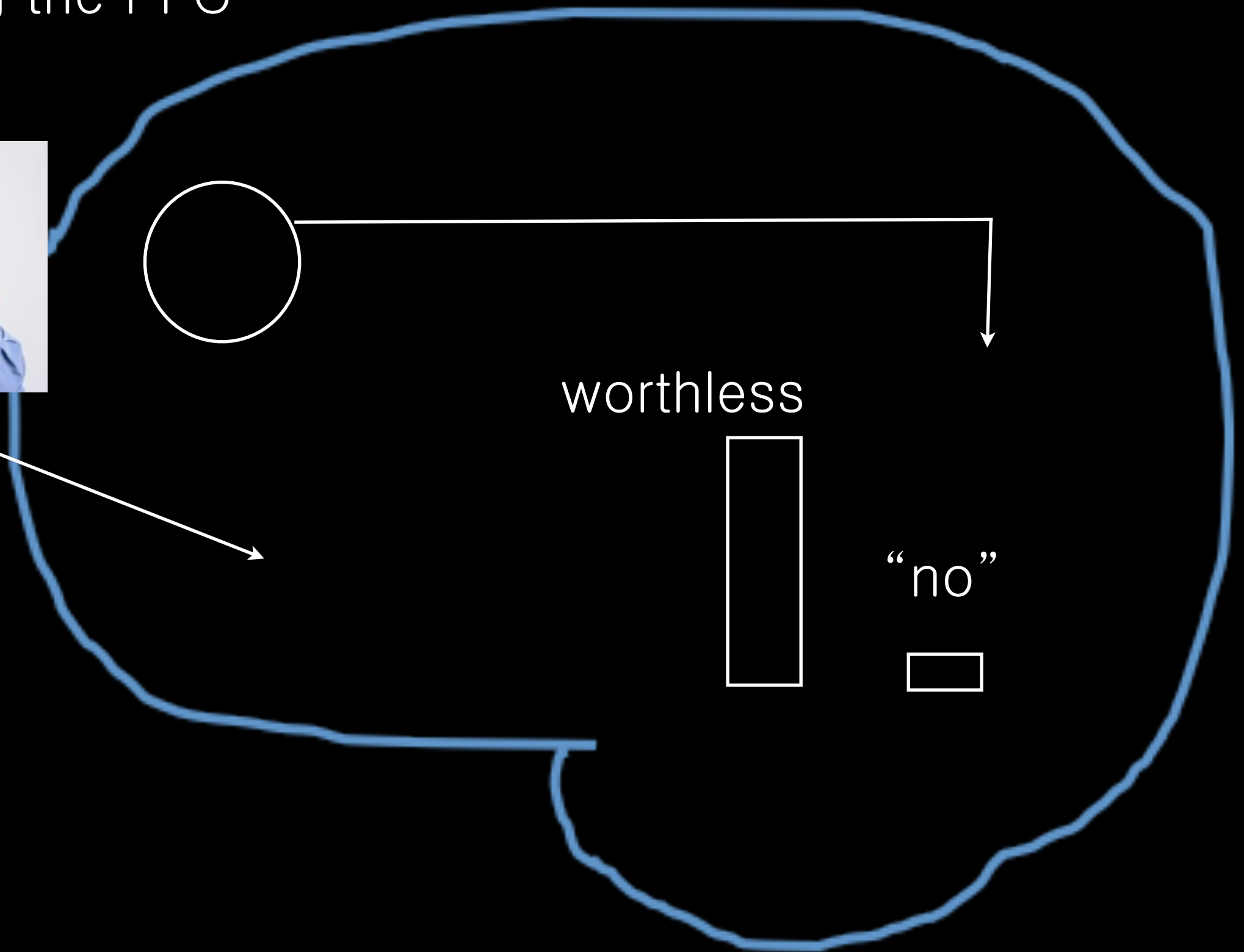


“no”

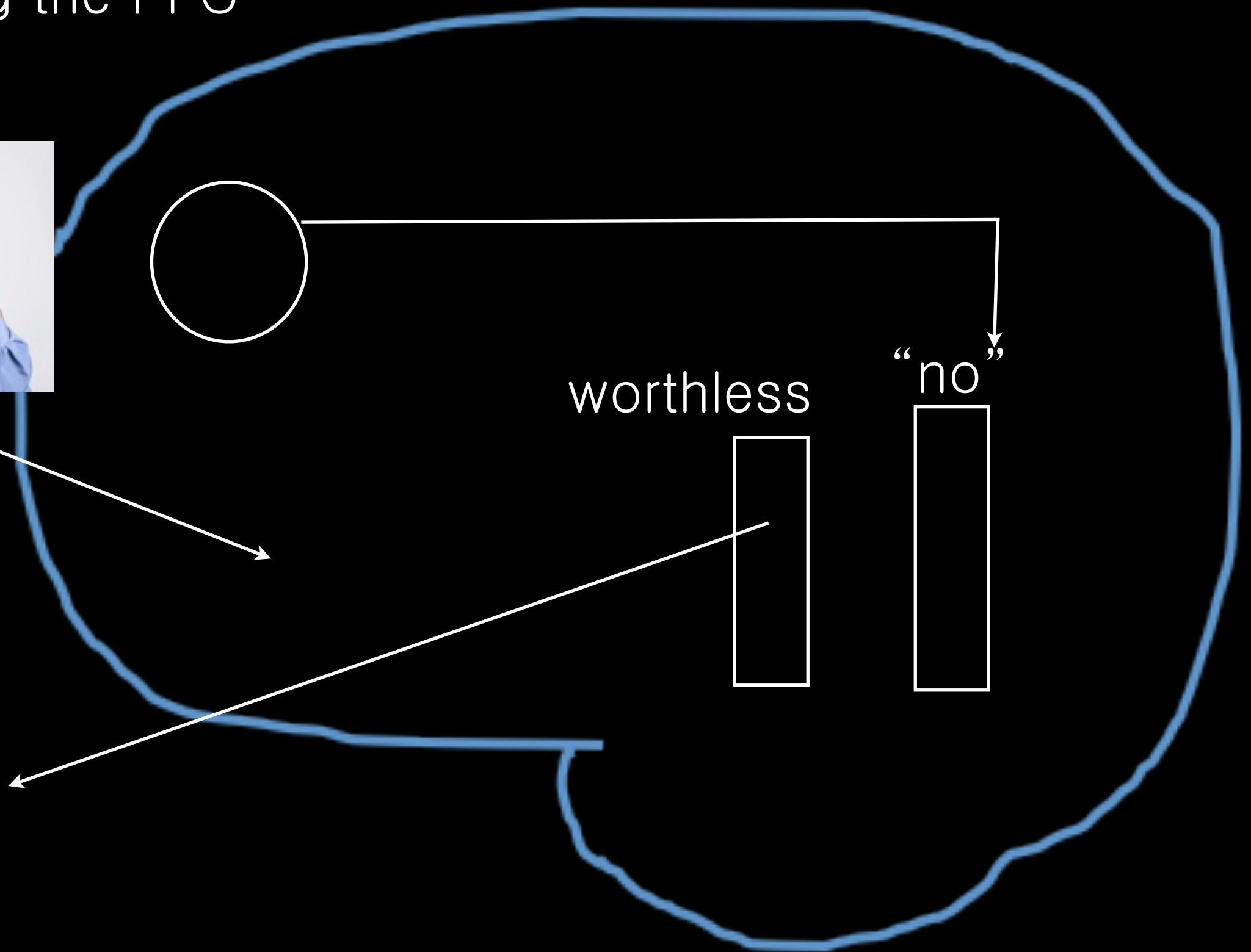


submit

Introducing the PFC



Introducing the PFC



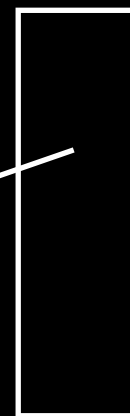
with pfc: not enough capacity



-7+

- IQ
- sober
- sleep
- sick

worthless

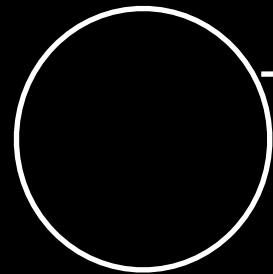


“no”



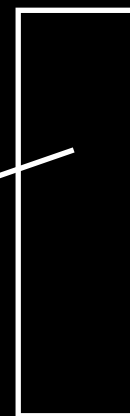
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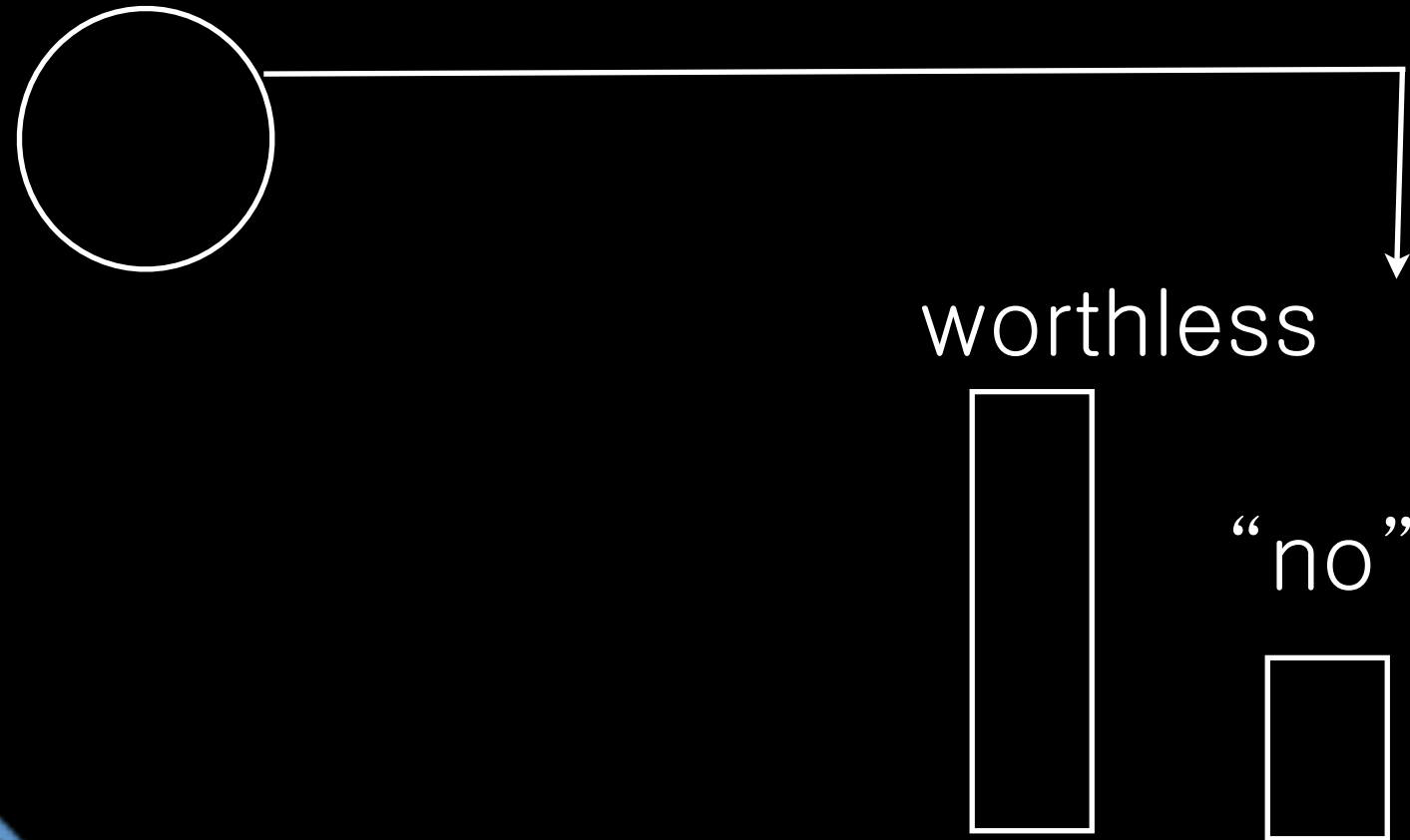
submit

what do we do in case where

(1) bad habit dominates
and

(2) we cannot do the more adaptive thing?

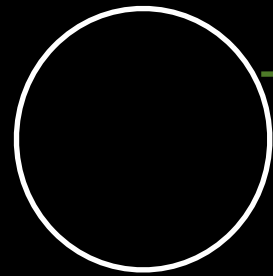
what do we do in case where bad habit dominates?



In this moment, we can't boost capacity

- IQ: determined mostly by genes
- sober: no control in this moment
- sleep: no control in this moment

what do we do in case where bad habit dominates?



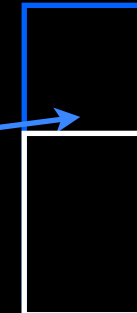
worthless

“no”

“Try harder!”

“Make a good choice!”

“Say no & take a break”

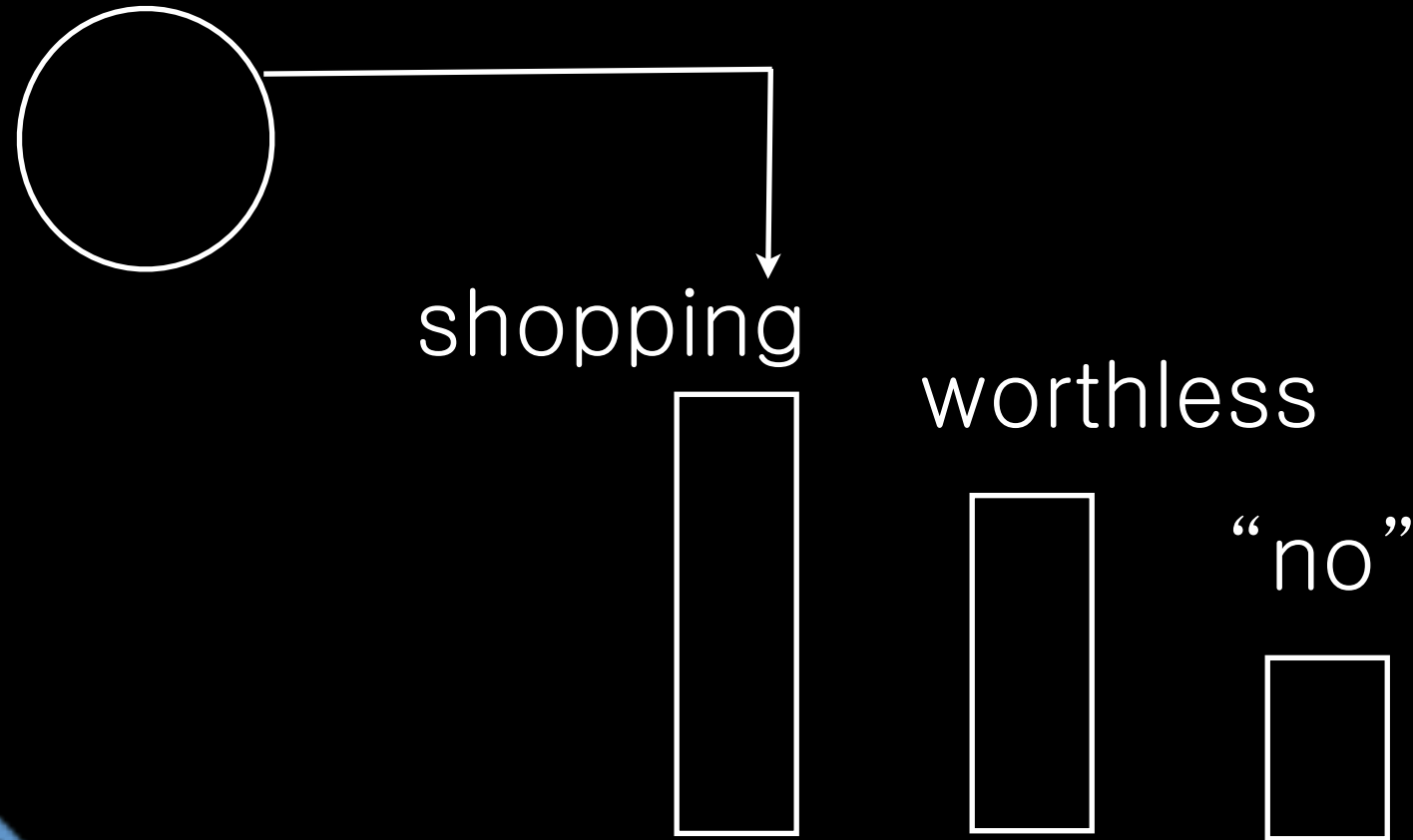


...so, advisor is really trying to:

(1) Direct attention to the “good choice” = “no”

(2) And activate it through words

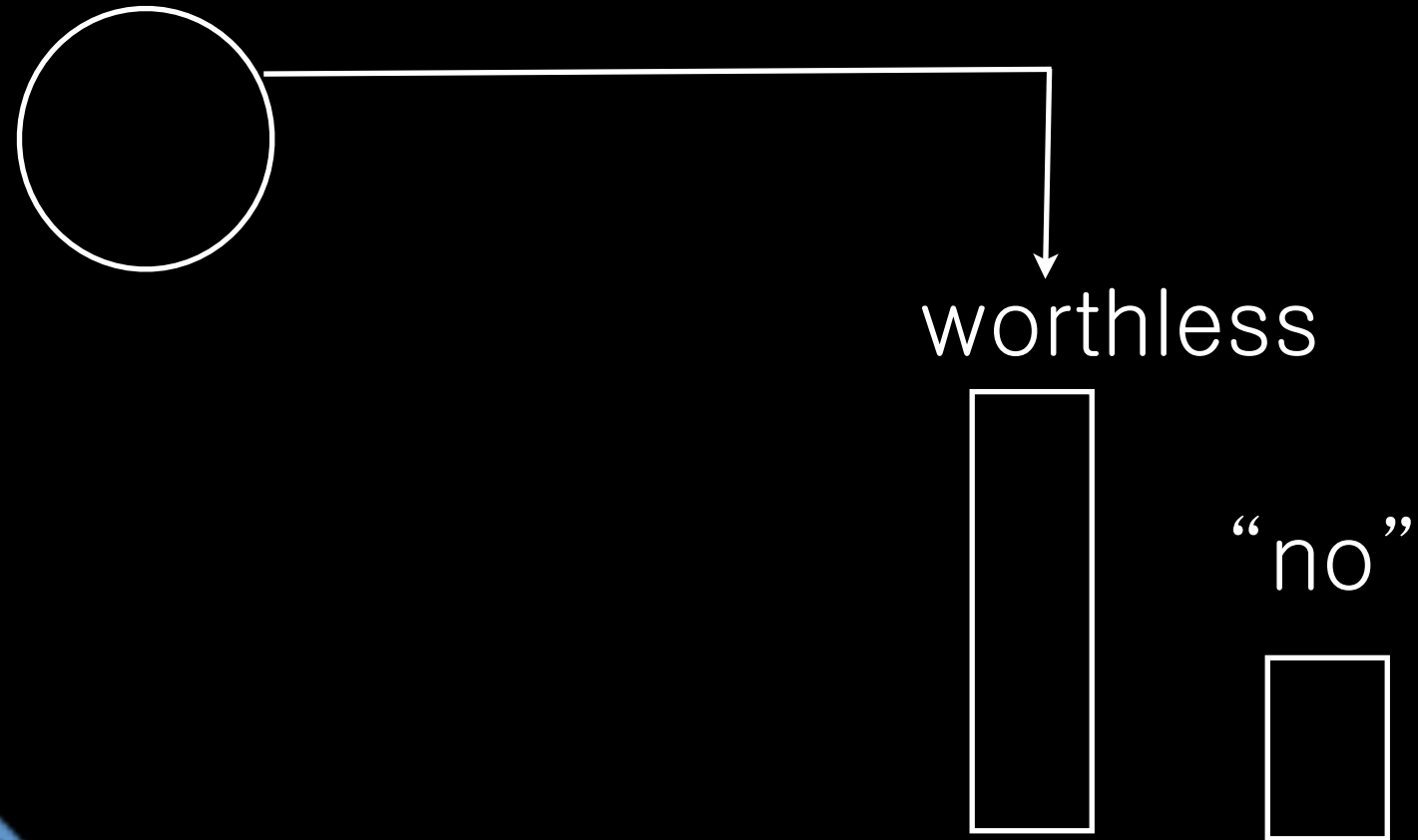
what do we do in case where bad habit dominates?



Distraction?

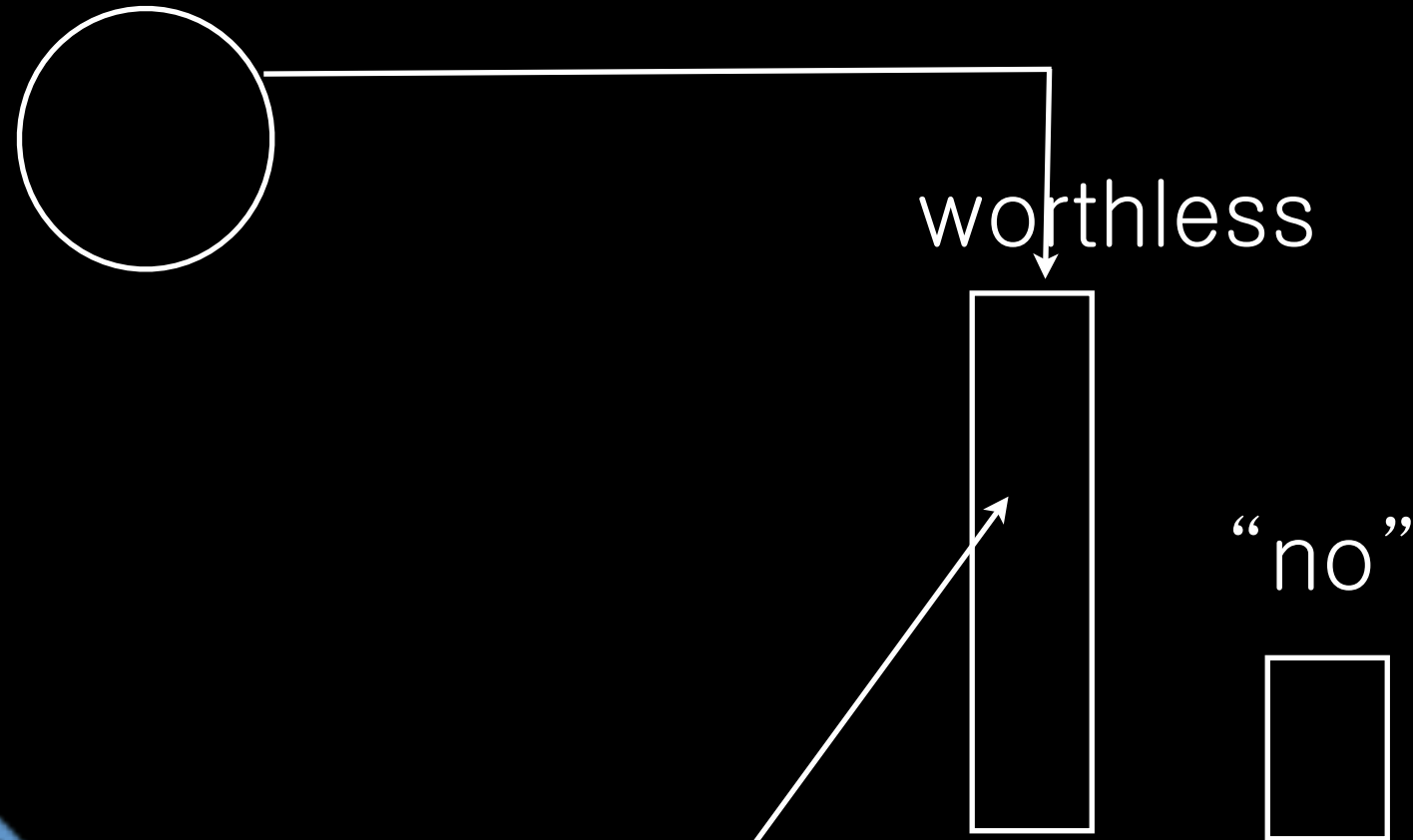
- Does nothing for building a “no”
- What happens next time? Same.

what do we do in case where bad habit dominates?



Punish/judge ourselves?
“I’m worthless”

what do we do in case where bad habit dominates?

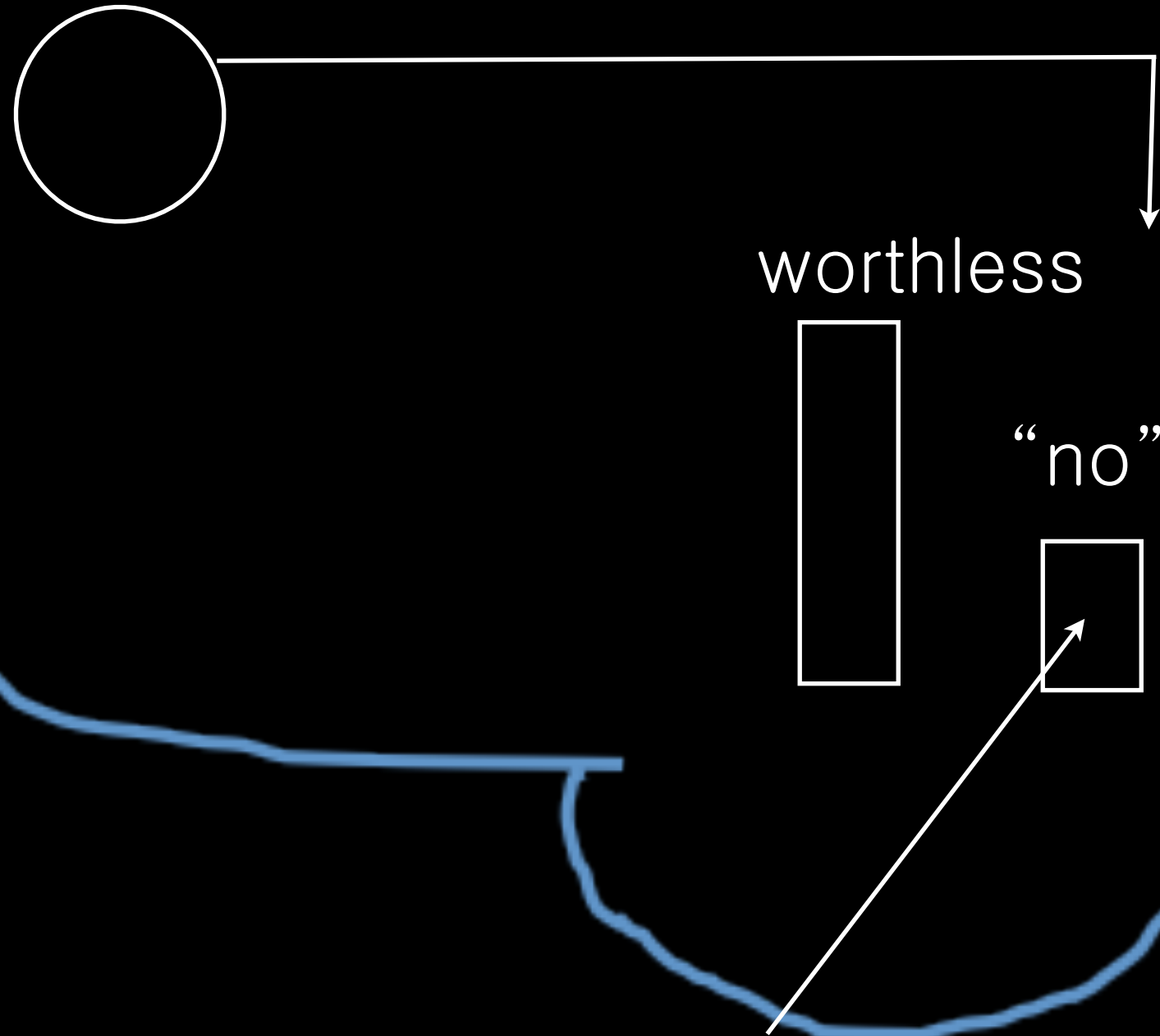


Punish/judge ourselves?
“I’m worthless”

- What happens next time? Same.

so, what do we do?

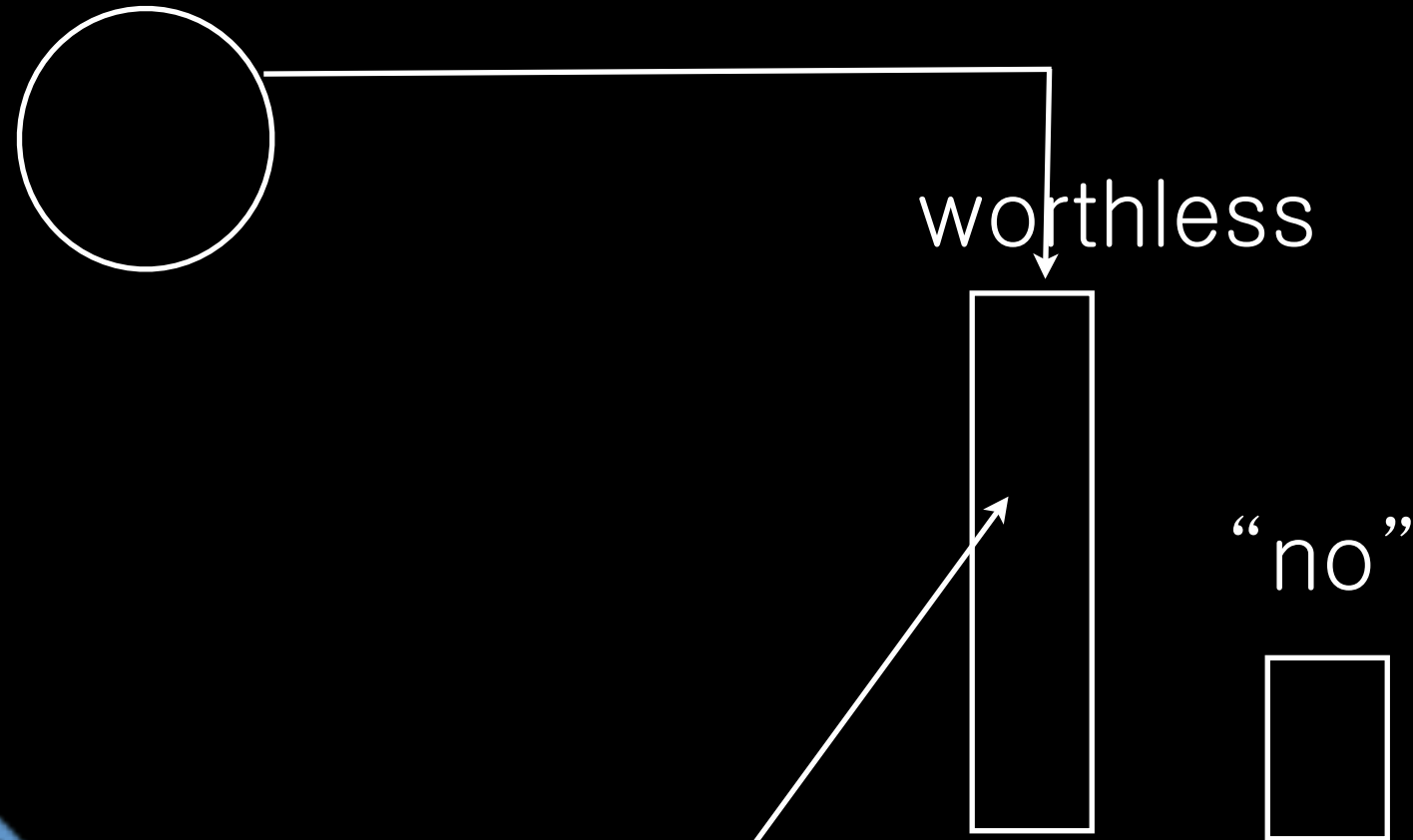
what do we do in case where bad habit dominates?



2 options:

- (1) Train adaptive response over many trials
- (2) Create a “pause & survey” dominant network

what do we do in case where bad habit dominates?

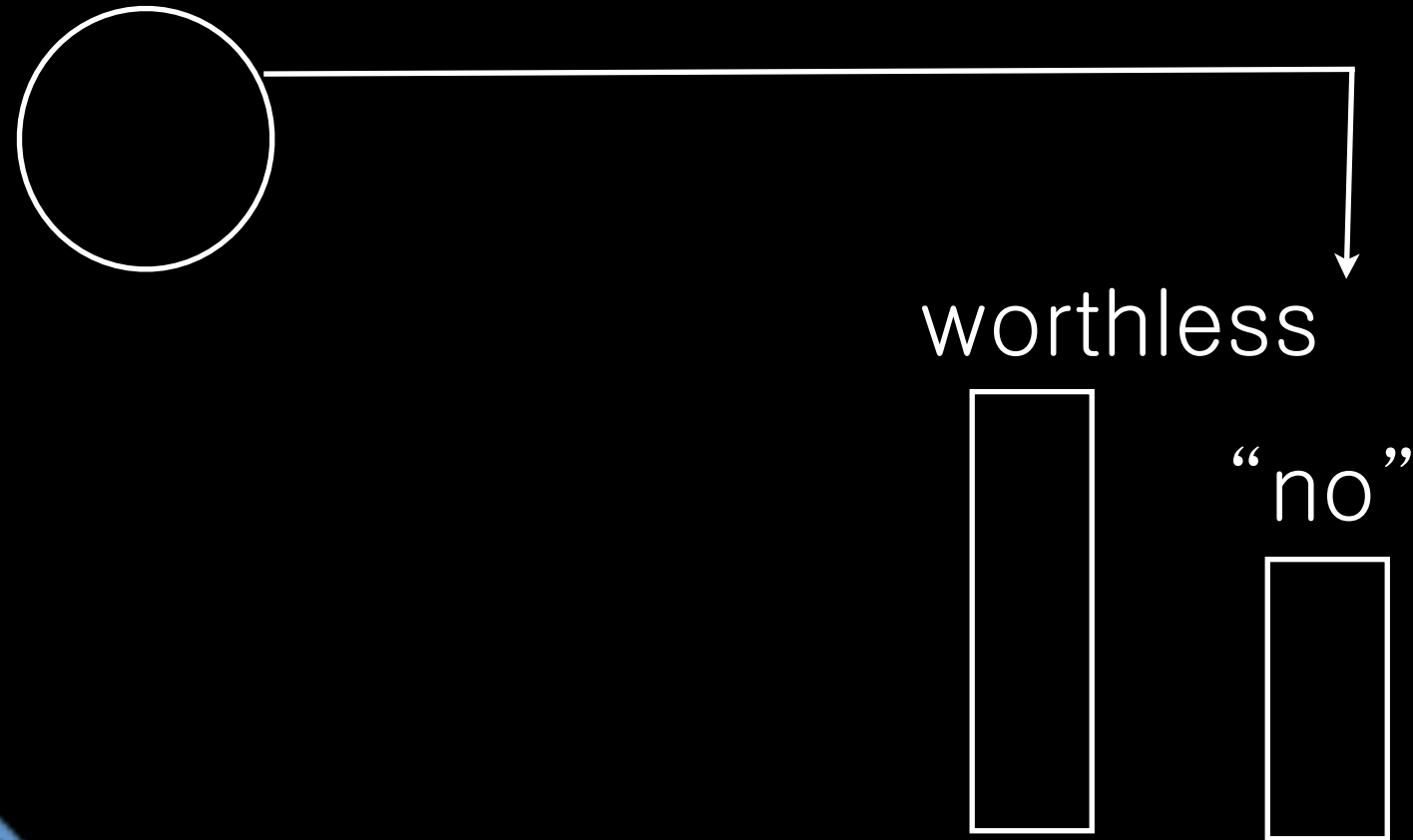


Instead of punish/judgement

Try...

compassion / respect: you did the best you could, next time try to say “no”

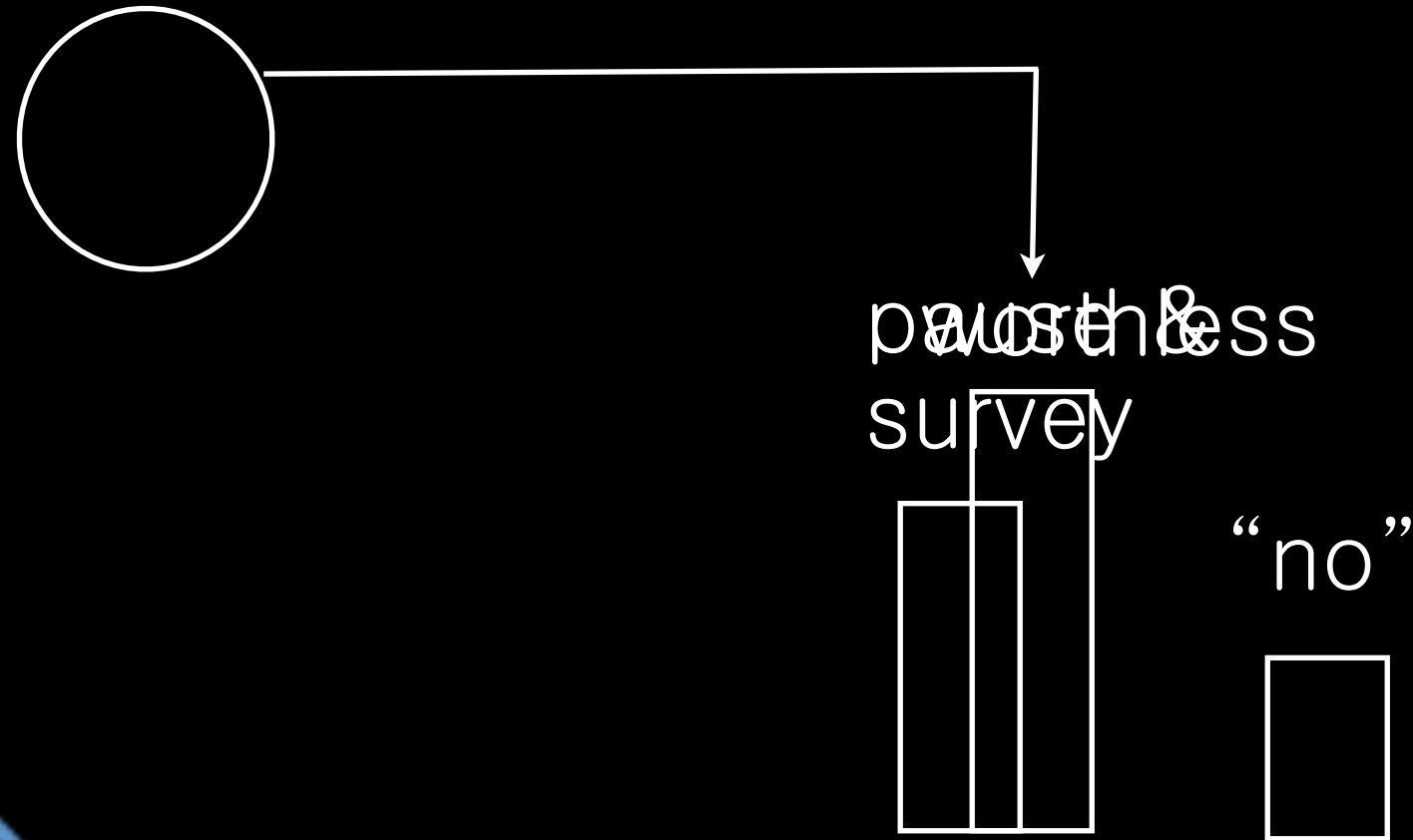
what do we do in case where bad habit dominates?



What about...

compassion / respect: you did the best you could, next time try to say "no"

with pfc: not enough capacity

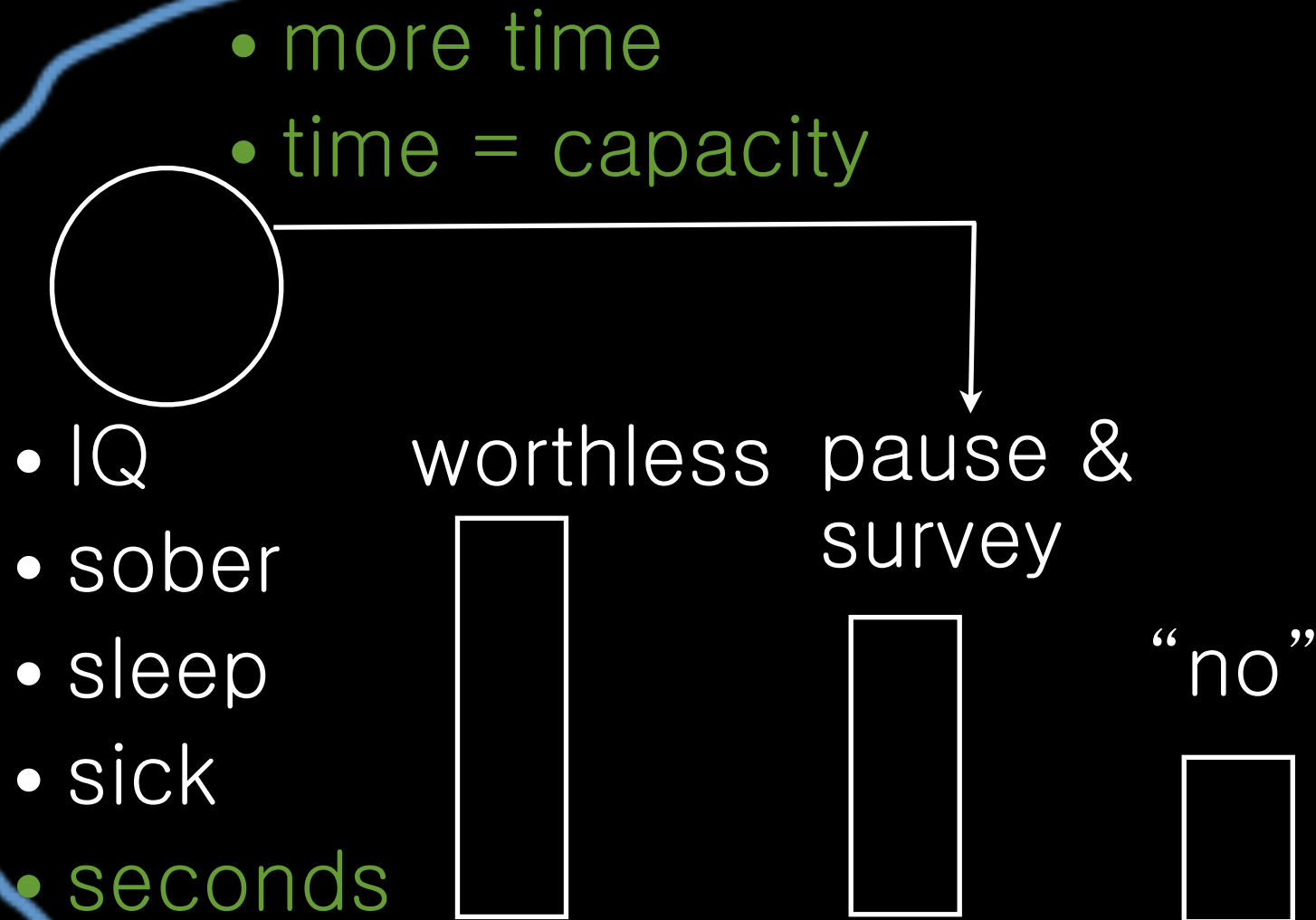


2 options:

(1) Train adaptive response over many trials

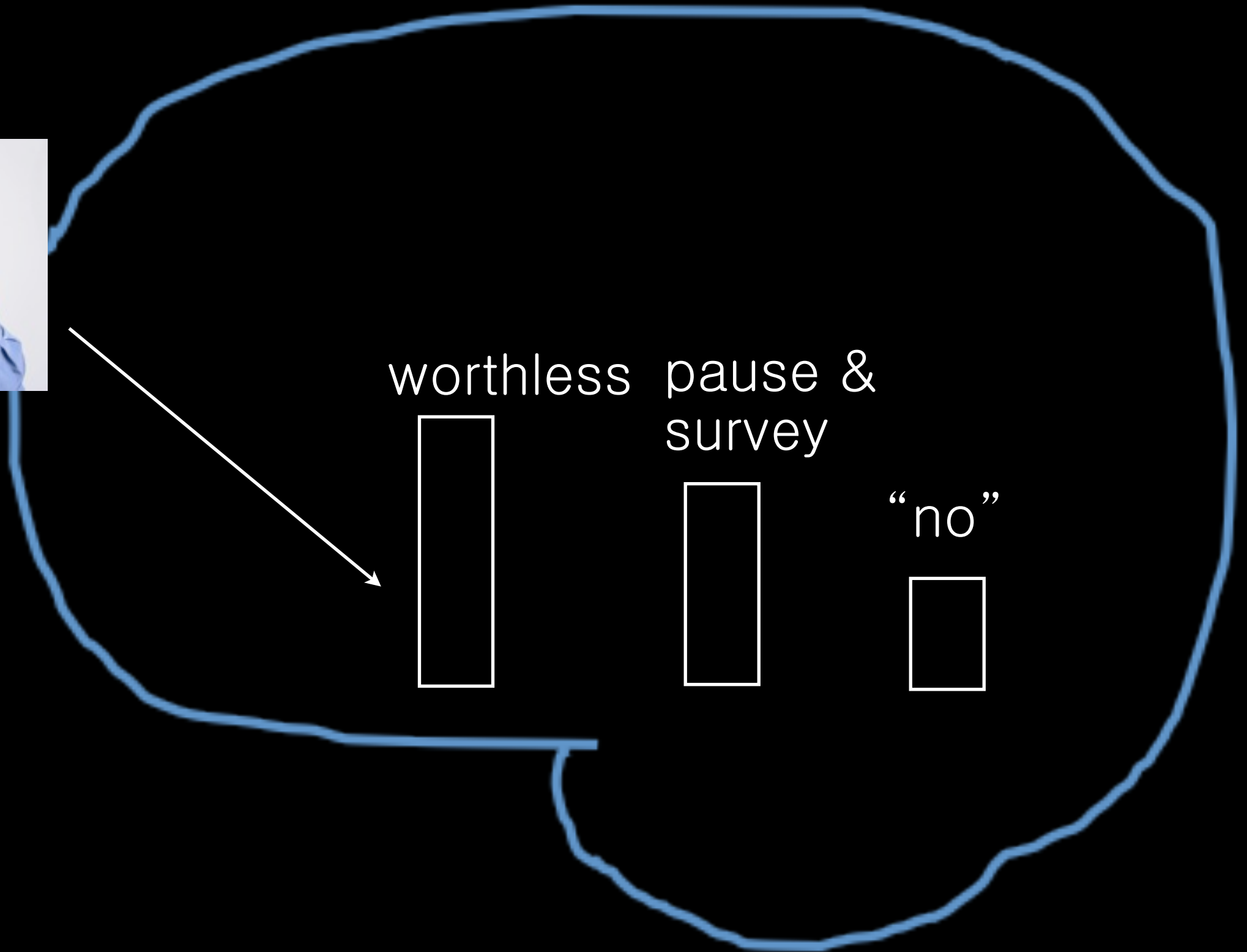
(2) Create a “pause & survey” dominant network = mindfulness

with pfc: not enough capacity

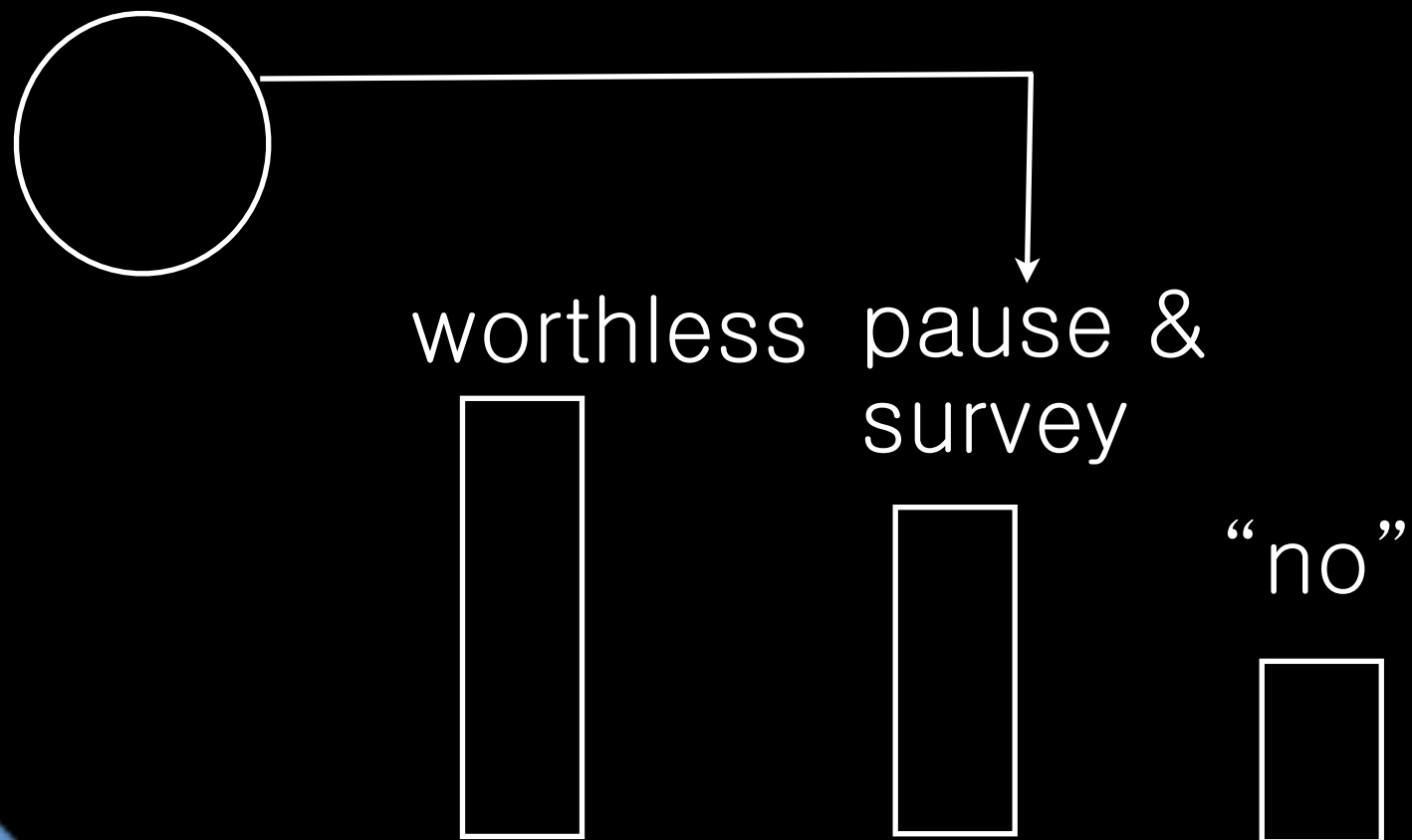


- Train up a pause & survey
- Associated with PNS through the breath?

with pfc & pause network: T1

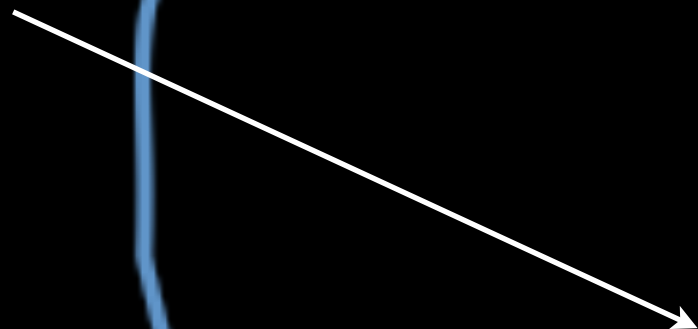


with pfc & pause network: T2

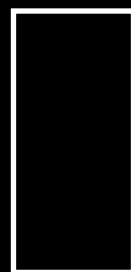


with pfc & pause network: T3

pause &
survey



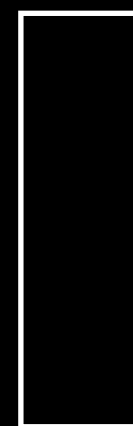
worthless



“no”



PNS



safe

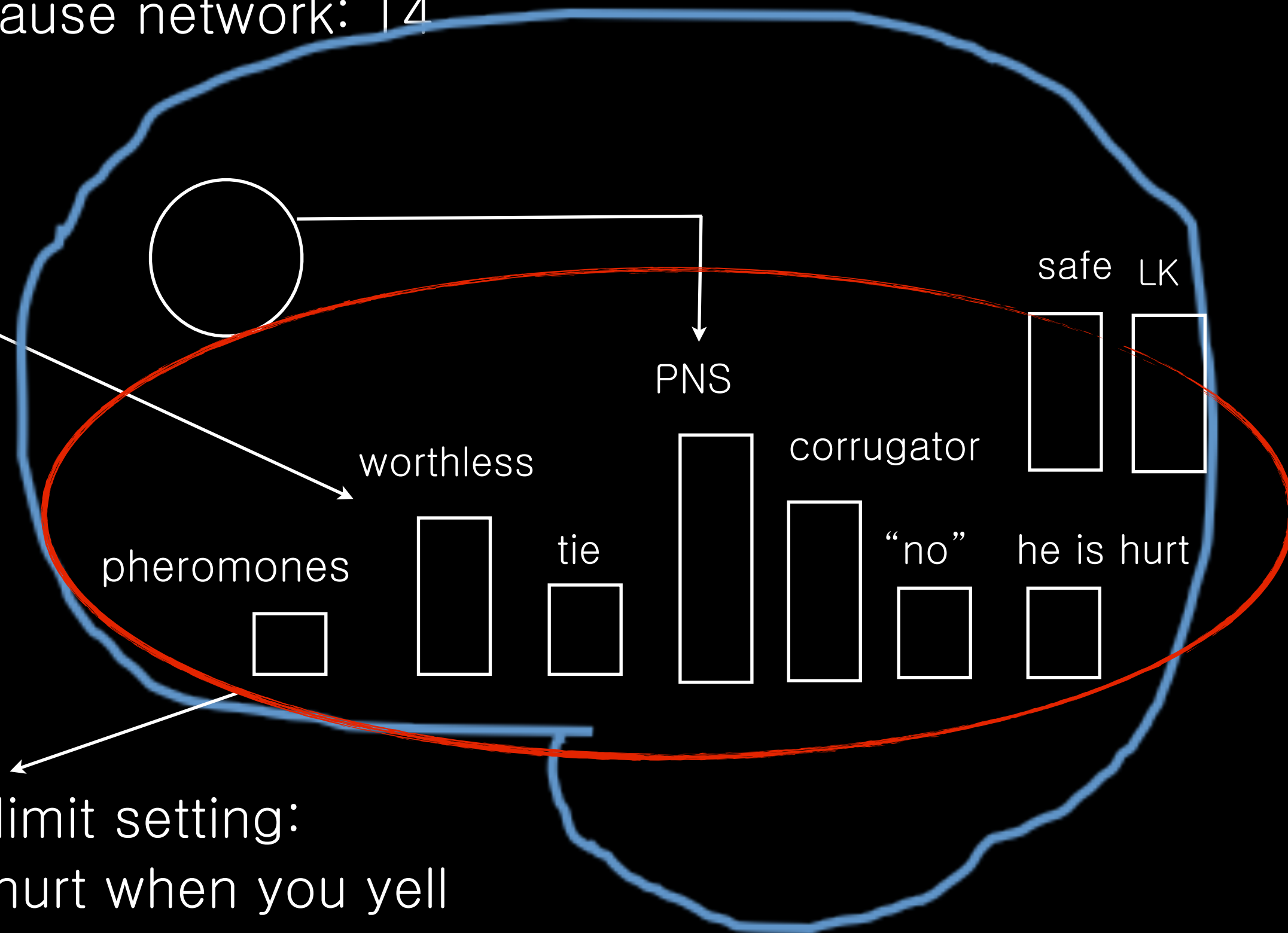


LK meditation



with pfc & pause network: T4

pause &
survey



skillful limit setting:
"I feel hurt when you yell
and I need to take a break"

with pfc & pause network: T4



wisdom
excellence
respect

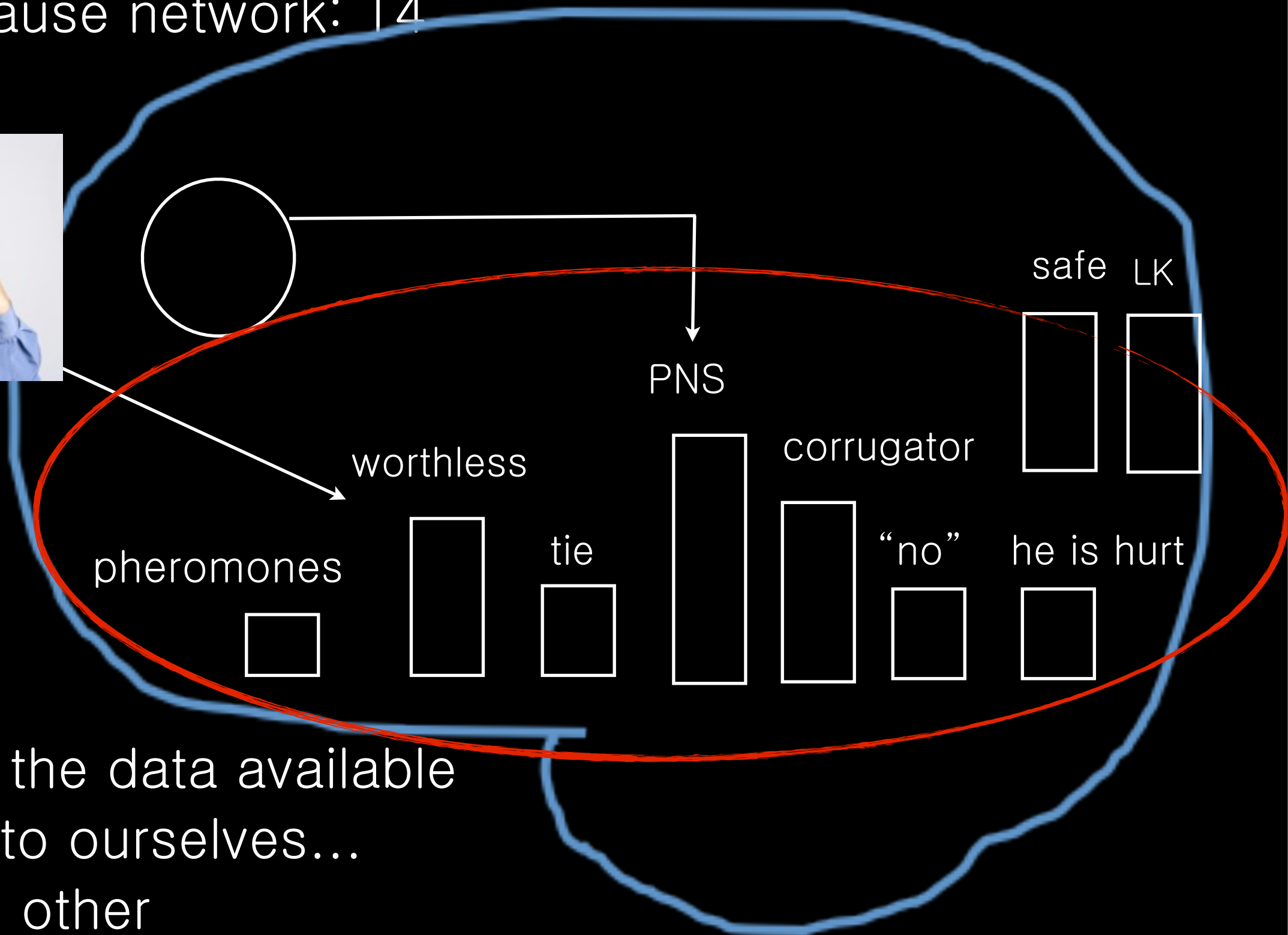
present
awake

seeing ALL the data available
connected to ourselves...

...and each other

authentic

spiritual





Integrating parts of ourselves

- Authenticity associated with less depression & anxiety, lower stress, greater subjective vitality, & lower physical Sxs (Ryan, LaGuardia, & Rawsthorne, 2005)
- More distinct one is across different roles, less well-being (Sheldon, Ryan, et al. JPSP, 1997)

“Spirituality and speed do not go together”



Satish Kumar

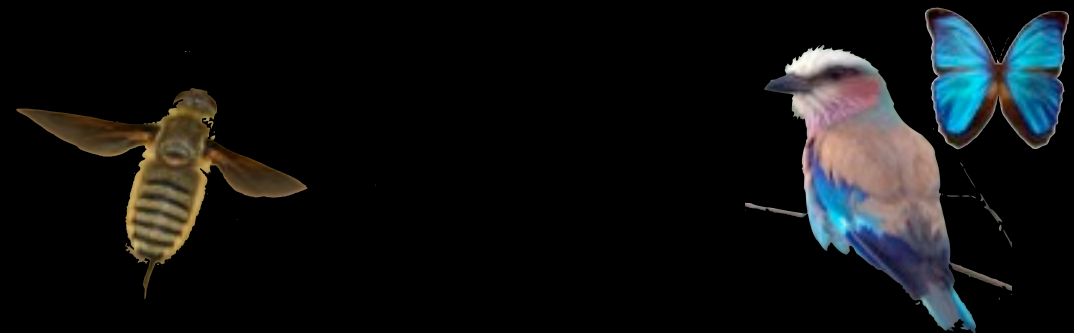
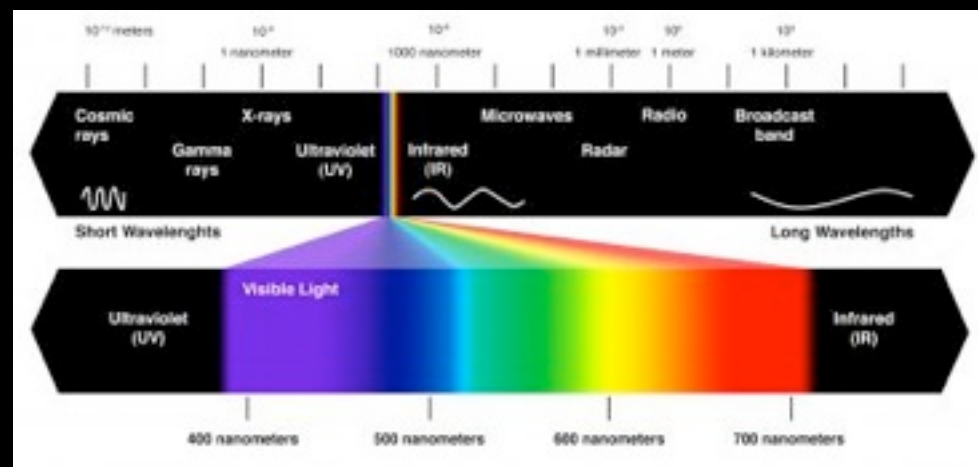
Me



Big We

we are not gods
we are interdependent humans
that's not just enough
it's beautiful

knowing reality: humans are limited



Flower photographs: (c) Dr Klaus Schmitt, Weinheim, Germany, uvir.eu

All other photographs are creative commons licensed:

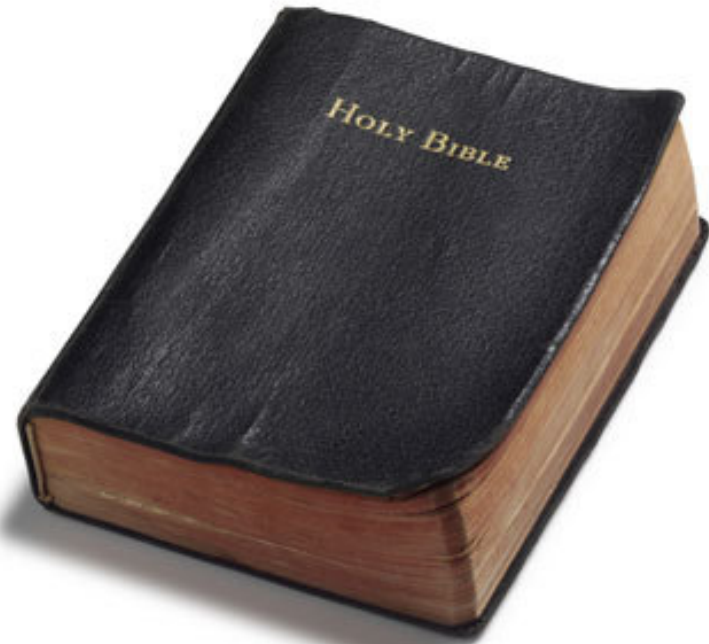
Bee, Jim Mcculloch; Bird, Mike's Birds; Butterfly: Gregory Phillips

See Deriso (2011), *Nature Education*

knowing reality

means using what we got

remember me

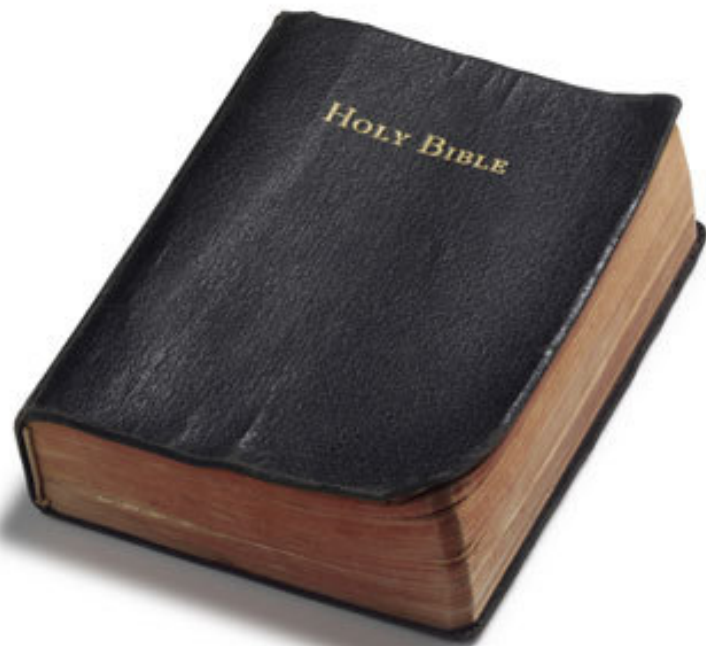


Mathew 22:37 Jesus replied: " 'Love the Lord your God with all your heart and with all your soul and with all your mind.' 38 This is the first and greatest commandment.

39 And the second **is like it**: 'Love your neighbor as yourself.'

40 All the Law and the Prophets hang on these two commandments."

(New International Version of the Bible)



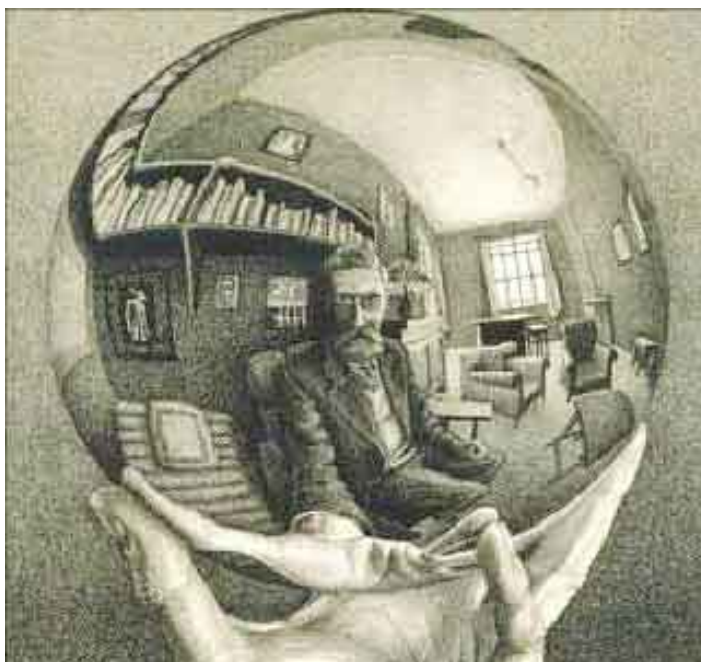
Love your neighbor as yourself.



Stanford Prison Experiment

- Students randomly assigned to “prisoner” or “guard” roles in mock prison setting
- Study prematurely terminated “when it became apparent that many of the ‘prisoners’ were in serious distress and many of the ‘guards’ were behaving in ways which brutalized and degraded their fellow subjects”
- “Volunteer prisoners suffered physical and psychological abuse...while volunteer guards were exposed to the new self-knowledge that they enjoyed being powerful and had abused this power to make human beings suffer.”

Zimbardo (1973); Expt: Haney, Banks, & Zimbardo (1973)



Neurally connected: Mirror Neuron System

- Observing an action = Doing that action
- Experiencing disgust & observing someone's disgust both activate anterior insula (Wicker, Keysers, et al., 2003, Neuron)
- Empathy: to put oneself in the place of others

Buccino & Amore (2008, Neuropsychiatry)



Empathy, Compassion, & Fairness

- Empathy: High functioning autistic individuals have less activation in MNS areas than controls when imitating emotional facial expressions (Depretto, et al, 2006, Nat Neurosci)
- Compassion: AC & Anterior insula activate when partner feeling pain (Singer, et al., 2004, Science)
- Fairness: AC & Anterior insula activated when neuroeconomic games are played fairly or not (Singer, et al., 2006, Nature)

What we think, do, & feel is the result of 3 influences

- Genes
- Learning up until this moment
- Our current context

When we truly realize this,
only compassion makes sense

ACEs cause...

Dose-dependent relationships, but focus here on 4+ ACEs vs. 0 ACEs, with odds ratios adjusted for age, gender, race, & Education



- ischemic heart disease: 2.2
- any cancer: 1.9
- stroke: 2.4
- chronic bronchitis or emphysema: 3.9
- Smoking: 2.2
- Obesity: 1.6
- Depression (in last year): 4.6
- Ever attempted Suicide: 12.2
- Self-reported alcoholic: 7.4
- Illicit drug use: 4.7
- injected drugs: 10.3

Felitti, and, et al. Am J Prev Med 1998; 14: 245-258

Social Justice

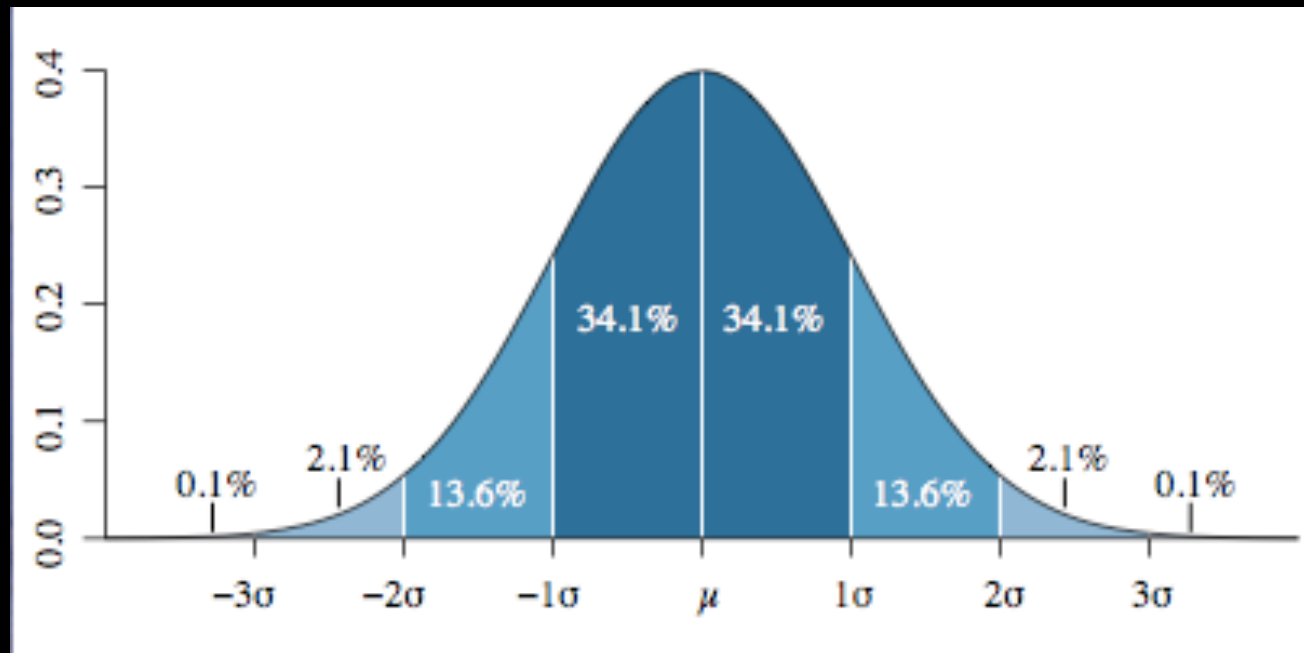
poor and vulnerable



(c) Juan Emilio



(c) Stepan Mazurov



Genes +

Learning up until this moment +

Our current context

Healer Stewardship

- (1) Train adaptive response over many trials
- (2) Create a “pause & survey” dominant network = mindfulness

Healer Stewardship

(1) Train adaptive response over many trials

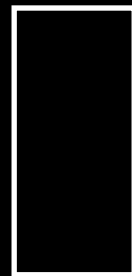
Patient
angry at
you



defensiveness



safe

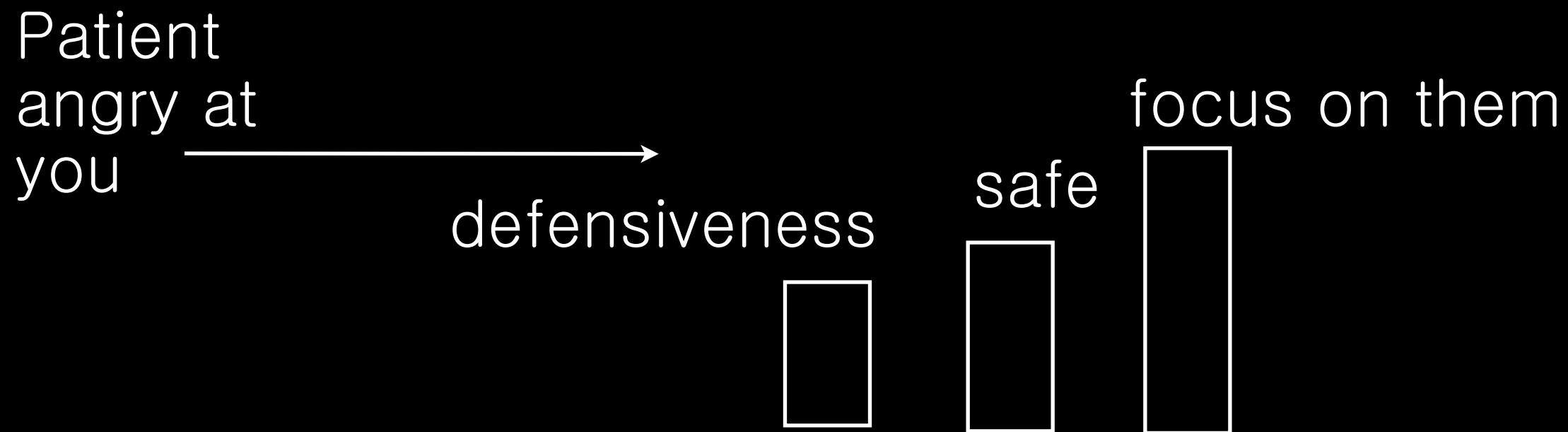


focus on them



Healer Stewardship

(1) Train adaptive response over many trials



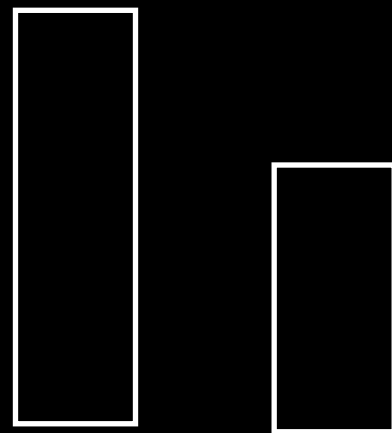
Healer Stewardship

(1) Train adaptive response over many trials

Patient
scared



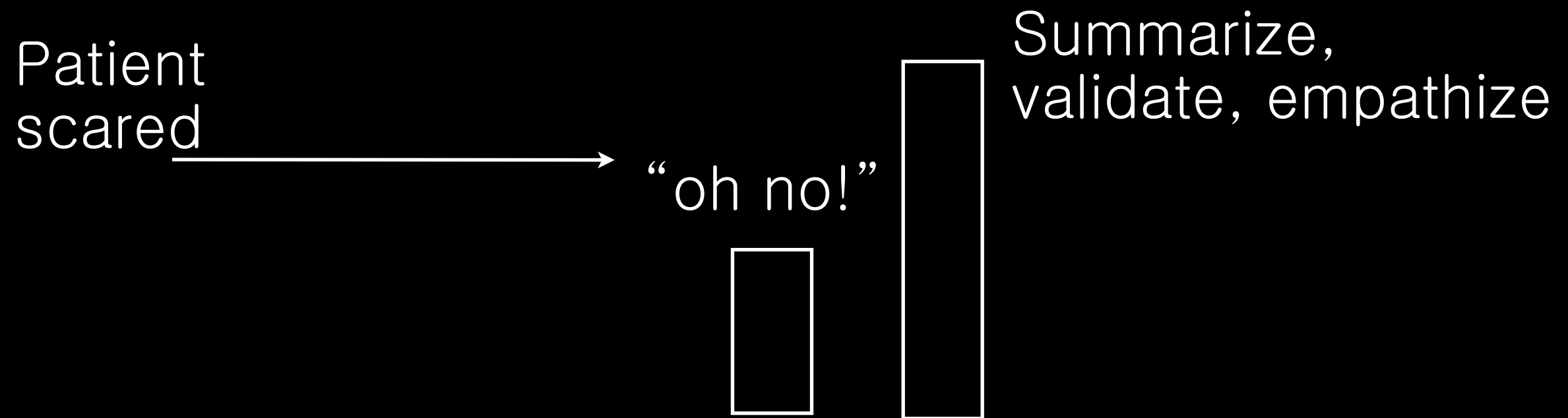
“oh no!”



Summarize,
validate, empathize

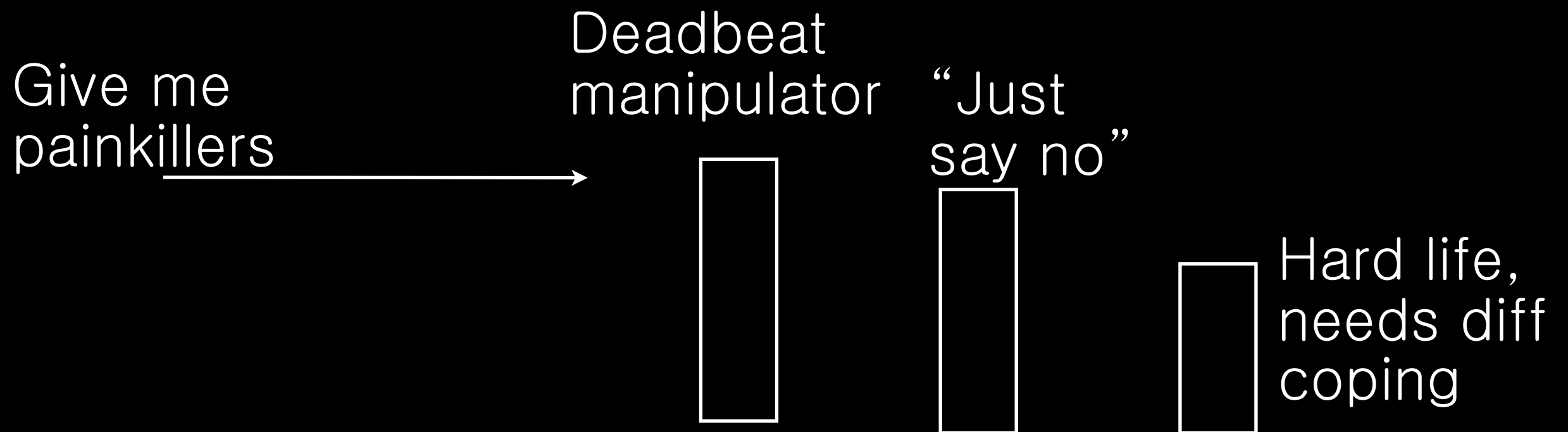
Healer Stewardship

(1) Train adaptive response over many trials



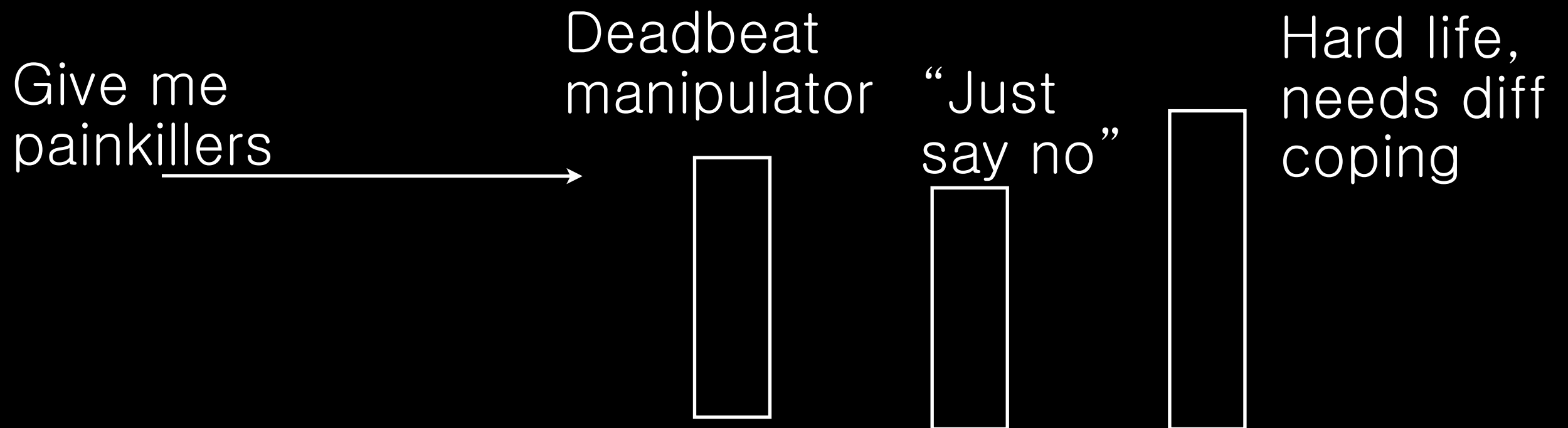
Healer Stewardship

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Healer Stewardship

(1) Train adaptive response over many trials



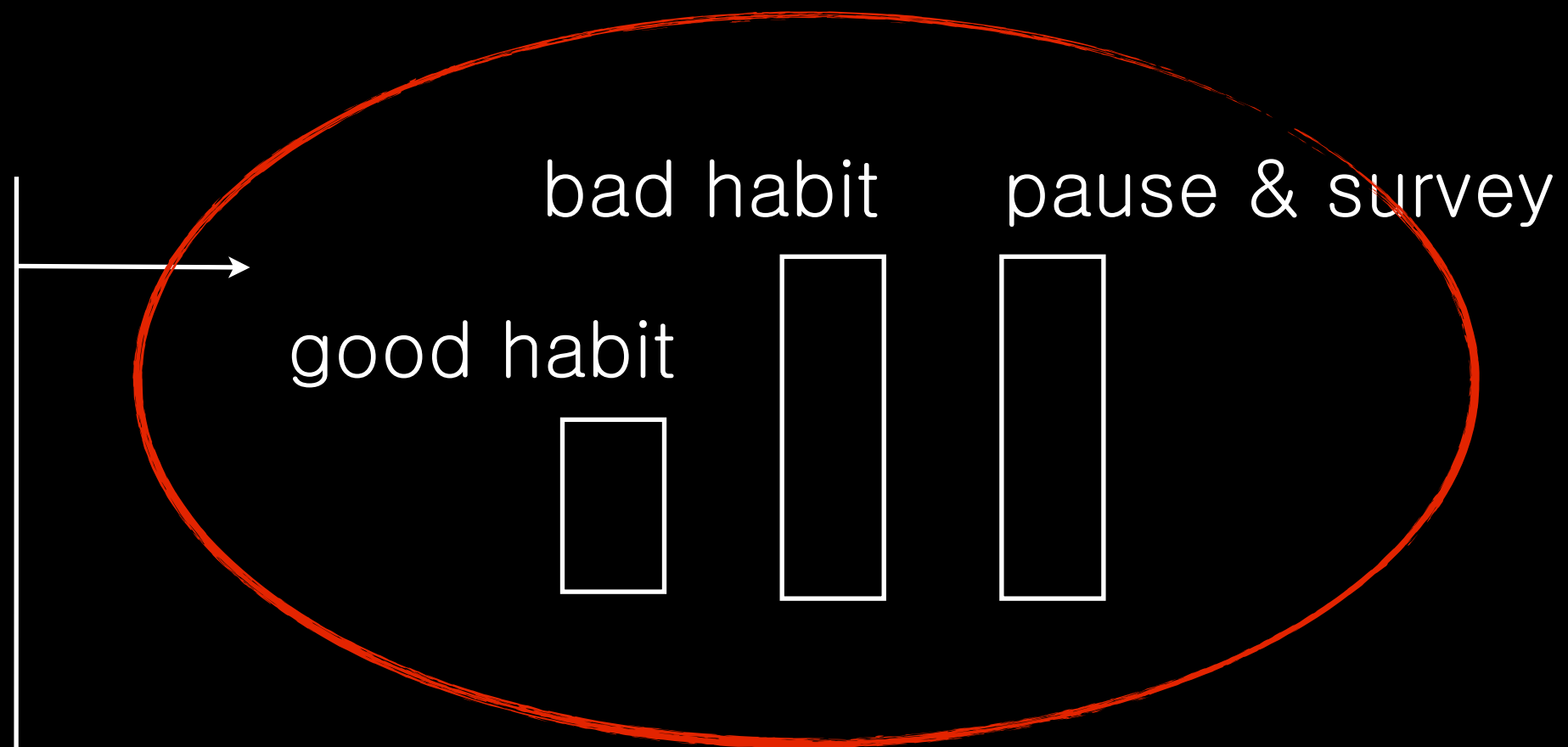
Healer Stewardship

(2) Create a “pause & survey” dominant network through mindfulness

Patient
angry at
you

Give me
painkillers

Patient
scared



Note: Each time you activate the good habit, you've just trained it



Some Necessary Social Technologies



- Avoid the 4 Horsemen
(Gottman)
 - Criticism
 - Contempt
 - Defensiveness
 - Stonewalling
- Complain & fight early & often
- Agreed upon, short, breaks
- Positive: Negative in 5:1

How? (1) Inner stewardship; (2) System Stewardship

System Stewardship

- (1) Allow enough time with patients... Busyness is a form of violence (paraphrasing Thomas Merton)
- (2) Support this type of training
- (3) Support interdependence across institutions

cured



pooled data

died



not pooled

we need we

Me

We

Big We

stewardship



one planet thriving



Our current way of life
is the largest and most
unethical failure in
human history

Disconnection from
ourselves,
each other,
& the planet

can we be present to this?
see reality, use all the data,
to achieve
one planet thriving?

1. deforestation & habitat destruction
2. soil problems (erosion, salinization, & soil fertility losses)
3. water management problems
4. over hunting
5. overfishing
6. effects of introduced species on native species
7. human population growth
8. increased per-capita impact of people
9. climate change
10. buildup of toxic chemicals in environment
11. energy shortages
12. full human use of Earth's photosynthetic capacity

Causes of societal collapse

- Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed*



1/2 gone [1]

Losing species faster than last 65M yrs [3]

1. deforestation & habitat destruction
2. soil problems (erosion, salinization, & soil fertility losses)
6 bushels soil lost/bushel wheat [2]
1/3 land affected [2]
3. water management problems
Water tables declining & quality declining [1]
40% of land = desertification [2] (e.g., Africa)
4. over hunting
5. overfishing
90% large ocean predators gone in last 50 years [1]
6. effects of introduced species on native species
Millions imported yearly. 400/1352 endangered native species threatened [6]
7. human population growth
76M/yr (Rate=1.09%; 6,928,198,253, est, 2011) [7]
8. increased per-capita impact of people
4 planets worth [8]
9. climate change
Warming of the climate system is unequivocal [9]. Human contribution is clear [10]
Unknown health consequences for many. Known effects on cancer, reproduction, birth defects, brain development, autism (?) [4-5]
10. buildup of toxic chemicals in environment
11. energy shortages
End of cheap fossil fuels w/o equiv alternative
12. full human use of Earth's photosynthetic capacity
"Humans are already using 40 percent of all the "plant biomass" produced by photosynthesis on the planet." [3]

Sources: [1] State of the World (2004); [2] Permaculture in a Nutshell (2009); [3] www.sciencedaily.com/releases/2011/05/110518131427.htm; [4] ewg.org; [5] In Harm's Way, www.preventingharm.org; [6] www.ucsusa.org/news/press_release/congress-may-ban-dangerous-0224.html; [7] CIA World Fact Book; [8] footprintnetwork.org, 2012; [9] IPCC 4th Assessment Report: Climate Change 2007 (next report 2014); [10] IPCC, Climate Change 2013: The Physical Science Basis

Past

New

Causes of societal collapse

- Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed*



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Africa)

Past

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6.8 planets worth [1]

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End of cheap fossil fuels w/o equiv alternative

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New

Sustainable Well-being

Well-being

Resources to get WB

Sustainable Well-being

(Mental & Physical Health) * Longevity

Ecological Footprint



One Planet Thriving

Thriving



One Planet

Life Sat	Life Exp	EF	HPI	Rank
7.4	77.4	9.5	28.8	150

How are we doing?

	Life Sat	Life Exp	EF	HPI	Rank
Vanuata	7.4	68.6	1.1	68.2	1
Costa Rica	7.5	78.2	2.1	66	3
Cuba	6.3	77.3	1.4	61.9	6
Switzerland	8.2	80.5	5.3	48.3	65
UK	7.1	78.4	5.4	40.3	108
Sweden	7.7	80.2	7	38.2	119
France	6.6	79.5	5.8	36.4	129
Lithuania	4.7	72.3	3.9	29.3	149
USA	7.4	77.4	9.5	28.8	150
UAE	7.4	78	9.9	28.2	154
Ukraine	3.6	66.1	3.3	22.2	174
Zimbabwe	3.3	36.9	1	16.6	178



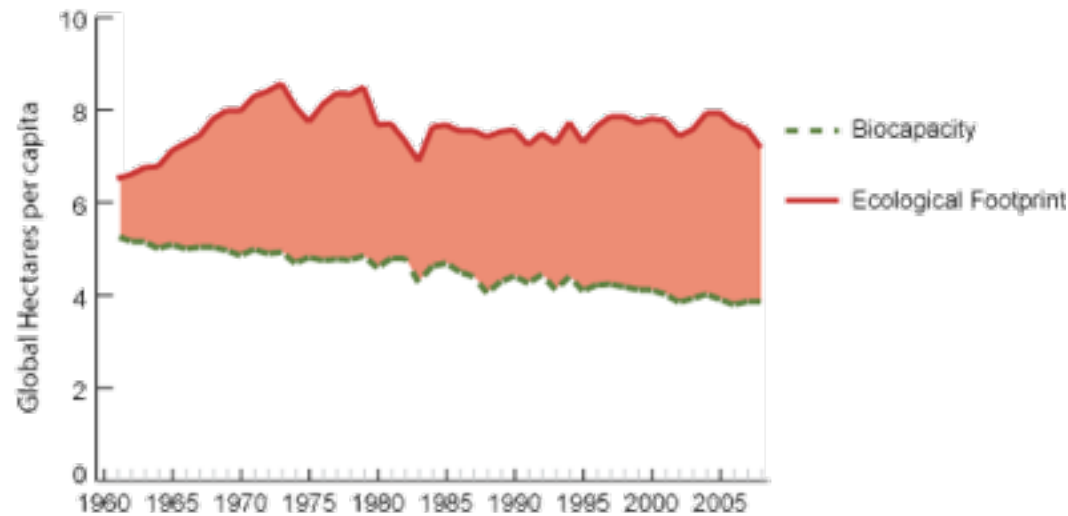
"The UnHappy Planet Index"

Sustainable Well-Being

Well-being

Resources to get WB

Resources Used



Life Sat	Life Exp	EF	HPI	Rank
7.4	77.4	9.5	28.8	150

- U.S. uses 4.05 planets worth of resources
(footprintnetwork.org, 2012)
- U.S. & allies outspend all non-allies militarily
- “Providing adequate food, clean water, and basic education for the world’s poorest could all be achieved for less than people spend annually on...
makeup, ice cream, and pet food” (p.10, State of the World, 2004)



Needed: Robust emotion regulation & communication

"A model for the future needs not only new technology and a healthy ecology, but also people who are able to use these tools in a meaningful way. It needs people who have learned how to stay together even during conflicts, solving them in non-violent and creative ways and remaining committed to solidarity even in difficult times. Community knowledge is the foundation of social sustainability." (Tamera: A Model for the Future, p. 104)

Laboratories/Test-fields:

Village-scale Solutions to Global Problems

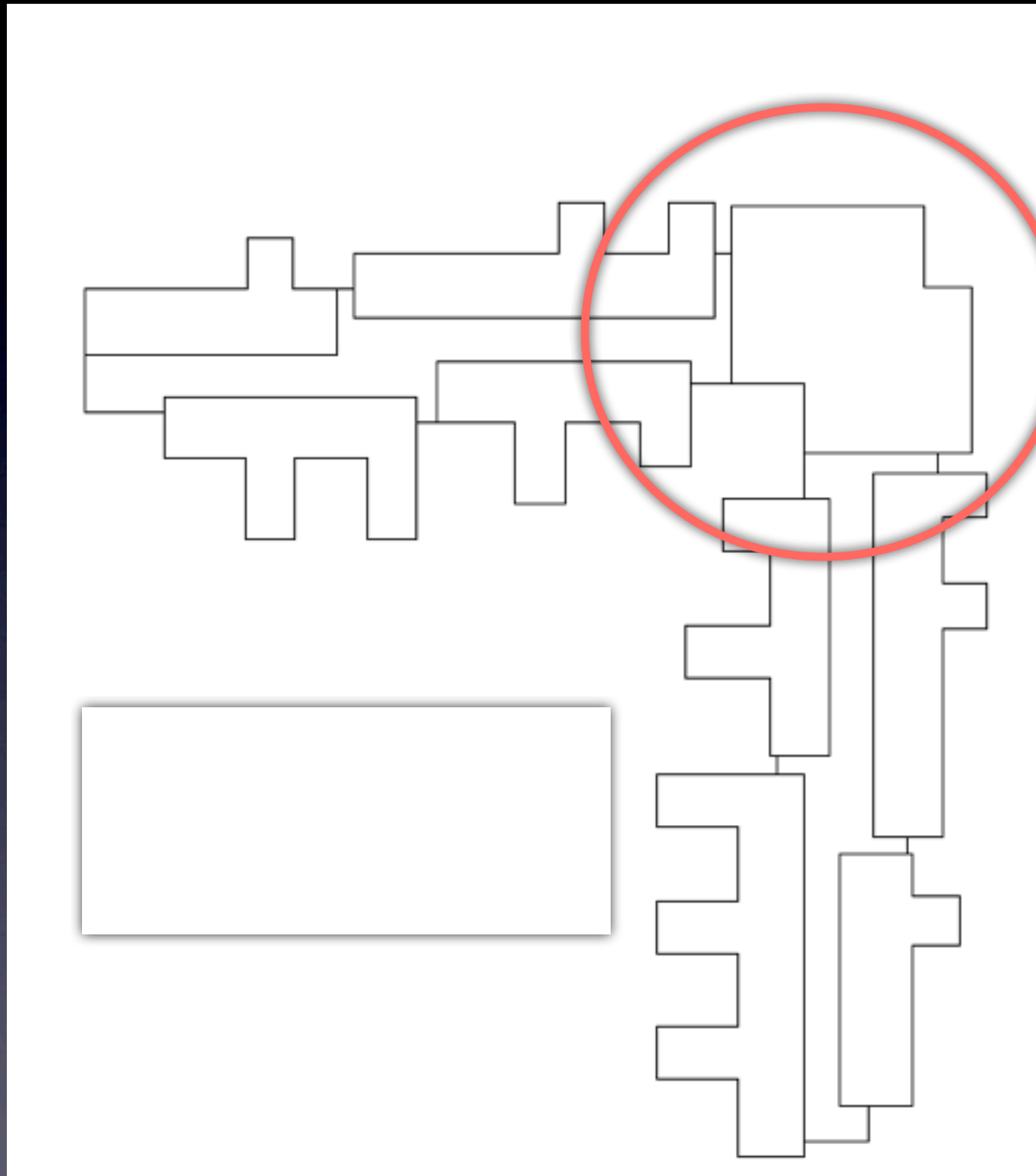


- Co-housing
- Ecovillages
- One Planet Communities

Co-housing



Jystrup: L-shape plan



Community Street - Jystrup







Ecovillages

Dancing Rabbit Ecovillage (MO)



- Reduced footprint by 85%
- 200+ acre backyard I share with my friends
- Five minute walk to a “luxuriously large natural swimming pool, our pond.”
- “...I would argue that we get 80% of the fun and 80% of the utility out of modern life with about 15% of the consumption.”
- “ ...leaves us room for other fine things in life...like watching fireflies, going for a quick swim before dinner, or taking long walks with friends.”

“How Much Does a Rabbit Consume” by Dan Durica on June 29, 2011, blog.dancingrabbit.org/2011/06/29/dr-consumption/

you are here



(c) Chmee2

Connecting to Ourselves

Connecting to all of who we are in this moment,
the pleasant & unpleasant,
means connecting to reality,
a process of interdependence

Connecting to **Ourselves**



me



we



(c) Nicholas Petrone

big we

Connecting to Ourselves

It is the interdependent process of
Respect and Compassion,
a prerequisite for Justice, Excellence, Stewardship,
and it's our best shot at wisdom

Connecting to Ourselves

all of this “big us” is always there waiting for us

pause,

be present to it,

and then proceed

Connecting to Ourselves

we've never needed this more urgently
we've never needed each other more urgently
and the good news is...

we are here

Music & Resources

One**Planet**Thriving.org



/public-talks

Mindfulness ~ Healthy Home ~
Green Medicine ~ Permaculture ~
MacCoon, Wallace, & Newman (2004)