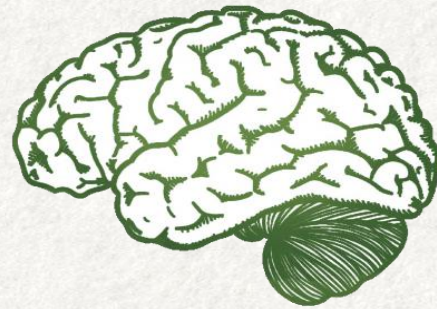


*Train yourself in doing good
that lasts and brings happiness.*

*Cultivate generosity, the life of peace,
and a mind of boundless love.*

Itivuttaka 1.22

Neurobhavana: Brain-Based Tools for Cultivating Factors of Awakening



Sati Center

March 28, 2026

Rick Hanson, Ph.D.

Wellspring Institute for Neuroscience and Contemplative Wisdom

www.RickHanson.com

Loving, Knowing, Growing

The cart of practice
has two wheels:

- Gradual development
 - True nature already



*Move my mind now to that which holds
Things as they change.*

Wendell Berry

*Things appear and disappear
according to causes and conditions.
The true nature of things is not being born,
and not dying.
Our true nature
is the nature of no-birth and no-death,
and we must touch our true nature
in order to be free.*

Thich Nhat Hanh

*The entire world is in flames,
the entire world is going up in smoke;
the entire world is burning,
the entire world is vibrating.*

*But that which does not vibrate or burn, which
is experienced by the noble ones, where death
has no entry –
in that my mind delights.*

The Buddha

*The born, come-to-be, produced,
The made, the conditioned, the transient,
Conjoined with decay and death,
A nest of disease, perishable,
Sprung from nutriment and craving's cord –
That is not fit to take delight in.*

*The escape from that,
The peaceful, beyond reasoning, everlasting,
The not-born, the unproduced,
The sorrowless state that is void of stain,
The cessation of states linked to suffering,
The stilling of the conditioned – bliss.*

Itivuttaka 2.16



Gradual development

Sudden awakening

Gradual development

Sudden awakening

Gradual development . . .

The Three-Legged Stool of Practice

Loving (*metta*) – Heart, compassion, courage

Knowing (*sati*) – Awareness, mindfulness,
welcoming, recollectedness

Growing (*bhavana*) – Healing, developing, learning
from the experiences we're having

In the Garden of the Mind

1

**Be with what
is there**

2

**Decrease
the negative**

3

**Increase
the positive**

Witness. Pull weeds. Plant flowers.
Let be. Let go. Let in.
Mindfulness is present in all three.

“Being with” is primary – but not enough.
We also need “wise effort.”

Let's practice with this

Loving . . .

Knowing . . .

Growing . . .

What Are We Growing?

Shaping the Course of a Life

Challenges

Vulnerabilities

Resources

Location of Resources

World

Body

Mind

Some Inner Resources - Psychology

Secure attachment

Executive functions

Positive emotions

Emotional intelligence

Interpersonal skills

Resilience, grit

Some Inner Resources - Buddhism

Mindfulness

Compassion

Wise view

Investigation

Kindness

Wise intention

Energy

Altruistic joy

Wise effort

Bliss

Tranquility

Virtue

Generosity

Concentration

Wisdom

Patience

Equanimity

Honesty

Reflections:

What is the highest happiness?

What are your own aspirations in practice? What calls to your heart?

What inner resources would be helpful for you these days?

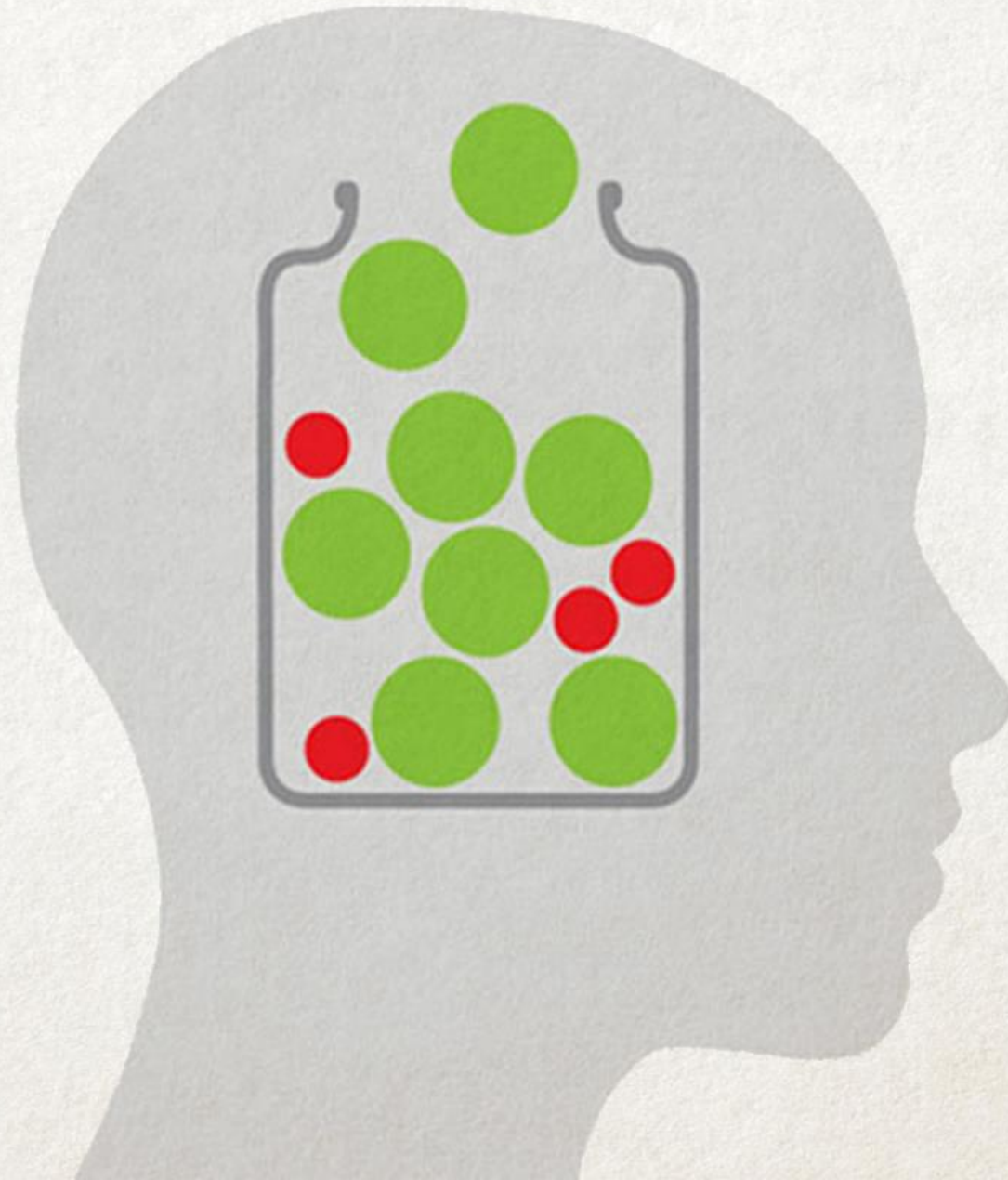
How Are We Growing It?

The majority
of our inner resources
are acquired,

through emotional, somatic,
social, and motivational
learning –

which is fundamentally hopeful.

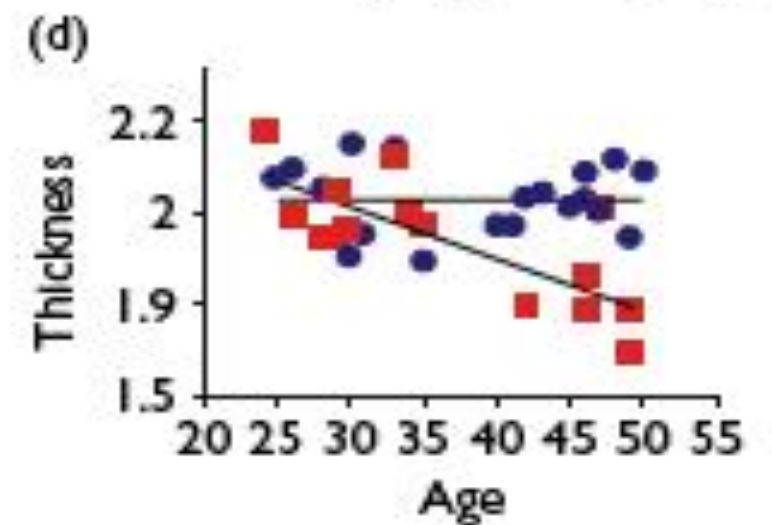
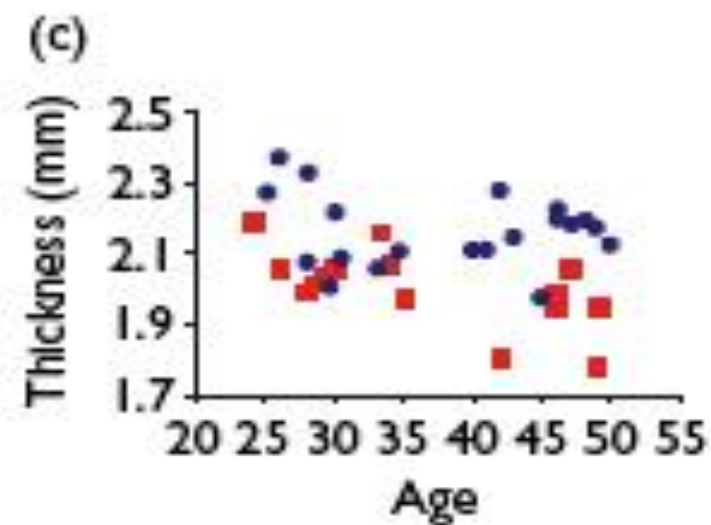
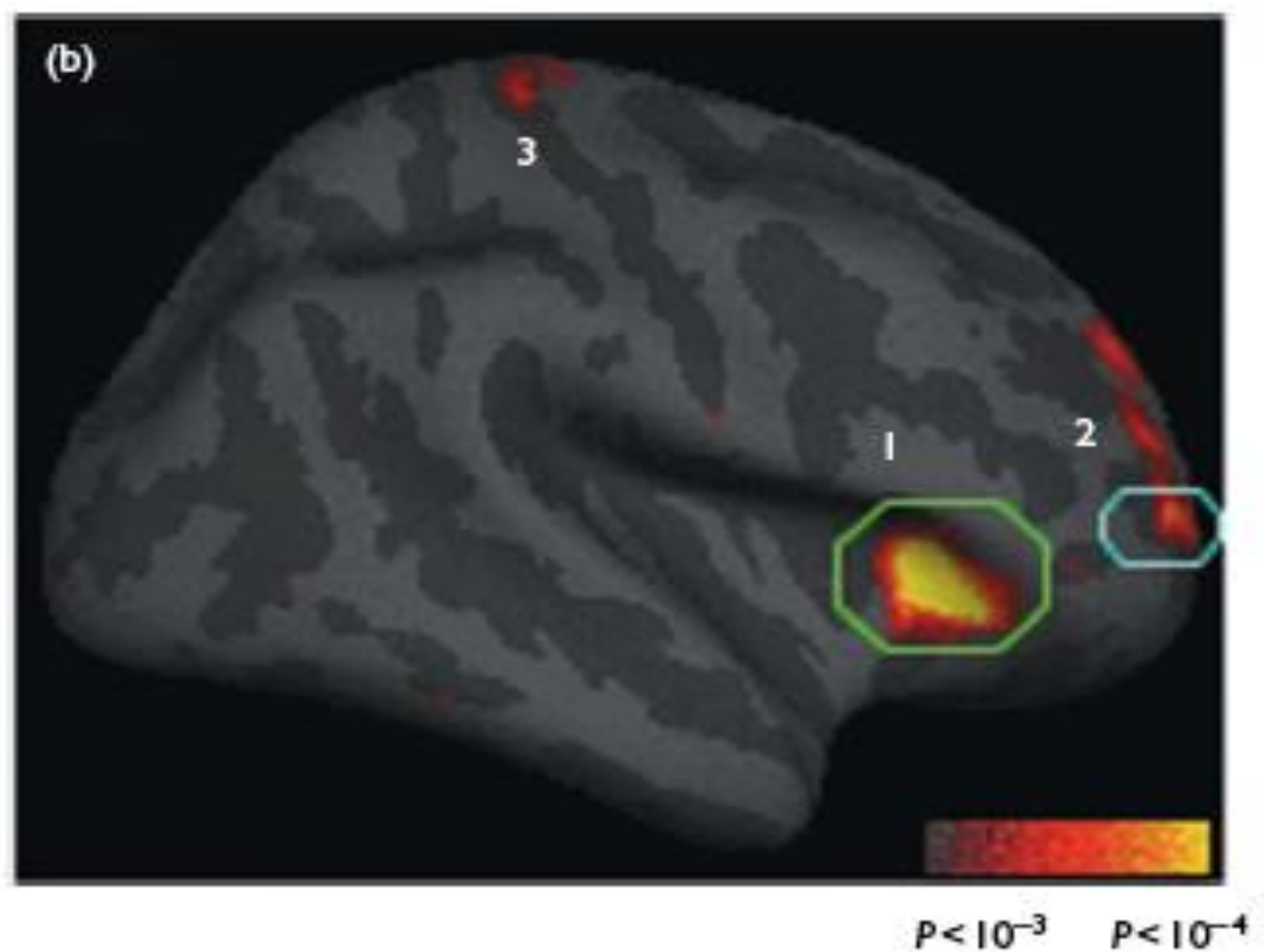
And Which Means Changing the Brain For the Better



Meditation experience is associated with increased cortical thickness.

Lazar, et al. 2005.

Neuroreport, 16, 1893-1897.



“The systematic training of the mind – the cultivation of happiness, the genuine inner transformation by deliberately selecting and focusing on positive mental states and challenging negative mental states – is possible because of the very structure and function of the brain.”

- The Dalai Lama and Howard Cutler

BUT: Experiencing doesn't equal learning.

Activation **without installation
may be pleasant,
but no trait resources are acquired.**

What fraction of our
beneficial mental states lead to lasting
changes in neural structure or function?

Mental resources are acquired in two stages:

Encoding



Consolidation

Activation



Installation

State



Trait

A complex network of glowing yellow neurons is shown against a dark background. The neurons consist of cell bodies and a dense web of axons. One central neuron is highlighted with a bright green nucleus. The overall appearance is that of a neural network or brain scan visualization.

Neurons that fire together,

wire together.

Consider the proverb:

“Your mind takes its shape
from what it repeatedly rests upon.”

A modern update could be:

“Your brain takes its shape
from what your mind repeatedly rests upon.”

A Sacred Power

We cannot change the past.

We have no influence over
the present moment as it has arisen.

But we can shape who we are becoming
by where we rest our attention, and
by how we engage what we find there.

No one can stop you from doing this,
gradually healing, growing, and awakening.

And no one can do it for you.

It's our beautiful opportunity,
in this one wild and precious life.

Let's explore the fundamental neuroplasticity of deliberately changing your brain for the better.

We'll use a framework I've developed, and explore it experientially.

I'll suggest a focus on one of the seven factors of awakening in Buddhism:

Tranquility

HEAL: Turning States into Traits

Activation

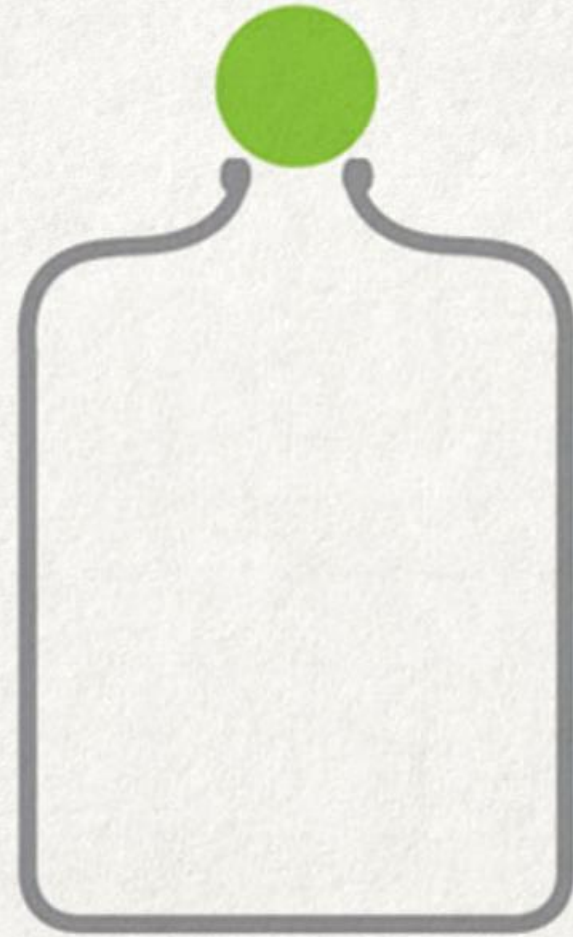
1. **Have** a beneficial experience

Installation

2. **Enrich** the experience

3. **Absorb** the experience

4. **Link** positive and negative material
(Optional)

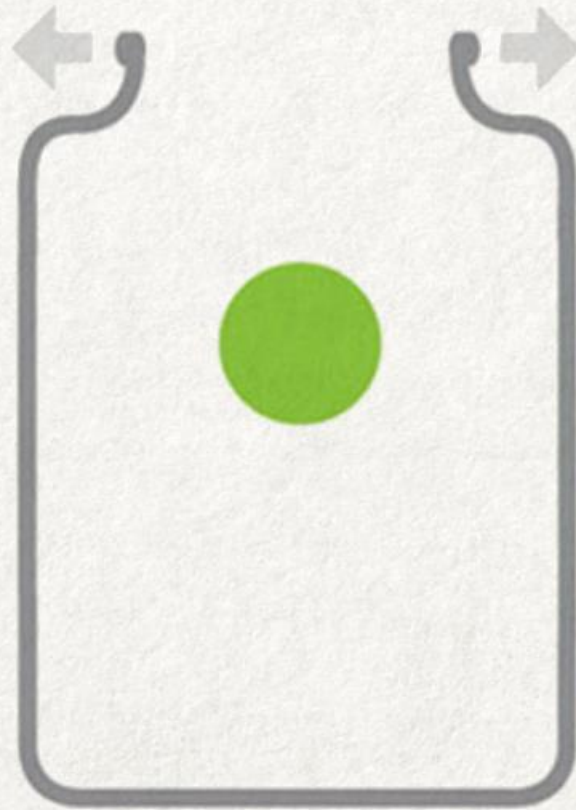


Have a Beneficial Experience

Let's open into a growing sense of
easing . . .
calming . . .
relaxing . . .
tranquility . . .

Now having this experience,
let's explore ways to internalize it,
woven into the fabric of your body.

We'll start with Enriching it: helping it be
big in your mind, and last.

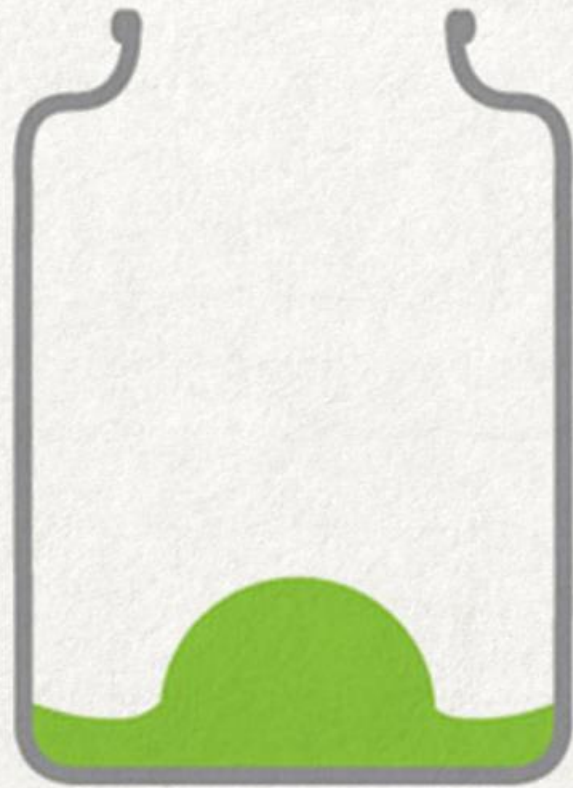


Enrich It

Enriching an Experience

- **Duration** – 5+ seconds; protecting it; keeping it going
- **Intensity** – opening to it in the mind; helping it get big
- **Multimodality** – engaging multiple aspects of experience, especially perception and emotion
- **Novelty** – seeing what is fresh; “don’t know mind”
- **Saliency** – seeing why this is personally relevant

Now shifting to the second aspect of internalization: helping your brain be as receptive as possible.

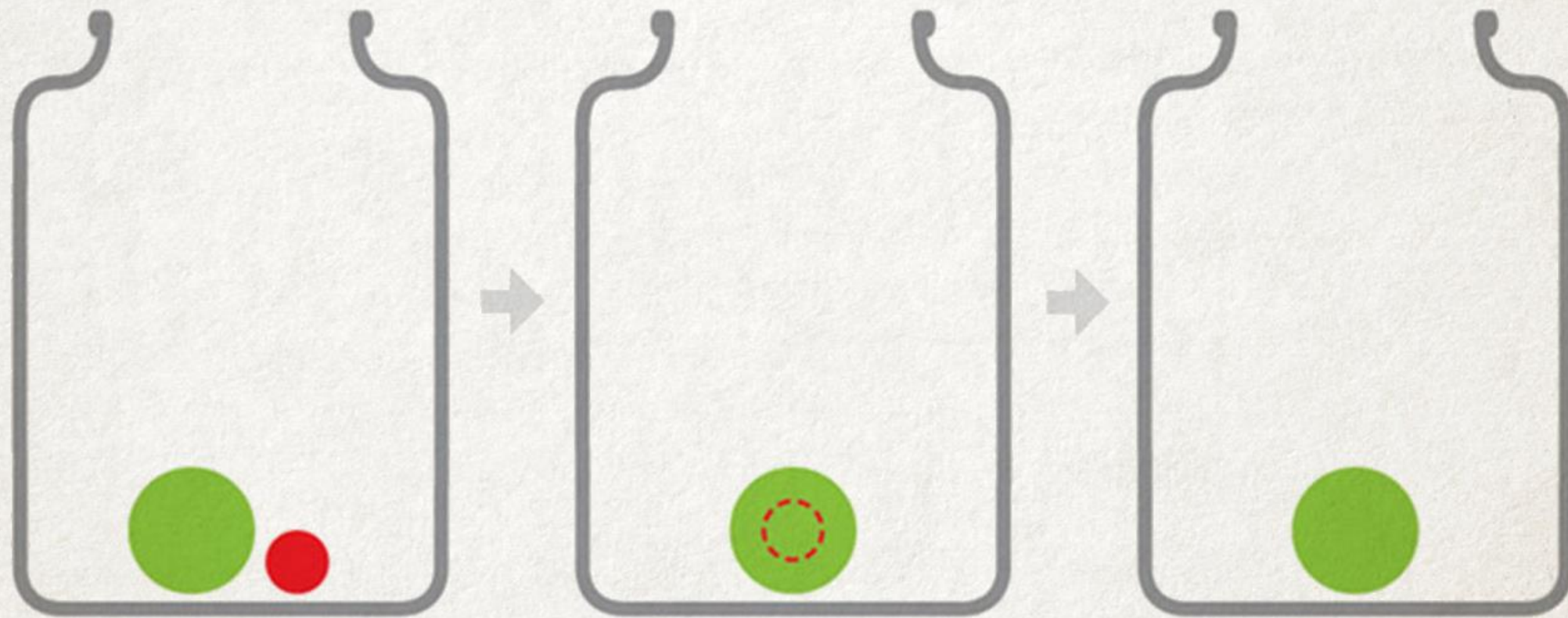


Absorb It

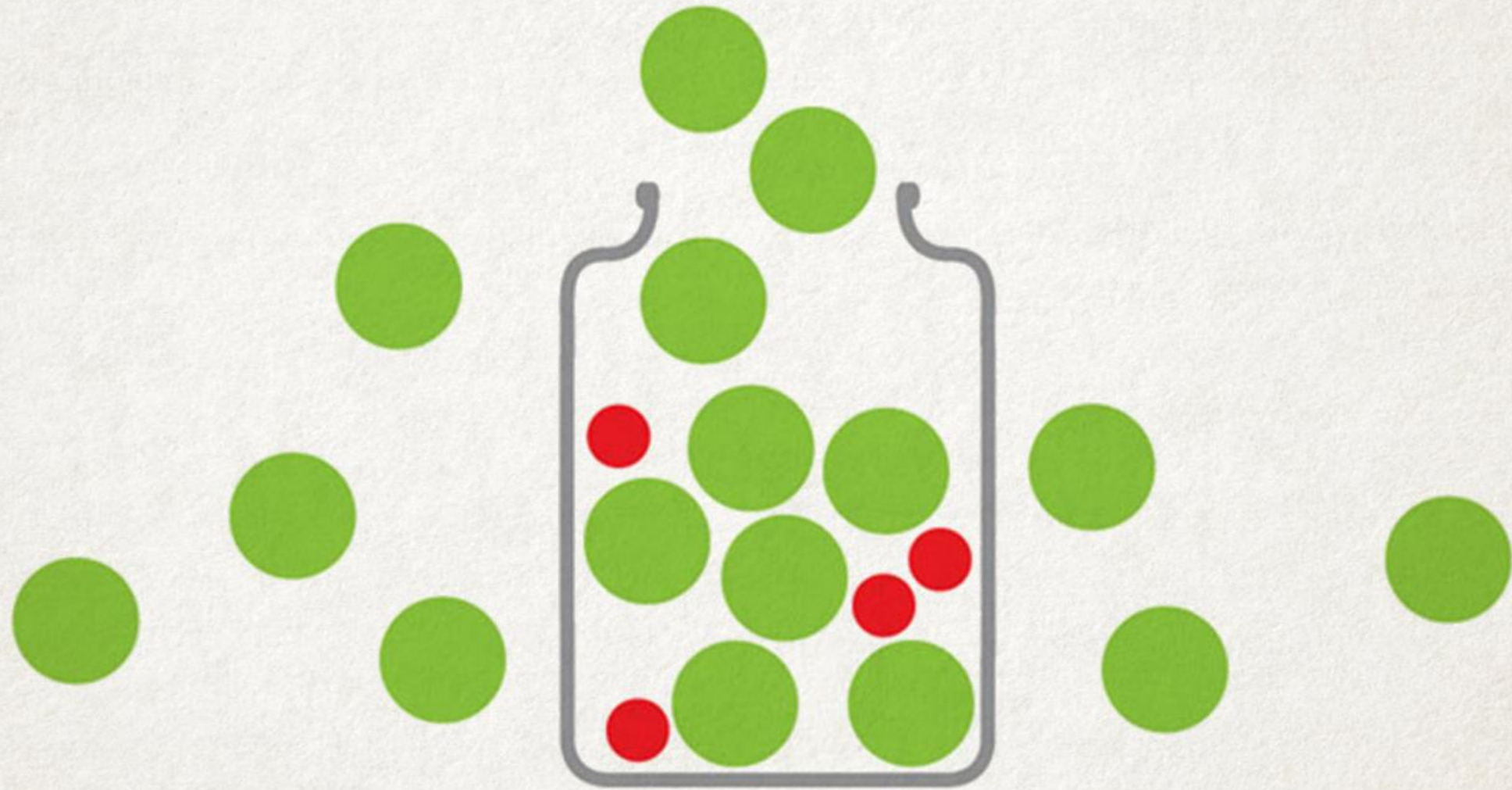
Absorbing an Experience

- Intend to receive the experience into yourself.
- Sense the experience sinking into you.
 - Imagery – Water into a sponge; golden dust sifting down; a jewel into the treasure chest of the heart
 - Sensation – Warm soothing balm
 - Give over to it; let it change you.
- Be aware of ways the experience is rewarding.

And as a bonus, if you like,
you can bring this sense of tranquility
into contact with places inside
that might feel stressed, frustrated,
frazzled, worried, or blue.



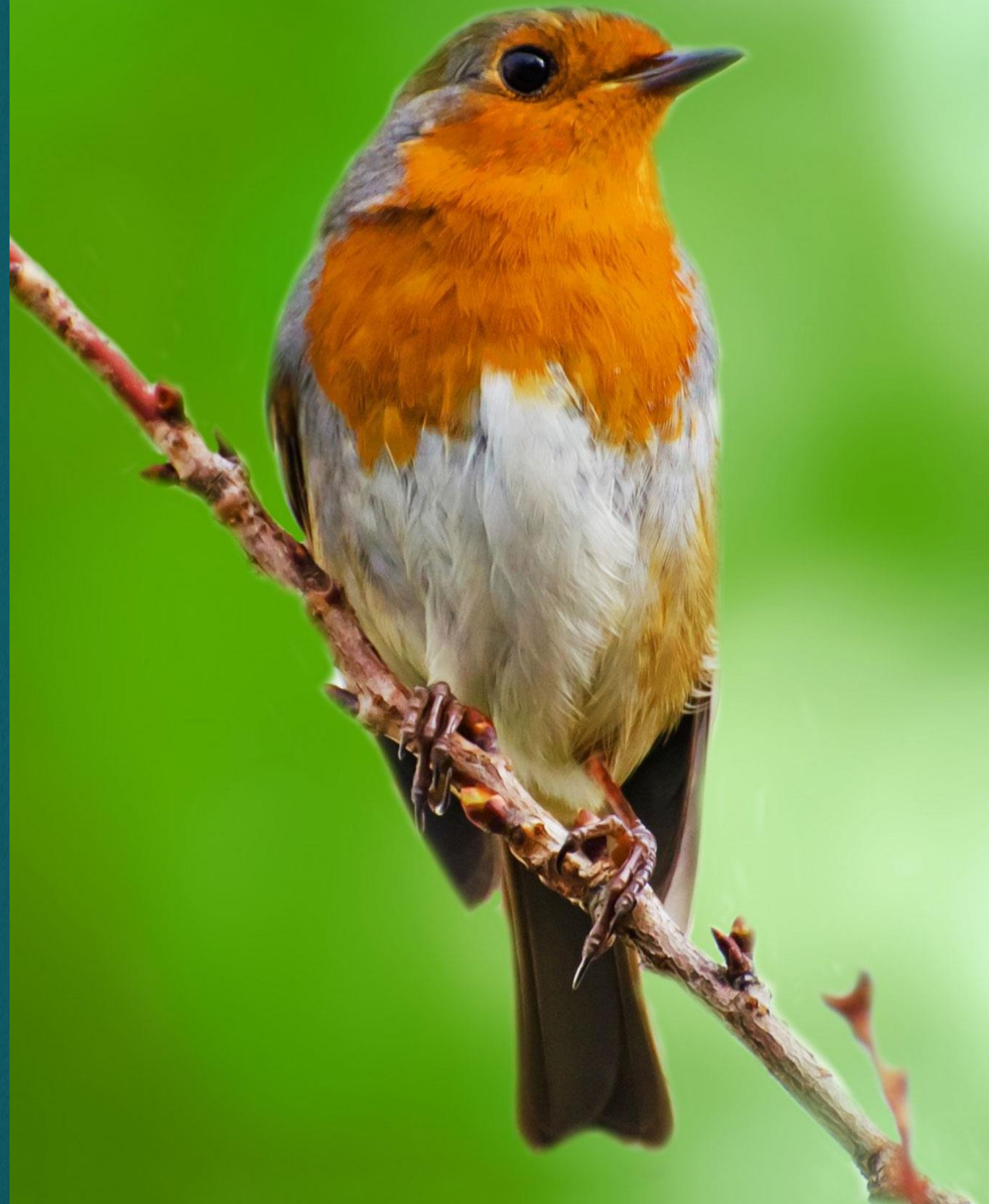
Link Positive & Negative Material



Have It, Enjoy It

*Keep a green bough
in your heart,
and a singing bird
will come.*

Lao Tzu

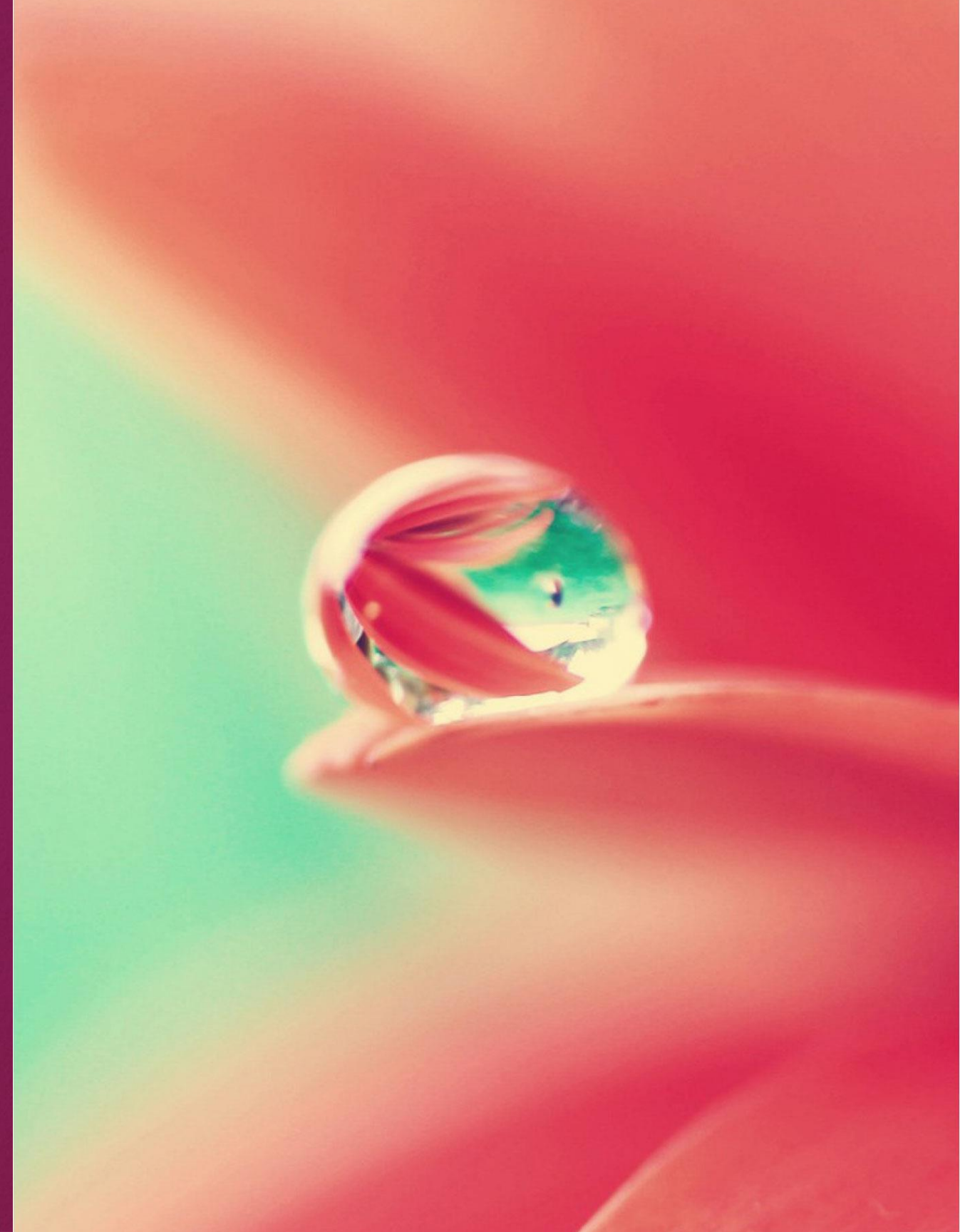


*Think not lightly of good, saying,
“It will not come to me.”*

*Drop by drop is
the water pot filled.*

*Likewise, the wise one,
Gathering it little by little,
Fills oneself with good.*

Dhammapada 9.122

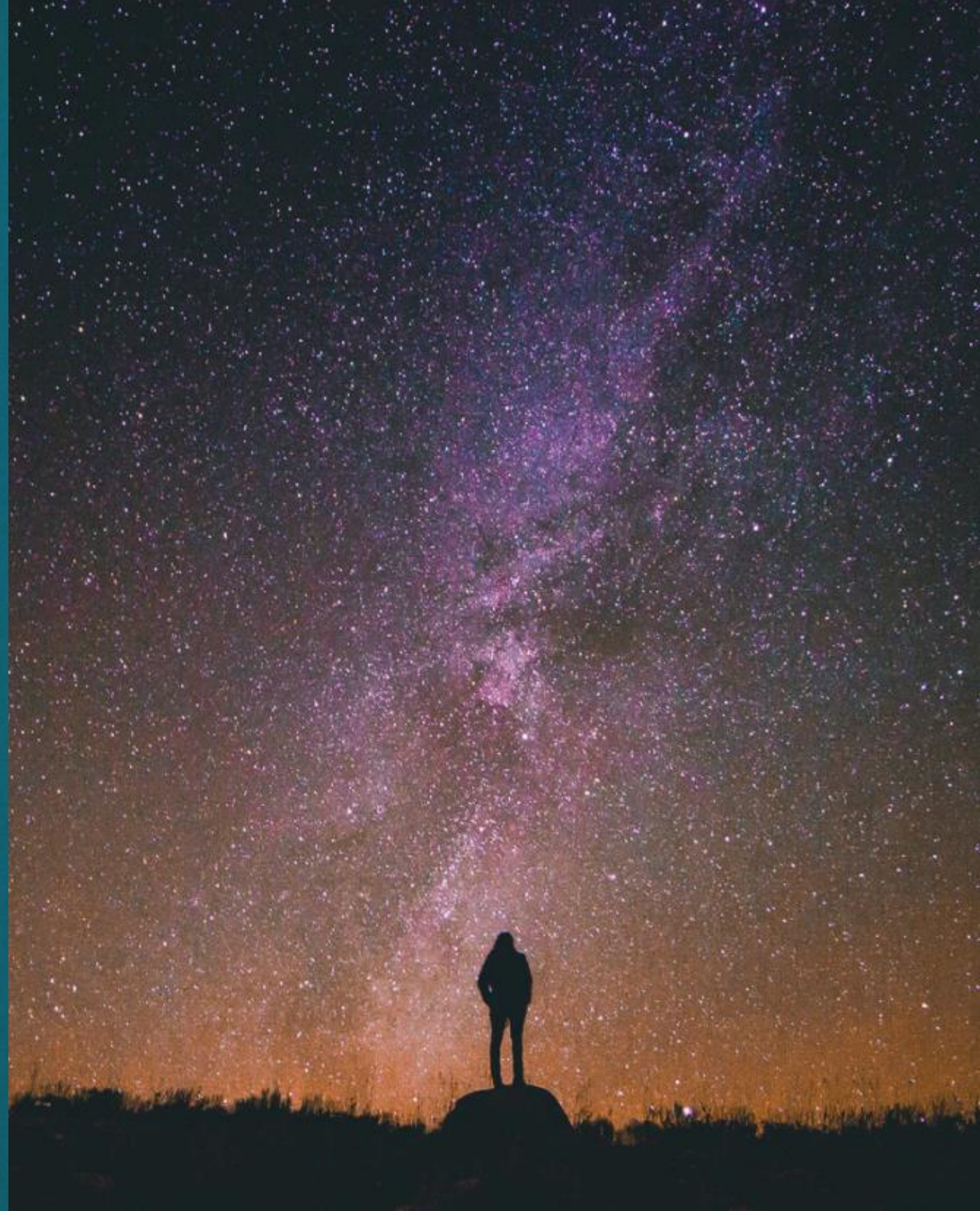


*In the beginning,
nothing came.*

*In the middle,
nothing stayed.*

*In the end,
nothing left.*

Milarepa



Learning

is the strength of strengths,
since it's the one we use
to grow the rest of them.

Knowing how to learn
the things that are important to you
could be the greatest strength of all.

Resting in Fullness

Now let's apply these ideas and tools
to the Buddha's
drive theory of suffering

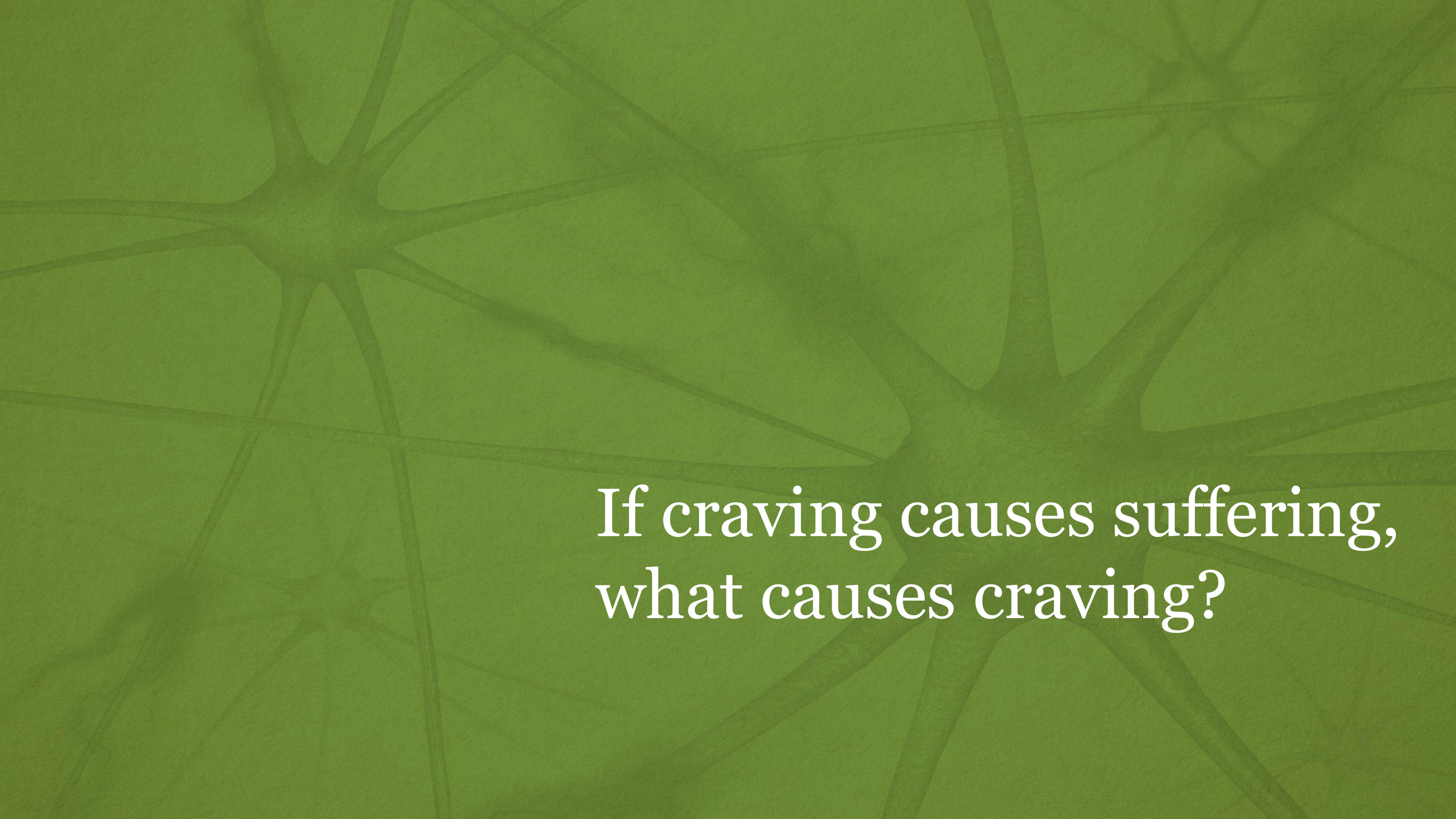
Four Ennobling Truths

There is suffering.

As craving increases, so does suffering.

As craving decreases, so does suffering.

There is an eight-part path that embodies
and leads to the ending of craving.



If craving causes suffering,
what causes craving?

Craving is **embodied**.

It arises in relationship to an animal's **needs** – including a complicated animal like us.

So, what do we need?

Meeting Our Three Fundamental Needs



Safety

Avoiding
harms

(threat response)



Satisfaction

Approaching
rewards

(goal pursuit)

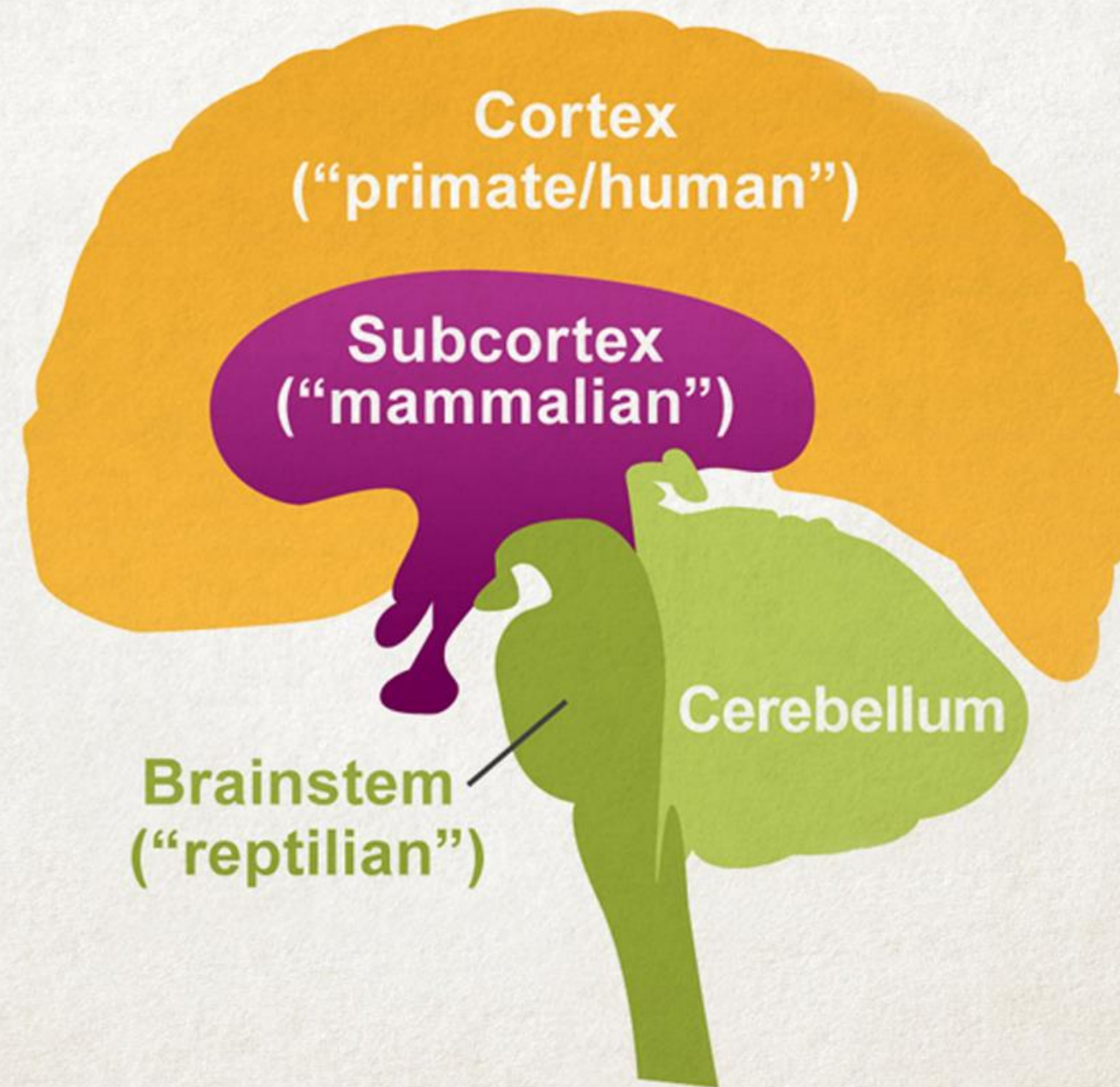


Connection

Attaching
to others

(social engagement)

The Evolving Brain



Cultivation Reduces Craving

Biologically, craving is a drive state based on an underlying sense of deficit or disturbance in meeting our basic needs for safety, satisfaction, and connection.

As we grow inner strengths to meet challenges effectively, and *internalize beneficial experiences of needs met enough*, we develop unconditional inner peace, contentment, and love.

Resting in fullness and balance disentangles us from craving.

With time, even the practice of cultivation falls away – like a raft that is no longer needed once we reach the farther shore.

Can You Stay in the Green Zone When:

Things are
unpleasant?

Things are
pleasant?

Things are
relational?

Resting in the Green Zone

Can you be strong and determined – while feeling safe enough in the present?

Can you pursue your goals – while feeling satisfied enough in the present?

Can you deal with conflicts – while feeling connected enough in the present?

Matching Resources to Needs

Safety

See actual threats
See resources
Grit, fortitude
Feel protected
Alright right now
Relaxation
Calm

Peace

Satisfaction

Gratitude
Gladness
Feel successful
Healthy pleasures
Impulse control
Aspiration
Enthusiasm

Contentment

Connection

Empathy
Compassion
Kindness
Wide circle of “us”
Assertiveness
Self-worth
Confidence

Love

What inner resources
would help you meet your challenges. . .
without craving?

As they grow an unshakable core
of peace, contentment, and love,
people become less vulnerable to
the classic manipulations of
fear and anger,
greed and possessiveness,
and “us” against “them” conflicts.

Which has big implications for our world.

The Heartwood of Practice

This holy life is not for the purpose of gain, honor, and fame, or for the attainment of virtue, concentration, or knowledge and vision.

Rather, it is this unshakeable liberation of mind that is the goal of this holy life, its heartwood, and its end.

Majjhima Nikaya, 30

Coming Home

Love

Contentment

Peace

*Things fall apart.
Tread the path with care.*

Digha Nikaya 16

Thank You

