# Human suffering comes from seeking happiness

where it cannot be found.

Kagyu Samye Ling Guidebook

## Opening into Allness:

# The Practical Neuroscience Of Wholeness and Oneness Experiences

Spirit Rock Meditation Center November 11, 2017

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Wellspring Institute for Neuroscience and Contemplative Wisdom

# Foundations

We'll be exploring experiences of plausible mental/neural factors of the sense of nowness, wholeness, allness, oneness.

#### Common - and Fertile - Ground

# Neuroscience **Psychology**

**Contemplative Practice** 



We ask, "What is a thought?"

We don't know,

yet we are thinking continually.

Venerable Tenzin Palmo

#### A Three-Legged Stool

- In the context of wisdom and virtue (*panna* and *sila*), practice is like a stool with three legs:
- Metta warmheartedness, kindness, compassion
- Sati mindfulness, concentration, seeing clearly
- Bhavana cultivation, learning, growth

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



# SPIRIT ROCK MEDITATION CENTER



Join us for

#### Cultivating Inner Strength - Monastic Daylong [Dana - No Fee Day]

with Ayya Anandabodhi and Ayya Santacitta

on

Sunday, July 8

from 9:30 am - 5 pm.

(Photo by Ed Ritger)

# Steadying the Mind

#### **Basics of Meditation**

- Relax
- Posture that is comfortable and alert
- Simple good will toward yourself
- Awareness of your body
- Focus on something to steady your attention
- Accepting whatever passes through awareness, not resisting it or chasing it
- Gently settling into peaceful well-being

#### **Mindfulness Factors**

- Setting an intention
- Relaxing the body
- Warming the heart
- Feeling safer
- Encouraging positive emotion
- Quieting the mind

#### **Neural Basis of Mindfulness Factors**

- Setting an intention "top-down" frontal, "bottom-up" limbic
- Relaxing the body parasympathetic nervous system
- Warming the heart social engagement system, vagus nerve
- Feeling safer inhibits amygdala/hippocampus alarms
- Encouraging positive emotion dopamine, norepinephrine
- Quieting the mind reducing activity of verbal centers

# Reducing Craving

#### A Telling of the Four Noble Truths

There is suffering.

When craving arises, so does suffering.

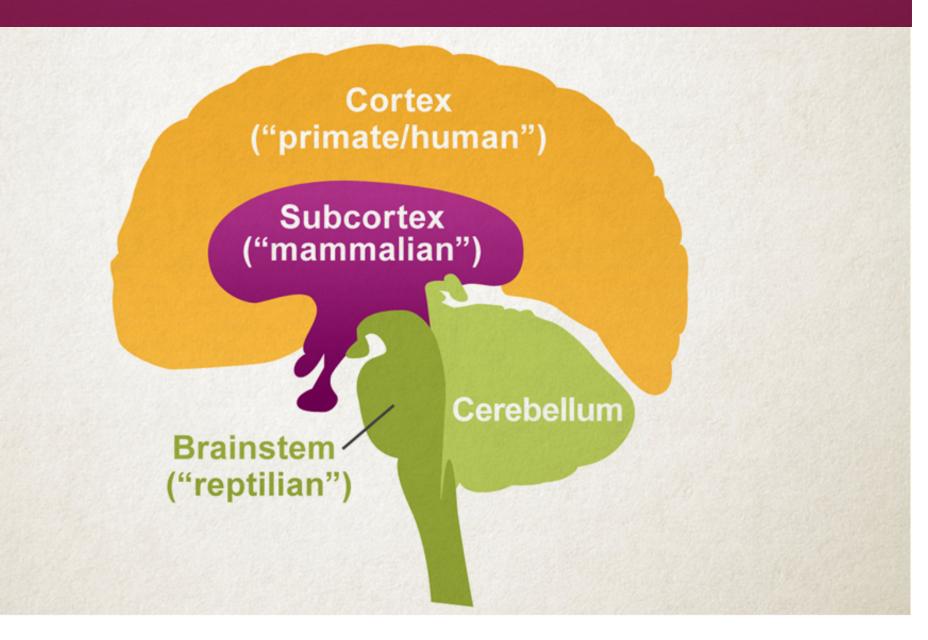
When craving passes away, so does suffering.

There is a path that embodies and leads to the passing away of this craving and suffering.

What causes craving?

What ends these causes?

# The Evolving Brain



#### Our Three Fundamental Needs



safety



satisfaction



connection

# Needs Activated by...



Safety

Unpleasant Pain Threat



Satisfaction

Pleasant Opportunity Loss



Connection

Relational Attraction Rejection

## Needs Met by Three Systems



Safety

**Avoiding** harms



Satisfaction

**Approaching** rewards



Connection

**Attaching** to others

## Needs Feel Met: Responsive Mode



When we feel basically **safe** — not disturbed by **threat** — the Avoiding system goes Responsive, with a sense of **peace**.



When we feel basically satisfied — not disturbed by <u>loss</u> — the Approaching system goes Responsive, with a sense of **contentment**.



When we feel basically connected – not disturbed by rejection – the Attaching system goes Responsive, with a sense of love.

#### Needs Don't Feel Met: Reactive Mode



When we feel

unsafe –

disturbed by

threat – the

Avoiding system

goes Reactive,

with a sense

of fear.



When we feel
dissatisfied –
disturbed by loss –
the Approaching
system goes
Reactive, with
a sense of
frustration.



When we feel
disconnected –
disturbed by
rejection – the
Attaching system
goes Reactive,
with a sense
of heartache.

### The Reactive Mode is Leaving Home

In the **Reactive "red zone,"** the <u>body</u> fires up into the stress response: fight, flight, or freeze; outputs usually exceed inputs; long-term building projects are deferred.

The mind fires up into:

Avoiding

ing Approaching

Attaching

Fear

**Frustration** 

Heartache

This is the brain in its allostatic Reactive, craving mode.

# Coming Home, Staying Home

Meeting your core needs brings you home to the **Responsive** "green zone."

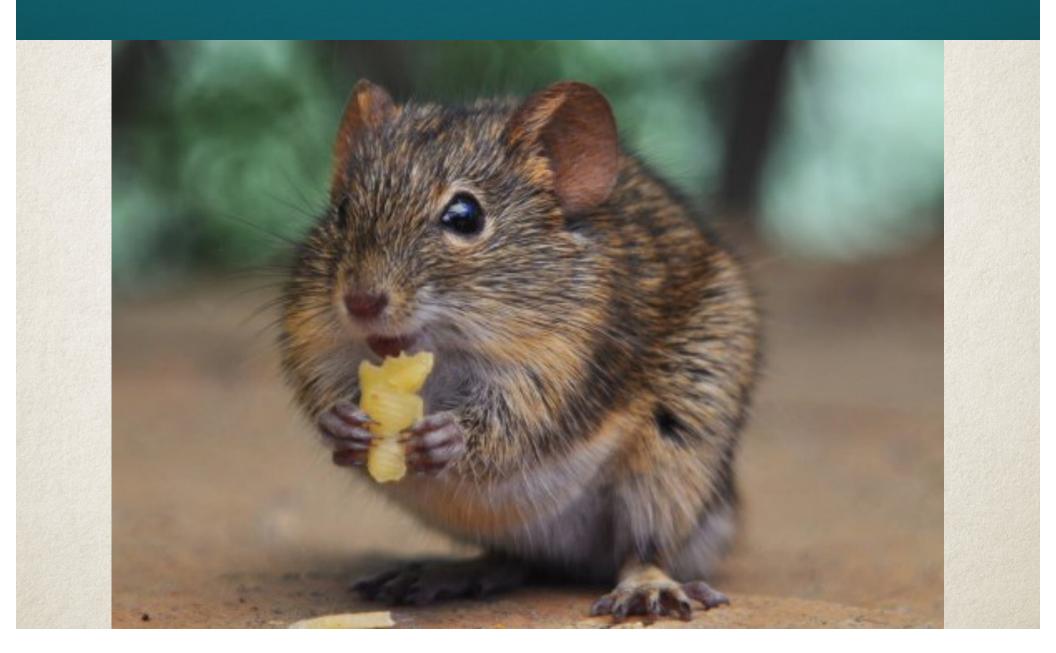
Taking in the good Responsive states grows
Responsive traits. In a wonderful cycle, these traits
promote good states – which can strengthen your
Responsive traits.

Responsive states and traits help you stay Responsive when the world is flashing red.

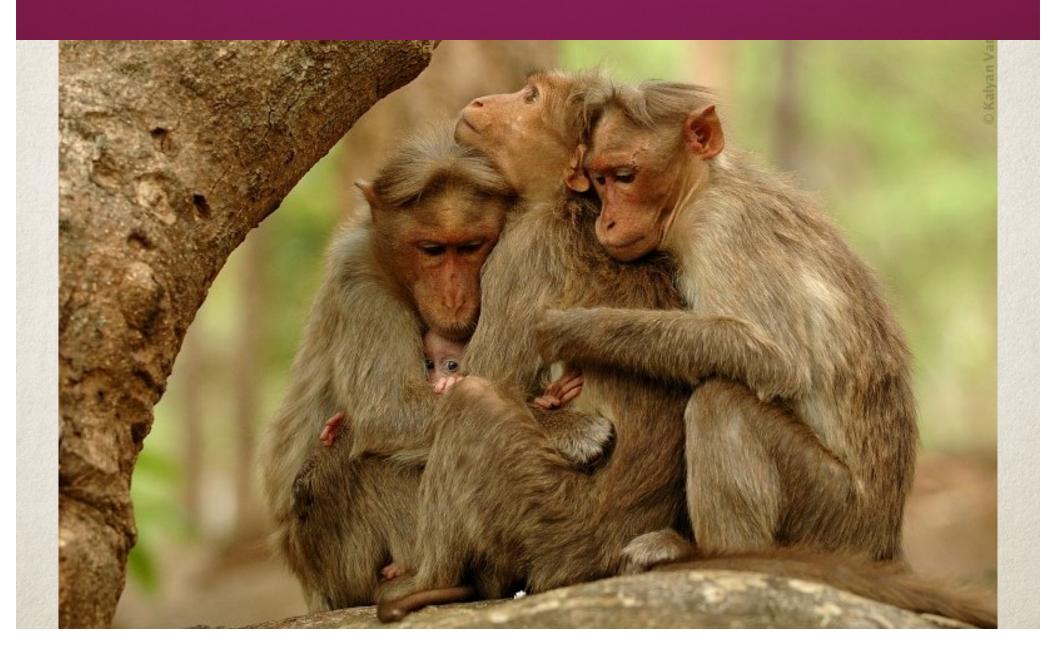
# Pet the Lizard



# Feed the Mouse



# Hug the Monkey



In Buddhism,
we work to expand
the range of life experiences
in which we are free.

**U** Pandita

#### Can You Stay in the Green Zone When:

Things are unpleasant?

Things are pleasant?

Things are heartfelt?

#### **Cultivation Undoes Craving**

We rest the mind upon beneficial states so that the brain may gradually take their shape.

This disentangles us from craving as we increasingly rest in a peace, contentment, and love that is independent of external conditions.

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

# Coming Home

Peace

Contentment

Love

# Resting at the Front Edge of Now

#### **Two Sides of Practice**

- One side of practice is to disentangle from the machinery of craving, purifying the mind, and cultivating factors of awakening.
- The other side is to open directly to what is not craving and suffering.
- "Gradual cultivation, sudden awakening, cultivation, awakening, cultivation . . . Moments of awakening, many times a day."
- We're focusing on abiding as what calls you.

This spiritual life does not have gain, honor, and renown for its benefit, or the attainment of moral discipline for its benefit, or the attainment of concentration for its benefit, or knowledge and vision for its benefit.

But it is this unshakable liberation of mind that is the goal of this spiritual life, its heartwood, and its end.

Let go of the past, let go of the future, let go of the present, and cross over to the farther shore of existence.

With mind wholly liberated, you shall come no more to birth and death.

# Enlightenment is to forget this moment and grow into the next.

Fade into emptiness as you exhale.

Suzuki Roshi

## The Present Moment

- Now is the great mystery: infinitely thin temporally, yet containing everything, including the causes from the past that condition the next moment of the future.
- Imagine super-slow motion mindfulness of the emergent edge of Now, coming into being as it passes away.
- In your brain, the <u>alerting</u> aspects of attention track the leading edge of the "windshield" of consciousness.
- These alerting networks entwine with <u>allocentric</u> networks that support the sense of oneness with all things.

# Letting Go

- Rest in a sense of alrightness . . . of peace, contentment, and love
- Awareness of breathing (or something else changing)
- Letting go, especially when exhaling
- Mindful of endless endings, changing
- Sometimes recognizing what is also true as this moment passes away

# Receiving This Moment

```
Things are happening . . .
No need to understand them,
connect them,
know what they are,
control them . . .
Whoosh, they're racing by.
Just sitting . . .
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Or standing or walking . . . No gaining idea . . . Living on the edge of now.

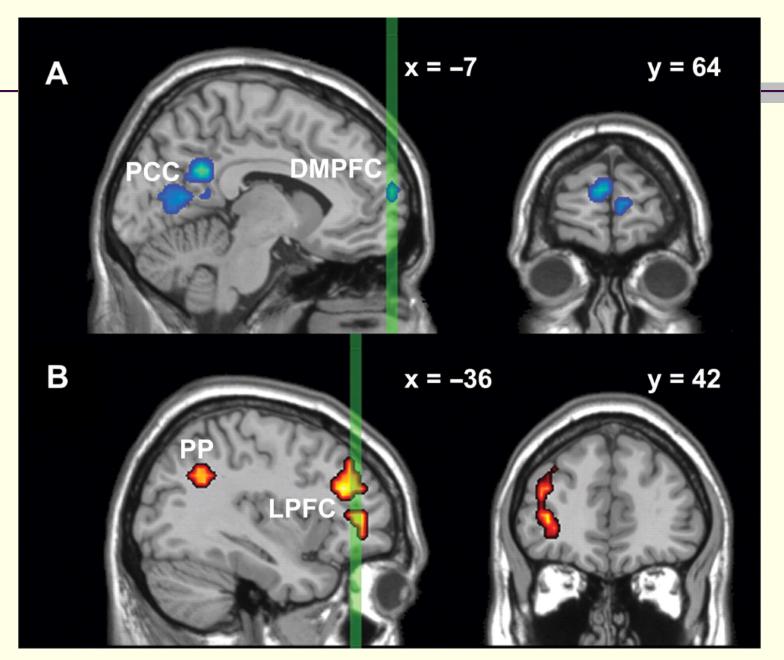
# Abiding Wholly

## The Parts and the Whole

- In the mind, suffering is parts tussling with parts.
- Meanwhile there is always mind as a whole, the totality of phenomenology, all one fabric, including awareness.
- Mind as a whole simply is, never a problem.
- In any moment of being mind as a whole, suffering falls away.
- Being mind as a whole can bring a felt knowing of its nature.

# What helps us experience mind as a whole?

### Self-Focused (blue) and Open Awareness (red)



# Abiding as Mind as a Whole

- Sense the breath in one area. Be aware of multiple sensations as a single experience.
- Gradually expand to include more sensations of breathing as a whole, as a single percept . . . Abiding as a whole body breathing.
- Include sounds: a single unified experience . . . Include sights . . . Thoughts and feelings . . . Including awareness . . . All a single whole . . . Abiding as mind as a whole.

# Opening into Allness

# Allocentric Perspective

- Being-oriented
- Based on more ancient, lower processing streams in the brain that involve lower regions of the thalamus
- "What it is, independent of me"; upper visual field
- "Objective" Things exist in a space in which their location is impersonal, not referring to an observer.
- Pervades kensho and non-dual awareness.

# **Egocentric Perspective**

- Action-oriented Focus on reacting to carrots and sticks
- Based on more recent, upper processing streams: upper portions of thalamus that confer "self" salience; rear of the "default network" (e.g., precuneus, posterior cingulate cortex); parietal regions that construct an enduring and unified sense of "my body in space"
- Establishes "where it is related to me"; lower visual field
- "Subjective" Things exist in relation to me.
- Pervades ordinary consciousness

# The Egocentric/Allocentric Dance

- Normal egocentric/allocentric fluctuations occur ~ 3-4 times a minute.
- As one perspective increases, the other decreases.
- With "contact," allocentric processing increases briefly as the new stimulus is considered in its own right
- Then egocentric processing surges forward as one figures out what to do about the "feeling tone" (pleasant, unpleasant, neutral, relational) of the stimulus.

To study the Way is to study the self.

To study the self is to forget the self.

To forget the self is to be enlightened illuminated lived

by all things.

# Strengthening Allocentric Processing – 1

- Taking in experiences of the allocentric mode regarding reality impersonally, panoramic perspective, little sense of "I," feeling connected – will naturally strengthen its neural substrates.
- Open awareness practices in which there are many moments of new contact would strengthen the "alerting" networks of attention and incline the brain toward allocentric mode.
- Lower regions of the thalamus with concentrations of GABA neurons – inhibit egocentric processing. GABA is calming; training in tranquility could strengthen these 51 GABA-based nodes and reduce egocentrism.

# Strengthening Allocentric Processing – 2

- "Craving" causes egocentric processing (and suffering). Craving itself is caused by a sense of deficit or disturbance in core needs: safety, satisfaction, connection. So repeatedly internalizing the experience of needs being met builds up a sense of fullness and balance, reducing underlying causes of craving and thus egocentric processing.
- We can relate to our <u>mind</u> from an egocentric or allocentric perspective. Suffering comes from parts tussling with other parts within an egocentric frame. So <u>abide as mind as a whole</u>.

# Strengthening Allocentric Processing – 3

■ Each moment of mind depends on <u>a vast network of causes</u>: the body, nature, human culture, and material reality . . . stretching back through human history, the evolution of life, and w-a-y back to the Big Bang.

This moment of experience is the local expression of this allness – like a small ripple contains within itself something of the whole ocean.

The felt recognition of mind depending upon this allness, being an expression of it, is the epitome of allocentric mode.

# When we try to pick out anything by itself, we find it hitched to everything else in the universe.

John Muir

# **Only Allness**

- Much as mind is a whole, the material universe is a whole and can be taken as a whole.
- Going a step further, Allness is everything, including the material universe – from quantum foam to super-clusters of galaxies – as well as life here and everywhere, and one's own mind and that of others.
- Each moment of experience is the local expression of this net of causes: each something embodies everything.
- Allness itself is perfect, never a problem.

Feeling at ease: peace, contentment, love

Tranquil and alert

Aware of the room as a whole, gazing to horizon

Sense of the objective, impersonal; relaxing "self"

Sense of stream of consciousness depending on human culture, the body, life, matter and energy

Recognizing mind as a local rippling of a vast sea of causes, opening into being the sea of allness

# Intimations of Unconditionality

Know the mind.

Shape the mind.

Free the mind.

# WHAT IS IT THAT IS <u>TRUE</u>?



O house-builder, you are seen! You will not build this house again. For your rafters are broken and your ridgepole shattered.

My mind has reached the unconditioned; I have attained the destruction of craving.

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.

# Itivuttaka 2.16

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.

# Congealing into Actuality

- Studies in quantum entanglement suggest that consciousness is necessary for quantum possibility to become particle actuality.
- Consider what is always just prior to this moment of actuality, in the universe as a whole: quantum foam, a field of possibility.
- Perhaps some kind of consciousness is necessary for that field of possibility to congeal into actuality . . . continuously, at the front edge of Now.

# Fertile Neural Noise

- In the neural substrates of the stream of consciousness, fleeting patterns of neural activity are the physical basis of fleeting contents of awareness eddies in a stream that form, stabilize, and disperse.
- These conditioned patterns with less uncertainty and more "signal" require a field of not yet patterned "noise."
- In the classic Buddhist descriptions of the movement through the jhanas toward cessation and nibbana, all signals drop out as the mind becomes profoundly quiet. Then there is only fertile noise: effectively unconditioned, like ultimately unconditionality . . . and liberating.

# Reflections on Unconditionality

- As soon as we conceptualize or label unconditionality, it is no longer unconditioned.
- There is no presumption here that we are moving through the jhanas to cessation.
- Yet many teachers refer to the interpenetration of the relative and absolute, samsara and nirvana, conditioned and unconditioned. It seems possible to grow in our intuition of unconditionality in meditation and daily life. Becoming more accessible to it, more permeable.
- "Moments of awakening . . . many times a day."

Feeling at ease, tranquil and alert

Abiding as mind as a whole, local expression of allness

At the front edge of now

From time to time intuiting the field of unconditioned possibility always just prior to conditioned consciousness: that which is still and unchanging, a kind of ground that allows change to occur.

As it is real for you, for moments or longer, intuiting that your underlying true nature is That.

Be still
Listen to the stones of the wall
Be silent, they try
To speak your

Name.

Listen to the living walls.

Who are you?

Who

Are you? Whose

Silence are you?

**Thomas Merton** 

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### See RickHanson.net for other good books.

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See <a href="https://www.RickHanson.net/key-papers/">www.RickHanson.net/key-papers/</a> for other suggested readings.

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# Supplemental Materials

If one going down into a river, swollen and swiftly flowing, is carried away by the current – how can one help others across?

The Buddha

# The root of Buddhism is compassion, and the root of compassion is compassion for oneself.

**Pema Chodron** 

### **Key Mental/Neural Factors**

- Reducing craving by resting in the "green zone" of peace, contentment, and love
- Insight into our standard, doomed, and harmful strategies for happiness – and the possibility of liberation
- Letting go into endings
- Receiving beginnings at the edge of now
- Being mind as a whole
- Experiencing this moment as a local ripple of allness
- Intimations of unconditionality

## Matching Resources to Needs

Safety

Alertness Grit Resolution **Protections** Calm Relaxation

**Peace** 

Satisfaction Connection

Gratitude Gladness **Capabilities** Restraint **Ambition Enthusiasm** 

Contentment

**Empathy** Compassion **Kindness Assertiveness** Self-worth Confidence

Love

#### Where Do We Seek?

- In the material realm: things, people, places, events, situations
- In the mental realm: experiences, conscious and unconscious processes
- In both, we try to hold on to what is changing.
- Our efforts are not merely incapable of bringing us lasting happiness: they are tense, pressured, contracted, and frustrated: saturated with suffering.

## The Feeling of Not Craving or Suffering

- Somehow we recognize an alternative to the conventional doomed machinery of happiness.
- Plopping, stopping, giving up, not fabricating, not concocting, letting go
- Taking refuge in the nature of things; things change but their nature doesn't.
- And perhaps something transcendental as well.

## "Bahiya, you should train yourself thus."

In reference to the seen, there will be only the seen. To the heard, only the heard. To the sensed, only the sensed. To the cognized, only the cognized.

When for you there will be only the seen in reference to the seen, only the heard in the heard, only the sensed in the sensed, only the cognized in the cognized, then there's no you in that.

When there's no you in that, there's no you there. When there's no you there, you are neither here nor yonder nor between the two.

This, just this, is the end of all suffering.

## Pointing directly to the heart-mind, see your own nature and become Buddha.

Hakuin