

# The Buddha on Lovingkindness

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*Wishing: In gladness and in safety, may all beings be at ease.*

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*Let none through anger or ill-will wish harm upon another. Even as a mother protects with her life her child, her only child, so with a boundless heart should one cherish all living beings; radiating kindness over the entire world: spreading upwards to the skies, and downwards to the depths, outwards and unbounded, freed from hatred and ill-will.*

*One should sustain this recollection.*

*This is said to be the sublime abiding.*

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***The Neurodharma of Love and Power:  
Practical Tools for  
Empathy, Kindness, and Assertiveness***

**Openground, Australia  
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**The Wellspring Institute for Neuroscience and Contemplative Wisdom**

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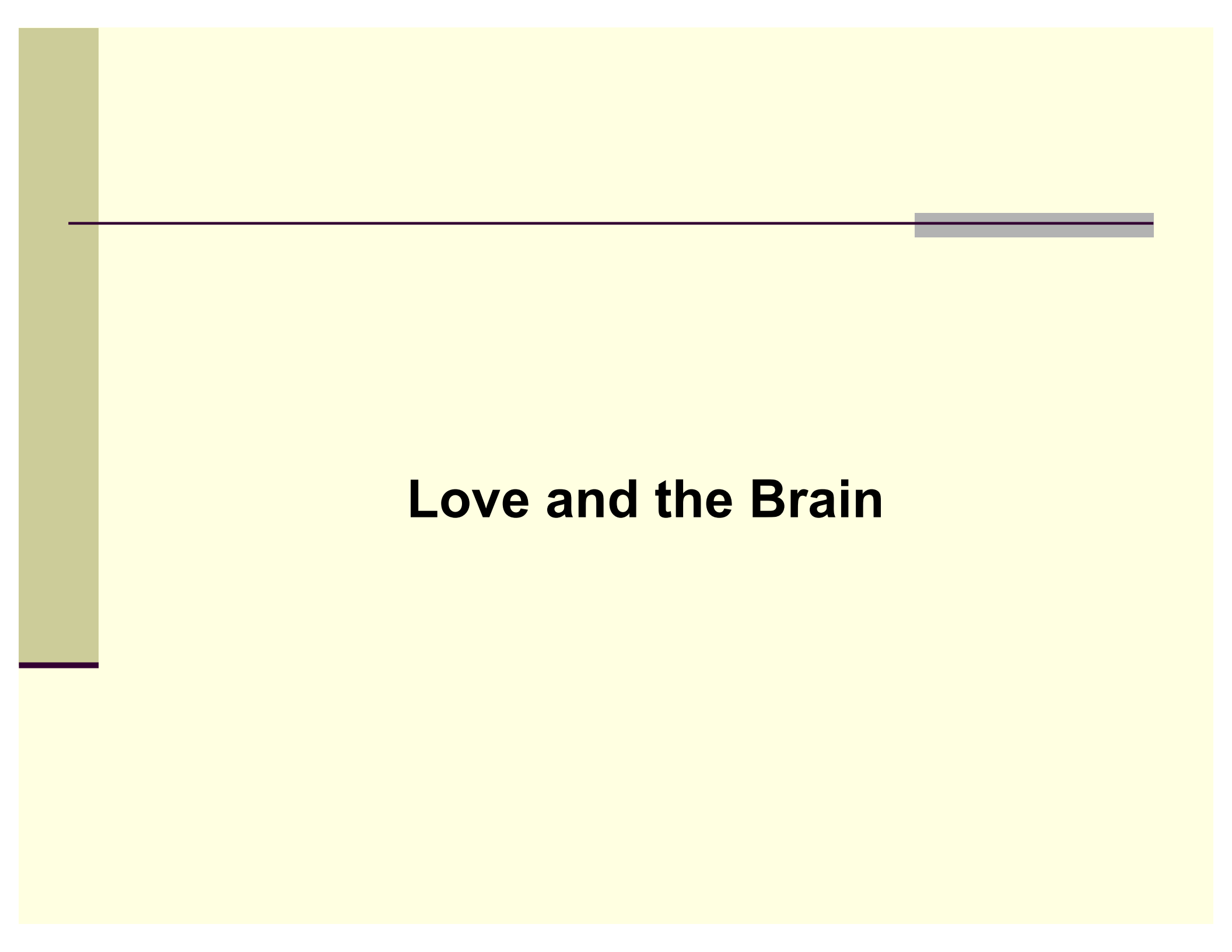
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# Topics

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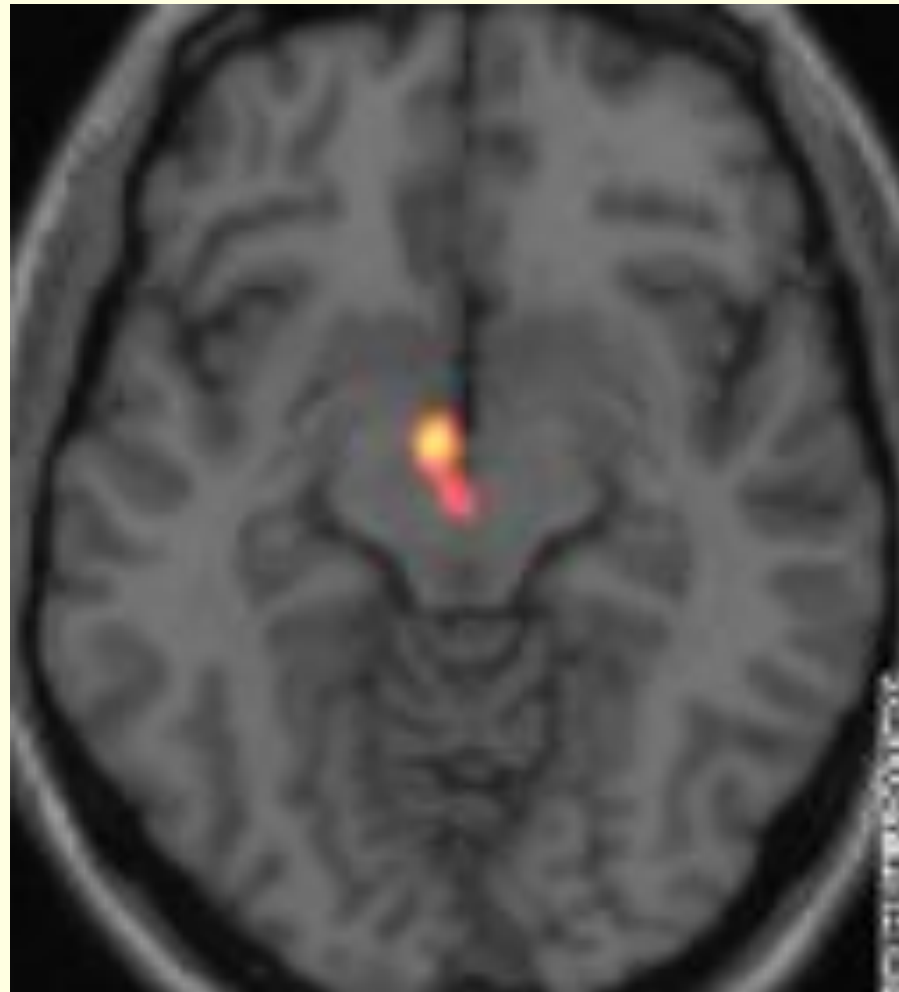
- **Love and the brain**
- **Your loving nature**
- **Generosity**
  
- **Two wolves in the heart**
  
- **Empathy**
  
- **Relationship virtues**
  
- **Universal compassion**

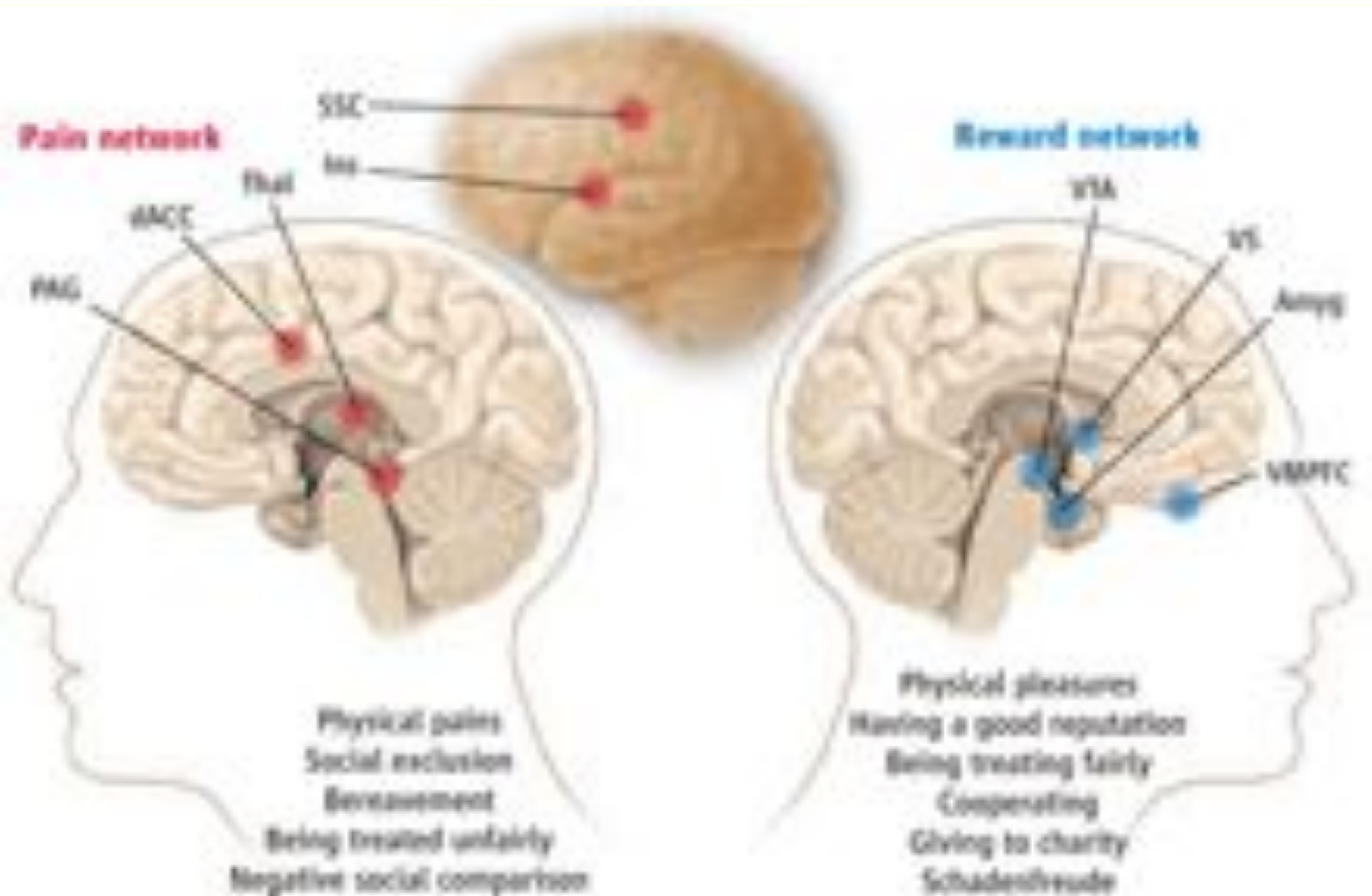


# **Love and the Brain**

# Rewards of Love

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Pain network: Dorsal anterior cingulate cortex (dACC), insula (Ins), somatosensory cortex (SSC), thalamus (Thal), and periaqueductal gray (PAG).

Reward network: Ventral tegmental area (VTA), ventral striatum (VS), ventromedial prefrontal cortex (VMPFC), and amygdala (Amyg).

# Oxytocin

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- It promotes bonding between parents and children - and between mates and friends, keeping kids alive
- In women, it triggers the let-down reflex in nursing, and tend-and-befriend behaviors during stress.
- In both sexes, it dampens the stress response; it feels pleasurable, relaxed, a “rightness.”
- It is stimulated by:
  - Physical contact (especially skin to skin)
  - Moving together harmoniously (e.g., dancing)
  - Warm feelings of rapport or love; devotion
  - Imagination of these
  - Nipple stimulation
  - Orgasm



**Can you feel connected?**

**Can you feel cared about?**



**Your Loving Nature**

# The Social Brain

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- Social capabilities have been a primary driver of brain evolution.
- Reptiles and fish avoid and approach. Mammals and birds *attach* as well - especially primates and humans.
- Mammals and birds have bigger brains than reptiles and fish.
- The more social the primate species, the bigger the cortex.
- Since the first hominids began making tools ~ 2.5 million years ago, the brain has roughly tripled in size, much of its build-out devoted to social functions (e.g., cooperative planning, empathy, language). The growing brain needed a longer childhood, which required greater pair bonding and band cohesion.



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*All sentient beings developed through natural selection in such a way that pleasant sensations serve as their guide, and especially the pleasure derived from sociability and from loving our families.*

Charles Darwin



















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*Ananda approached the Buddha and said, “Venerable sir, this is half of the spiritual life: good friendship, good companionship, good comradeship.”*

*“Not so, Ananda! Not so Ananda!” the Buddha replied.  
“This is the entire spiritual life. When you have a good friend, a good companion, a good comrade, it is to be expected that you will develop and cultivate the Noble Eightfold Path.”*

[adapted from *In the Buddha's Words*, Bhikkhu Bodhi]

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*In the cherry blossom's shade  
there is no thing  
as a stranger*

Issa



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*If there is anything I have learned about [people], it is that there is a deeper spirit of altruism than is ever evident.*

*Just as the rivers we see are minor compared to the underground streams, so, too, the idealism that is visible is minor compared to what people carry in their hearts unreleased or scarcely released.*

*(Hu)mankind is waiting and longing for those who can accomplish the task of untying what is knotted, and bringing these underground waters to the surface.*

Albert Schweitzer











# **Two Wolves in the Heart**

# Us and Them

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- Core evolutionary strategy: within-group cooperation, and between-group aggression.
- Both capacities and tendencies are hard-wired into our brains, ready for activation. And there is individual variation.
- Our biological nature is much more inclined toward cooperative sociability than toward aggression and indifference or cruelty. We are just very reactive to social distinctions and threats.
- That reactivity is intensified and often exploited by economic, cultural, and religious factors.
- Two wolves in your heart:
  - Love sees a vast circle in which all beings are “us.”
  - Hate sees a small circle of “us,” even only the self.

*Which one will you feed?*

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*In between-family fights, the baboon's 'I'  
expands to include all of her close kin;  
in within-family fights,  
it contracts to include only herself.*

*This explanation serves for baboons  
as much as for the Montagues and Capulets.*

Dorothy Cheney and Robert Seyfarth



**On Your Own Side**

# Self-Goodwill

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- Moral teachings tell us to be compassionate and kind toward all beings. And that whatever we do to the world affects us, and whatever we do to ourselves affects the world.
- You are one of the “all beings!” And kindness to yourself benefits the world, while hurting yourself harms the world.
- It’s a general moral principle that the more power you have over someone, the greater your duty is to use that power wisely. Well, who is the one person in the world you have the greatest power over? It’s your future self. You hold that life in your hands, and what it will be depends on how you care for it.
- Consider yourself as an innocent child, as deserving of care and happiness as any other.

# Feeling Cared About

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- As we evolved, we increasingly turned to and relied on others to feel safer and less threatened.
  - Exile from the band was a death sentence in the Serengeti.
  - Attachment: relying on the secure base
  - The well-documented power of social support to buffer stress and aid recovery from painful experiences
- Methods:
  - Recognize it's kind to others to feel cared about yourself.
  - Look for occasions to feel cared about and take them in.
  - Deliberately bring to mind the experience of being cared about in challenging situations.
  - Be caring yourself.

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

Pema Chodren

# Self-Compassion

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- Compassion is the wish that a being not suffer, combined with sympathetic concern. Self-compassion simply applies that to oneself. It is not self-pity, complaining, or wallowing in pain.
- Studies show that self-compassion buffers stress and increases resilience and self-worth.
- But self-compassion is hard for many people, due to feelings of unworthiness, self-criticism, or “internalized oppression.” To encourage the neural substrates of self-compassion:
  - Get the sense of being cared about by someone else.
  - Bring to mind someone you naturally feel compassion for
  - Sink into the experience of compassion in your body
  - Then shift the compassion to yourself, perhaps with phrases like: “May I not suffer. May the pain of this moment pass.”

# “Anthem”

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*Ring the bells that still can ring  
Forget your perfect offering  
There is a crack in everything  
That's how the light gets in  
That's how the light gets in*

Leonard Cohen

# Feeling Strong

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- Feeling the strength in awareness itself, never disturbed or stained by what passes through it
- Sense the vitality in your body.
- Recall a time you felt really strong. Energy and strength in your breathing . . . your body . . . your whole being . . .
- A spacious strength that lets others flow through
- In relationship and at peace
- Relaxed in a spacious world; no need for struggle



**Empathy**

# What Is Empathy?

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- It is sensing, feeling, and understanding how it is for the other person. In effect, you *simulate* his or her inner world.
- It involves (sometimes subtly) all of these elements:
  - Bodily resonance
  - Emotional attunement
  - Conceptual understanding
- Empathy is usually communicated, often tacitly.
- We can give empathy, we can receive it, and we can ask for it.

# Neural Substrates of Empathy

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- Three *simulating* systems:
  - Actions: “mirror” systems; temporal-parietal
  - Feelings: resonating emotionally; insula
  - Thoughts: “theory of mind”; prefrontal cortex
- These systems interact with each other through association and active inquiry.
- They produce an automatic, continual re-creation of aspects of others’ experience.

# Empathy Skills

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- Pay attention.
- Be open.
- Read emotion in face and eyes.
- Sense beneath the surface.
- Drop aversion (judgments, distaste, fear, anger, withdrawal).
- Investigate actively.
- Express empathic understanding:
  - Reflect the content
  - Resonate with the tone and implicit material
  - Questions are fine
  - Offer respect and wise speech throughout

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**Can you attend to the postures, facial expressions,  
and movements of another person?**

**Can you attune to and feel something of the  
emotions of another person?**

**Can you have some sense of the thoughts, hopes,  
and concerns of another person?**

# Reflections about Empathy

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- You're more likely to get empathy if you're:
  - Open, present
  - Honest, real, authentic
  - Reasonably clear
  - Responsible for your own experience
  - Taking it in when you feel felt
- Empathy can be negotiated:
  - Name it as a topic in the relationship
  - Follow NVC format: "When X happens, I feel Y, because I need Z. So I request \_\_\_\_\_."
  - Stay with it.

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*If we could read the secret history  
of our enemies,  
we should find in each [person's] life  
sorrow and suffering enough  
to disarm any hostility.*

Henry Wadsworth Longfellow



# **Compassion and Lovingkindness**



# The Wisdom of Connection

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*A human being is a part of a whole, called by us "universe," a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest... a kind of optical delusion of his consciousness.*

*This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us.*

*Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty.*

Albert Einstein

# The Buddha on Lovingkindness

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*One should sustain this recollection.*

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# Lovingkindness Practice

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- Types of wishes

- Safety
- Health
- Happiness
- Ease

- Types of beings


- Self
- Benefactor
- Friend
- Neutral
- Difficult

- Continually “omitting none” in all directions

# Feeding the Wolf of Love

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- Focus on similarities between “us” and “them.”
- Consider others as young children.
- Notice good things about neutral or unpleasant people.
- Bring to mind the sense of someone who cares about you.
- Keep extending out the sense of “us” to include everyone.
- Consider others as your mother or dear friend in a past life.
- Restraint about over-identifying with “us”
- Reflect on the suffering of so many people in the world.
- Self-generate feelings of kindness and love.



# **Relationship Virtues**

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*Wisdom is . . . all about understanding the underlying spacious and empty quality of the person and of all experienced phenomena.*

*To attain this quality of deep insight, we must have a mind that is quiet and malleable.*

*Achieving such a state of mind requires that we first develop the ability to regulate our body and speech so as to cause no conflict.*

Venerable Ani Tenzin Palmo

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*There are those who do not realize that  
one day we all must die.*

*But those who do realize this  
settle their quarrels.*

The Buddha

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*If you let go a little,  
you will have a little happiness.*

*If you let go a lot,  
you will have a lot of happiness.*

*If you let go completely,  
you will be completely happy.*

Ajahn Chah

# Benefits of Unilateral Virtue

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- It simplifies things: all you have to do is live by your own code, and others will do whatever they do.
- It feels good in its own right; it brings peace of mind, “the bliss of blamelessness.”
- It minimizes inflammatory triggers, and encourages good behavior in others.
- It stands you on the moral high ground.
- It teaches you what you can ask for from others

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**What is your own code of relationship virtues?**

**How will it benefit you and others to undertake the training aspiration of living by that code?**

# Wise Speech

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- Well-intended
- True
- Beneficial
- Timely
- Expressed without harshness
- If possible: wanted

# Other Relationship Virtues

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- Give life and encouragement. Do not kill or devalue.
- Be generous. Do not steal or otherwise take what is not freely offered.
- Create pleasure without attaching to it. Do not harm yourself or others through the pursuit of pleasure, including sexuality.
- Speak for the benefit of yourself and others. Do not lie
- Foster clarity and good judgment. Do not use media, activities, or intoxicants in ways that cloud the mind and lead to heedlessness.
- The fundamental principle of non-harming . . . including oneself
- These are aids to practice, not rules that are a sin to break.

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**What is your own code of relationship virtues?**

**How will it benefit you and others to undertake the training aspiration of living by that code?**



# **Assertiveness**

# Healthy Assertiveness

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What it is: Speaking your truth and pursuing your aims in the context of relationships

What supports it:

- Being on your own side
- Self-compassion
- Naming the truth to yourself
- Refuges: Three Jewels, reason, love, nature, God
- Taking care of the big things so you don't grumble about the little ones
- Health and vitality

# Healthy Assertiveness: How to Do It - 1

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- Know your aims; stay focused on the prize; lose battles to win wars
- Ground in empathy, compassion, and love
- Practice unilateral virtue

# Healthy Assertiveness: How to Do It - 2

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- Communicate for yourself, not to change others
  - Wise Speech; be especially mindful of tone
  - NVC: “When X happens, I feel Y because I need Z.”
  - Dignity and gravity
  - Distinguish empathy building (“Y”) from policy-making
- If appropriate, negotiate solutions
  - Establish facts as best you can (“X”)
  - Find the deepest wants (“Z”)
  - Focus mainly on “from now on”
  - Make clear plans, agreements
  - Scale relationships to their actual foundations

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**So that all cubs are our own . . .**

**All beings are our clan . . .**

**All life, our relatives . . .**

**The whole earth, our home . . .**

# Great Books

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See [www.RickHanson.net](http://www.RickHanson.net) for other great books.

- Austin, J. 2009. *Selfless Insight*. MIT Press.
- Begley, S. 2007. *Train Your Mind, Change Your Brain*. Ballantine.
- Carter, C. 2010. *Raising Happiness*. Ballantine.
- Hanson, R. (with R. Mendius). 2009. *Buddha's Brain: The Practical Neuroscience of Happiness, Love, and Wisdom*. New Harbinger.
- Johnson, S. 2005. *Mind Wide Open*. Scribner.
- Keltner, D. 2009. *Born to Be Good*. Norton.
- Kornfield, J. 2009. *The Wise Heart*. Bantam.
- LeDoux, J. 2003. *Synaptic Self*. Penguin.
- Linden, D. 2008. *The Accidental Mind*. Belknap.
- Sapolsky, R. 2004. *Why Zebras Don't Get Ulcers*. Holt.
- Siegel, D. 2007. *The Mindful Brain*. Norton.
- Thompson, E. 2007. *Mind in Life*. Belknap.

# Key Papers - 1

---

See [www.RickHanson.net](http://www.RickHanson.net) for other scientific papers.

- Atmanspacher, H. & Graben, P. 2007. Contextual emergence of mental states from neurodynamics. *Chaos & Complexity Letters*, 2:151-168.
- Baumeister, R., Bratlavsky, E., Finkenauer, C. & Vohs, K. 2001. Bad is stronger than good. *Review of General Psychology*, 5:323-370.
- Braver, T. & Cohen, J. 2000. On the control of control: The role of dopamine in regulating prefrontal function and working memory; in *Control of Cognitive Processes: Attention and Performance XVIII*. Monsel, S. & Driver, J. (eds.). MIT Press.
- Carter, O.L., Callistemon, C., Ungerer, Y., Liu, G.B., & Pettigrew, J.D. 2005. Meditation skills of Buddhist monks yield clues to brain's regulation of attention. *Current Biology*. 15:412-413.

# Key Papers - 2

---

- Davidson, R.J. 2004. Well-being and affective style: neural substrates and biobehavioural correlates. *Philosophical Transactions of the Royal Society*. 359:1395-1411.
- Farb, N.A.S., Segal, Z.V., Mayberg, H., Bean, J., McKeon, D., Fatima, Z., and Anderson, A.K. 2007. Attending to the present: Mindfulness meditation reveals distinct neural modes of self-reflection. *SCAN*, 2, 313-322.
- Gillihan, S.J. & Farah, M.J. 2005. Is self special? A critical review of evidence from experimental psychology and cognitive neuroscience. *Psychological Bulletin*, 131:76-97.
- Hagmann, P., Cammoun, L., Gigandet, X., Meuli, R., Honey, C.J., Wedeen, V.J., & Sporns, O. 2008. Mapping the structural core of human cerebral cortex. *PLoS Biology*. 6:1479-1493.
- Hanson, R. 2008. Seven facts about the brain that incline the mind to joy. In *Measuring the immeasurable: The scientific case for spirituality*. Sounds True.

# Key Papers - 3

---

- Lazar, S., Kerr, C., Wasserman, R., Gray, J., Greve, D., Treadway, M., McGarvey, M., Quinn, B., Dusek, J., Benson, H., Rauch, S., Moore, C., & Fischl, B. 2005. Meditation experience is associated with increased cortical thickness. *Neuroreport*. 16:1893-1897.
- Lewis, M.D. & Todd, R.M. 2007. The self-regulating brain: Cortical-subcortical feedback and the development of intelligent action. *Cognitive Development*, 22:406-430.
- Lieberman, M.D. & Eisenberger, N.I. 2009. Pains and pleasures of social life. *Science*. 323:890-891.
- Lutz, A., Greischar, L., Rawlings, N., Ricard, M. and Davidson, R. 2004. Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *PNAS*. 101:16369-16373.
- Lutz, A., Slager, H.A., Dunne, J.D., & Davidson, R. J. 2008. Attention regulation and monitoring in meditation. *Trends in Cognitive Sciences*. 12:163-169.

# Key Papers - 4

---

- Rozin, P. & Royzman, E.B. 2001. Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*, 5:296-320.
- Takahashi, H., Kato, M., Matsuura, M., Mobbs, D., Suhara, T., & Okubo, Y. 2009. When your gain is my pain and your pain is my gain: Neural correlates of envy and schadenfreude. *Science*, 323:937-939.
- Tang, Y.-Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., Yu, Q., Sui, D., Rothbart, M.K., Fan, M., & Posner, M. 2007. Short-term meditation training improves attention and self-regulation. *PNAS*, 104:17152-17156.
- Thompson, E. & Varela F.J. 2001. Radical embodiment: Neural dynamics and consciousness. *Trends in Cognitive Sciences*, 5:418-425.
- Walsh, R. & Shapiro, S. L. 2006. The meeting of meditative disciplines and Western psychology: A mutually enriching dialogue. *American Psychologist*, 61:227-239.

## *Where to Find Rick Hanson Online*

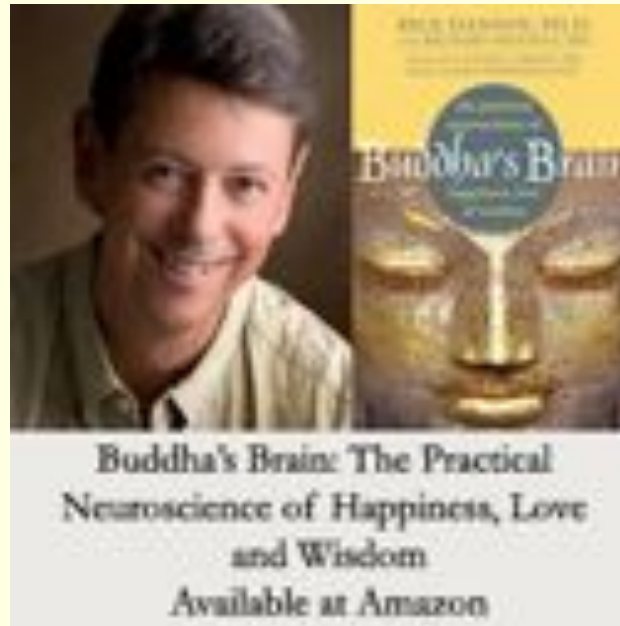
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