Balance and the Mind

We know a lot about the body. We are much less certain about the mind. What is this strange creature that observes itself thinking, feeling, and acting? Is it all in the brain? In the hormones? In the ether? All of the above? Does it matter?

I have a new favorite book: *Buddha's Brain*, by Rick Hanson with Richard Mendius. The authors combine their training in neurology, neuropsychology, and personal meditation practice to bring fresh perspective to the question of mind.

We know that the brain drives our behavior; we are less aware that behavior can change the brain. Neural pathways that generate perceptions and desires are strengthened by repeated use. The brain is more inclined to choose food if we habitually overeat. It goes to straight to anger if we do so often. It opens to optimism if we practice seeing the glass half full.

Balancing the mind calls for an optimal combination of stimulation and focus. Evolution has favored brains that constantly scan the environment for threats. Those who remained alert, watching and listening for predators, survived; those who slept soundly or focused on one task at a time were eaten. This primitive bias is an advantage when driving on a freeway. It is a liability when writing an article, completing the project at hand, or listening to a troubled friend.

As humans we can watch ourselves as we think, choose and act. We can use our observations to build new habits over time. What is the balance between stimulation and calm that works for you? Do you want more capacity for focus, or less inclination to boredom? Do you want to act more quickly, or to look longer before you leap? Neither end of the spectrum meets all our needs, and each of us seeks a different tipping point.

Hanson proposes that, in today's environment, we often wish for more calm and focus than we currently manage. I find that is true for me. How about you? *Buddha's Brain* explores the practice of meditation, training the brain to be less reactive and more at peace. Try it out!

Your Brain on Drugs: Equanimity

Do you remember the public service ads? “This is your brain. This is your brain on drugs.” I am reminded of that image when I learn more about the brain and its many marvels. To a degree, our brains are always on drugs. Those drugs are the hormones that regulate everything from perceptions to emotions, from self-defense to mystical experience.

Acoording to *Buddha’s Brain,* the human brain is designed for happiness. It aims for a dynamic balance between excitation and repose, between overload and boredom. Happiness oscillates between the energy of "doing" and the inner calm of "being". Sympathetic and parasympathetic. Amygdala and anterior cingulate cortex.

Our evolutionary ancestors were not so happy. They scanned for threats and fought or fled on impulse. The “reptilian” part of our brain still plays that role in our lives. It directs the sympathetic nervous system to protect our interests with vigilance. It pumps cortisol into the system. The primitive brain reacts to those drugs with stress.

Over time, however the human brain developed a cortex—the seat of mental reflection. With the capacity to observe and evaluate, we grew the capacity to determine whether a situation truly threatened and called for action. The parasympathetic system makes sure we don’t go overboard, fearing imaginary monsters or seeing friends as foes. It suppresses cortisol and releases serotonin: a drug that calms the brain, enabling it to respond rather than react.

Watch the brain mindfully as it deals with your day. Feel the impact when it senses an insult and rises to the threat. Appreciate the peace that flows when the cooler mind enters the scene, sizes it up, and declares it safe after all. The zone of clarity between reaction and response is known as equanimity.

What practices do you employ to foster equanimity? Take a deep breath. Exhale. Count to ten. Go for a walk. Imagine a peaceful scene. Access the cortex, listen to its wisdom, and choose.

Your Brain on Drugs: Community

The last time we looked at the role of evolution, the brain, and hormones in human happiness. We celebrated the balance of excitement and calm, and the roles of instinct and reason in our responses to events. In studying happiness, scientists find that we thrive on the energy of hormones that arouse, while we depend for stability on hormones that relax.

This week, we explore another aspect of experience moderated by the brain: our relationships with others. In the process of evolution from reptiles to mammals, apes to humans, the brain has grown ever larger. In doing so, it has generated the capacity for social systems: bonding in pairs, caring for young, and living in communities. Over time, we have developed empathy, language, ethics, and spirituality. It appears that the capacity to love and support one another has been proven a successful strategy for humans, and we reap the benefits.

While romantic attraction generates an endorphin "high," the long-term love drug is oxytocin. With its help, we experience connections with others and value their well-being on a par with our own. Oxytocin stimulates generosity and sacrifice, nurturing and commitment. It feels good when we are together; it hurts to let go.

As with other hormonal influences, the chemistry of connection engages in give-and-take with opposing forces. Stress and aggression, hatred and war are fueled by cortisol and testosterone: substances with a mission to search for enemies and destroy them.

The conscious mind can influence its chemical environment, distinguishing thoughtfully between friend and foe. While the primitive brain views only those most like itself as objects of empathy and concern, a more advanced perspective expands its horizon and finds commonality with those who are different. According to Buddhist thought, the community of compassion includes all sentient beings. All humans. Mammals. Birds. Reptiles. Insects. Yes, even mosquitoes.

What is your definition of "us?" Who is your friend, your sister or brother, your fellow traveler? Are you quick or slow to define others as "them?" As suspect, untrustworthy, even dangerous? Step back, take another look. Don't we have more in common than appears on the surface? Our hormones tell us it feels good to bond. It feels bad to separate. Give it a try.

Your Brain on Drugs: Clarity

This final reflection on *Buddha's Brain* touches on the role of the brain, its chemical messengers, and mental clarity. We will look into our ability to focus, to absorb, to follow a train of thought, and to reach conclusions.

The thinking brain exercises three related functions: holding material in active memory, updating to keep it current, and actively seeking new information. Optimal mental activity relies on a balance among the functions. Any of the functions, out of control, has a dark side.

When I hold too tight to active memory, I become obsessive: focusing on fears or needs, re-running old tapes, and displacing more productive content. If the updating function is out of whack, distractions overtake my mind. I cannot read a page or write a sentence without listening to the barista taking another order, a political conversation at the next table. Stimulus-seeking increases distraction. Not only do I tune in to events nearby, but I go looking for more: checking e-mail, getting a snack, calling a friend.

The chemical gate-keeper of mental attention is dopamine. When mental stimulation is moderate, dopamine closes the gate to new input, allowing us to focus on what we are doing now. When mental activity drops into the range of boredom, dopamine cracks the gate to let in some "breaking news." If immediate danger or an intense craving arises, dopamine spikes and throws the gate wide for running from evil or pursuing the good.

I confess: mental focus is a major challenge for me. I am always struggling to do one thing at a time, do it well, and sustain the effort. I am writing this morning at a coffee shop in Colorado, testing this theory in real life. The barista and conversation at another table are real-time events. Checking e-mail and updating my calendar and to-do list are hazards of laptop living.

Buddha's Brain offers a wealth of practical suggestions for improving the quality of mental and emotional experience. On the subject of focus, the authors suggest slowing down, talking less, doing one thing at a time, simplifying. They suggest setting an intention and developing rituals for keeping the intention in view (I am partial to stickies on the computer, bathroom mirror, and fridge.) They also recommend the practice of meditation to focus attention when tempted by distraction or hyperactivity.

What is your greatest challenge? Do thoughts fall out of your mind? Are they frequently diverted by events around and within you? Do you easily bore and go looking for action? These challenges are pervasive; they permeate our lives and our culture. We cannot escape, but we can use our understanding of the brain to respond more effectively when they arise.