Wired for Peace — Resource & Citation Guide

Introduction: The Brain's Core Functions — Coordination, Regulation, and Prediction

Jeremy Pollack, Ph.D. · Wired for Peace: Using 7 Neuroscience-Based Principles to Resolve Conflicts (Wiley, 2026)

Each row pairs a concept or claim from the Introduction with peer-reviewed literature or an authoritative academic source that supports it. Citations follow APA 7th edition; each links to the source via DOI or publisher record. Several rows add a supplementary source where a single claim rests on more than one body of evidence.

Quoted Line from the Book (with page)	Supporting Peer-Reviewed Source (APA 7) + Link
"Our brains are composed of more than 170 billion cells, about half of which are called neurons — the information processing cells that communicate via electrical and chemical signals. The other half are called glial cells." **(Introduction, p. xix)**	Azevedo, F. A. C., Carvalho, L. R. B., Grinberg, L. T., Farfel, J. M., Ferretti, R. E. L., Leite, R. E. P., Jacob Filho, W., Lent, R., & Herculano-Houzel, S. (2009). Equal numbers of neuronal and nonneuronal cells make the human brain an isometrically scaled-up primate brain. *Journal of Comparative Neurology, 513*(5), 532–541. **Link:** https://doi.org/10.1002/cne.21974
"For half a century the brain was thought to hold ten times more glia than neurons; modern counts revise the glia-to-neuron ratio to roughly 1:1." **(Introduction, p. xix)** *Supplementary support for the concept above.*	von Bartheld, C. S., Bahney, J., & Herculano-Houzel, S. (2016). The search for true numbers of neurons and glial cells in the human brain: A review of 150 years of cell counting. *Journal of Comparative Neurology, 524*(18), 3865–3895. **Link:** https://doi.org/10.1002/cne.24040
"Although the brain is only about 2% of body's mass, it consumes roughly 20% of the body's total energy at rest, reflecting an extraordinary concentration of metabolic investment in this information processing center." **(Introduction, p. xix)**	Raichle, M. E., & Gusnard, D. A. (2002). Appraising the brain's energy budget. *Proceedings of the National Academy of Sciences, 99*(16), 10237–10239. **Link:** https://doi.org/10.1073/pnas.172399499
"When groups of neurons repeatedly activate together, they can strengthen their connections, forming a neural circuit." **(Introduction, p. xix)**	Hebb, D. O. (1949). *The organization of behavior: A neuropsychological theory*. Wiley. **Link:** Foundational text (catalog record)
"When groups of neurons repeatedly activate together, they can strengthen their connections … [empirical demonstration of activity-dependent synaptic strengthening]." **(Introduction, p. xix)** *Supplementary support for the concept above.*	Bliss, T. V. P., & Lømo, T. (1973). Long-lasting potentiation of synaptic transmission in the dentate area of the anaesthetized rabbit following stimulation of the perforant path. *The Journal of Physiology, 232*(2), 331–356. **Link:** https://doi.org/10.1113/jphysiol.1973.sp010273
"Neurons connect across synapses — specialized junctions where the axon terminal of one neuron meets the dendrite, soma, or axon of another. A synapse includes the presynaptic terminal, the tiny gap called the synaptic cleft, and the postsynaptic membrane."	Pereda, A. E. (2014). Electrical synapses and their functional interactions with chemical synapses. *Nature Reviews Neuroscience, 15*(4), 250–263. **Link:** https://doi.org/10.1038/nrn3708

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(Introduction, p. xix)	
"The average adult human brain has between 100 and 500 trillion synaptic connections (depending on whom you ask), which produce hundreds of trillions of synaptic events every minute." **(Introduction, p. xix)**	Drachman, D. A. (2005). Do we have brain to spare? *Neurology, 64*(12), 2004–2005. **Link:** https://doi.org/10.1212/01.WNL.0000166914.38327.BB
"Our internal universe is probably as mysterious and complex as the external universe … perhaps as enigmatic as the deep seas, of which only about 5 percent have been explored." **(Introduction, p. xx)**	National Oceanic and Atmospheric Administration, Office of Ocean Exploration. (n.d.). *How much of the ocean have we explored?* U.S. Department of Commerce. **Link:** https://oceanexplorer.noaa.gov/ocean-fact/explored/
"There are three main functions of your brain: coordination, regulation, and prediction … to coordinate your body's organs and biochemical processes in order to regulate their metabolic output to best meet the demands that it predicts the body will need." **(Introduction, p. xx)**	Barrett, L. F., & Simmons, W. K. (2015). Interoceptive predictions in the brain. *Nature Reviews Neuroscience, 16*(7), 419–429. **Link:** https://doi.org/10.1038/nrn3950
"Neurobiologists and psychologists use the term regulation to refer to the activity of the nervous system … The sympathetic nervous system … facilitate[s] physiological mobilization … our parasympathetic system — the network associated with restoration, relaxation, and recovery." **(Introduction, p. xxi)**	Ulrich-Lai, Y. M., & Herman, J. P. (2009). Neural regulation of endocrine and autonomic stress responses. *Nature Reviews Neuroscience, 10*(6), 397–409. **Link:** https://doi.org/10.1038/nrn2647
"In cases where there seems to be a mismatch of up- or downregulation of the nervous systems' … components, leading to some disruption of normal or healthy function, we call this dysregulation." **(Introduction, p. xxi)**	McEwen, B. S. (1998). Stress, adaptation, and disease: Allostasis and allostatic load. *Annals of the New York Academy of Sciences, 840*(1), 33–44. **Link:** https://doi.org/10.1111/j.1749-6632.1998.tb09546.x
"We might take steps to regulate the system by slowing and deepening our breathing and consciously relaxing the body, thereby hoping to upregulate the parasympathetic system and downregulate the sympathetic system." **(Introduction, p. xxii)**	Zaccaro, A., Piarulli, A., Laurino, M., Garbella, E., Menicucci, D., Neri, B., & Gemignani, A. (2018). How breath-control can change your life: A systematic review on psycho-physiological correlates of slow breathing. *Frontiers in Human Neuroscience, 12*, 353. **Link:** https://doi.org/10.3389/fnhum.2018.00353
"The brain predicts the metabolic resources the body will need … incoming sensory information (from the bottom) is checked	Clark, A. (2013). Whatever next? Predictive brains, situated agents, and the future of cognitive science. *Behavioral and Brain Sciences, 36*(3), 181–204.

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against predictive processing (from the top). These processes then cause up- and/or downregulation of various components of the nervous system." **(Introduction, p. xxii)**	**Link:** https://doi.org/10.1017/S0140525X12000477
"Inherent in the brain's future-focused prediction function is a past-focused memory function … the entire reason the brain remembers and learns from past experiences is to appropriately position resources to meet the demands of the predicted future." **(Introduction, p. xxiii)**	Schacter, D. L., Addis, D. R., & Buckner, R. L. (2007). Remembering the past to imagine the future: The prospective brain. *Nature Reviews Neuroscience, 8*(9), 657–661. **Link:** https://doi.org/10.1038/nrn2213
"We start doing things that our brains and bodies are afraid of … emotionally powerful experiences that override and update memories and conditioning." **(Introduction, p. xxiii–xxiv)**	Nader, K., Schafe, G. E., & LeDoux, J. E. (2000). Fear memories require protein synthesis in the amygdala for reconsolidation after retrieval. *Nature, 406*(6797), 722–726. **Link:** https://doi.org/10.1038/35021052
"Escalated states are produced in brain regions that lead to a narrowing or constraining of one's psychological and behavioral repertoires, rather than to the widening aperture required for … creative problem-solving." **(Introduction, p. 2 (Principle 1))**	Arnsten, A. F. T. (2009). Stress signalling pathways that impair prefrontal cortex structure and function. *Nature Reviews Neuroscience, 10*(6), 410–422. **Link:** https://doi.org/10.1038/nrn2648
"… the widening aperture required for interpersonal connection, information intake, and creative problem-solving [the broadening counterpart to threat-driven narrowing]." **(Introduction, p. 2 (Principle 1))** *Supplementary support for the concept above.*	Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218–226. **Link:** https://doi.org/10.1037/0003-066X.56.3.218