

LAW OF NATURE | THE MANIFESTO

Part 2 – The Second Law of Highest Impact

Reference list

February 22, 2024

1. Hawkins, J., & Blakeslee, S. (2004). "On Intelligence." Times Books, Henry Holt and Company. ISBN: 0-8050-7456-2.

LoN-Manifesto add-on

From an overload of publications in brain research, this book identifies highest-impact architectural elements for understanding the brain's information processing and capacity bottlenecks, such as the columnar structure and the slow conduction speed of neurons.

- 2. Marois, R., & Ivanoff, J. (2005). "Capacity limits of information processing in the brain." Trends in Cognitive Sciences. doi:10.1016/j.tics.2005.04.010.
- 3. Casanova, M. F., & Tillquist, C. (2008). "Encephalization, Emergent Properties, and Psychiatry: A Minicolumnar Perspective." The Neuroscientist, 14, 101-118.

LoN-Manifesto add-on

Relevant architectural criteria for the Capacity Bottleneck Law of Nature

- "... increased cortical gyrification or folding serves to appose different brain regions and thereby reduce the length of interconnecting fibers."
- "Increasing distance limits connectivity, as the amount of energy required to generate and maintain long-distance connections is substantial."
- 4. Miller, G. (2008). "Music Builds Bridges in the Brain." Science Daily News, April 16, 2008.

LoN-Manifesto add-on: Building bridges is a practice of the Capacity Bottleneck Law of Nature

- 5. Oetringer, E., & Fitzgerald, M. (2008). "Hypothesis: Capacity Bottlenecks Cause Mental Conditions and Disorders." Bioscience Hypotheses, 1(1), 28-31. https://doi.org/10.1016/j.bihy.2008.02.002.
- Oetringer, E., Casanova, M., & Fitzgerald, M. (2010). "Fundamental principles by which the brain could process information - an information management perspective." Poster presented at NeuroTalk 2010 conference, Singapore. <u>https://lon-</u> manifesto.org/downloads/FundamPrinciplesNeuroTalk2010.pdf.
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 An Information Management Perspective." Poster presentation. WTAS conference, Frankfurt.
 2008. <u>https://www.lon-manifesto.org/downloads/WTAS%20Frankfurt%20Poster%202008-11-03.pdf</u>.
- 8. Gerald M. Edelman and Vernon B. Mountcastle, eds. "An Organizing Principle for Cerebral Function: The Unit Model and the Distributed System." 1978; in *The Mindful Brain*, Cambridge, MIT Press, 1978.