

Start from the measure: Carcassi interpretation of entropy

Entropy is well established measure of information defined by Claude Shannon Shannon and Weaver, 1949 as the average amount of information produced by / stored by a stochastic source.

Variability interpretation of entropy Carcassi et al., 2021 is better starter for cognitive science interpretations.

"Shannon entropy can be fully understood as measuring the variability of the elements within a given distribution", what gives it "a crisp intuitive meaning that is general and applicable to all branches of science" (Carcassi et al., 2021).

This view leads to ontologically and epistemologically neutral notion of information.

References I



Shannon, C., & Weaver, W. (1949). *The mathematical theory of communication*. University of Illinois Press.



Carcassi, G., Aidala, C. A., & Barbour, J. (2021). Variability as a better characterization of Shannon entropy [<https://iopscience.iop.org/article/10.1088/1361-6404/abe361>]. *European Journal of Physics*, 42(4), 045102.
<https://doi.org/10.1088/1361-6404/abe361>