The Statistical Theory of Storytelling: Quantifying the Arts
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Assumptions
- Time is discretized according to human processing speeds
- Processing stages occur in sequence
- Expectation follows normal distribution, even though sample is “finite”
- Working knowledge changes linearly, i.e., no weightings to indicate “note-worthy” information (e.g., emotions)

Future Work: Models
- Experimentally-based models for I, e.g., F, S, and U (e.g., from CNS)
- Different distribution for N? Our
- With these analytical relations, coding can generate values of surprise, working knowledge & understanding.

Future Work: Applications
- Robotics
  - With learning quantified, robots can learn from experiences as humans do
- Impact of the arts
  - Relationship between artist(s) and audience is quantified
  - Way to analyze the value of a piece of temporally existing art