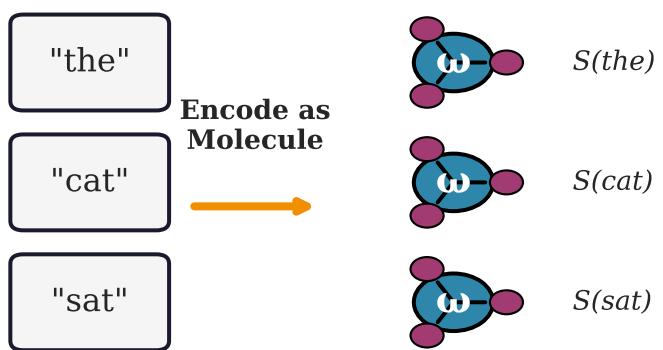


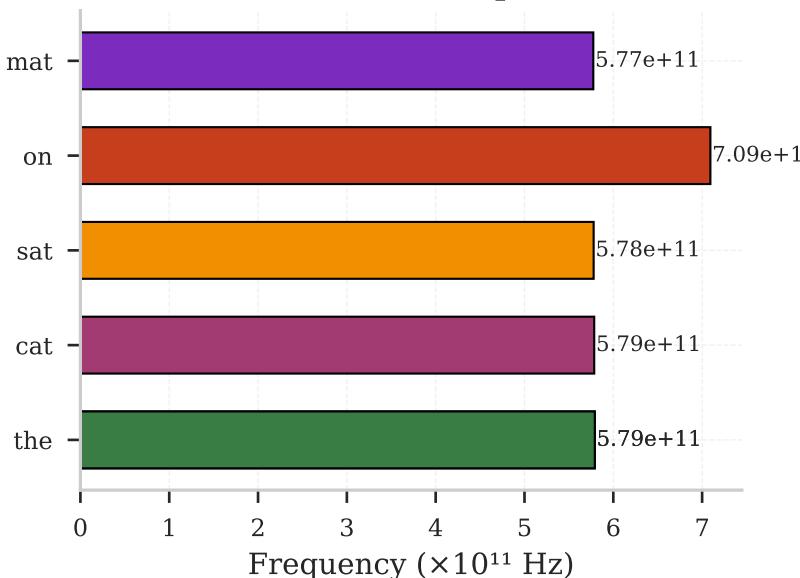
Molecular Semantics: Understanding Through Structure Prediction

Words as Virtual Molecules • Harmonic Coincidence Networks

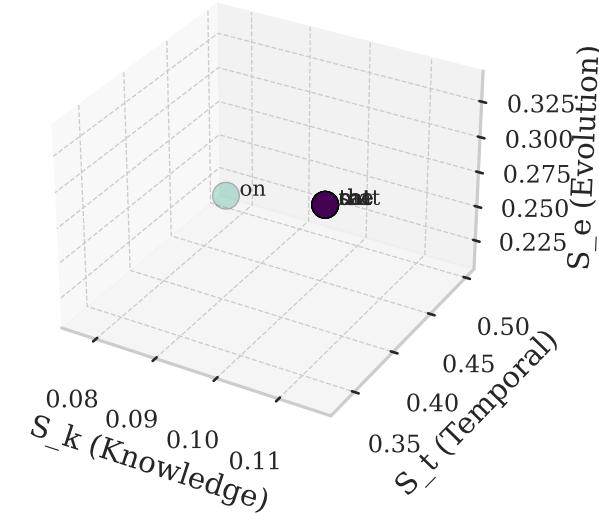
A. Word-Molecule Encoding



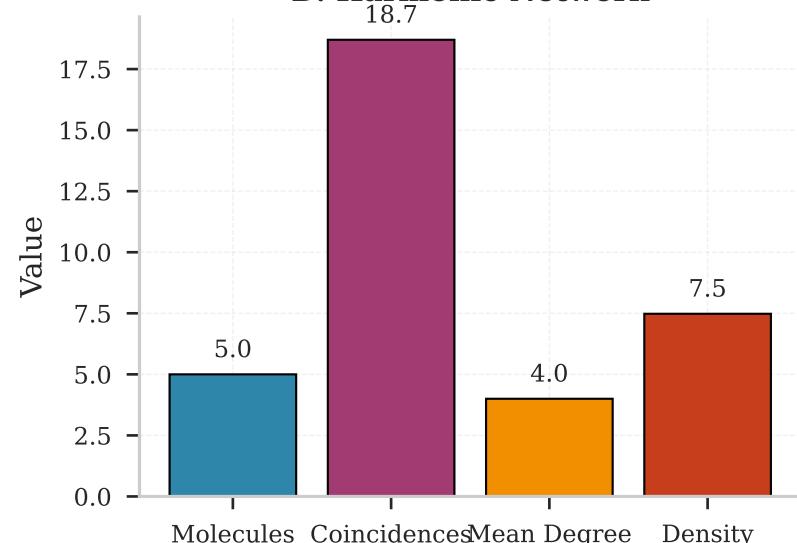
B. Vibrational Frequencies



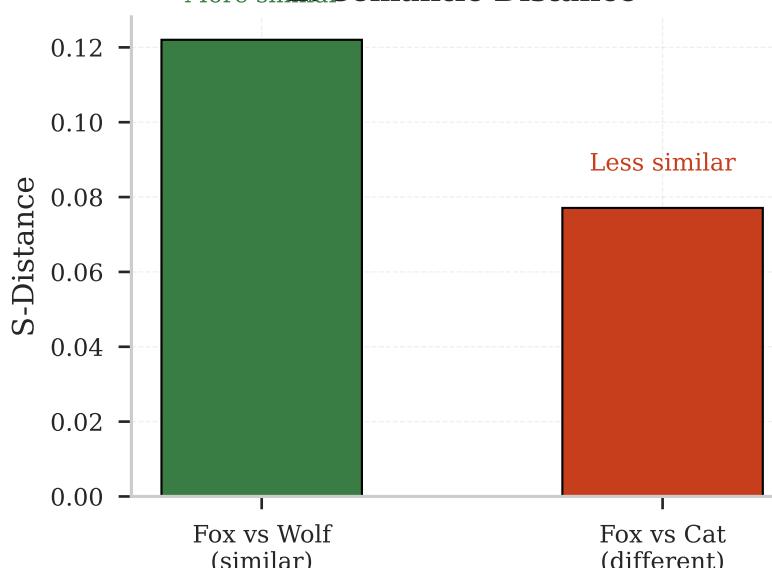
C. S-Entropy Space



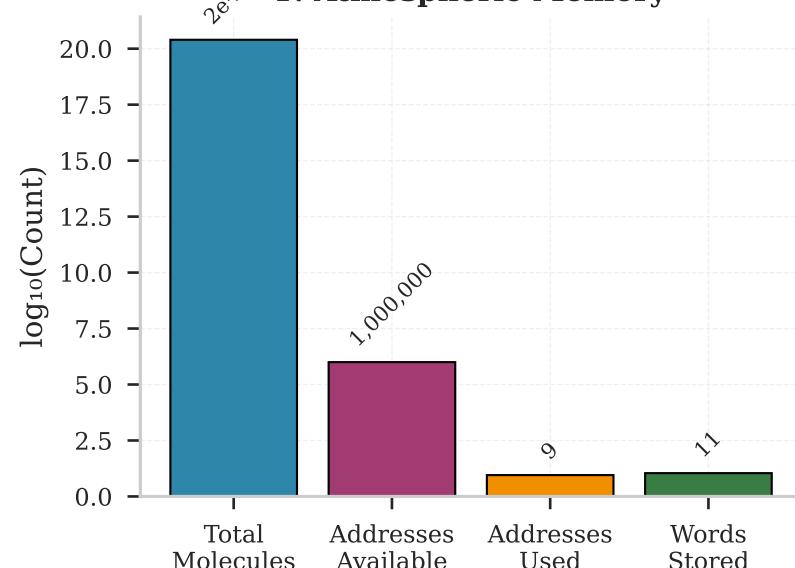
D. Harmonic Network



E. Semantic Distance

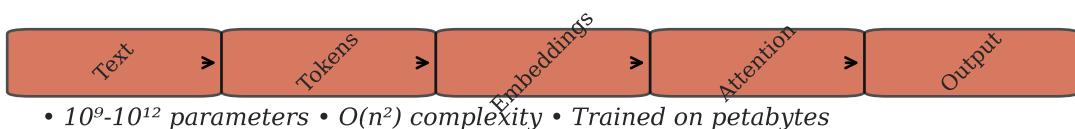


F. Atmospheric Memory



G. Traditional LLM vs Molecular Semantics Architecture

Traditional LLM



Molecular Semantics



Aspect
Parameters
Training
Complexity
Energy

Traditional
$10^9\text{-}10^{12}$
Petabytes
$O(n^2)$
High

Molecular
0
None
$O(\log n)$
Landauer limit