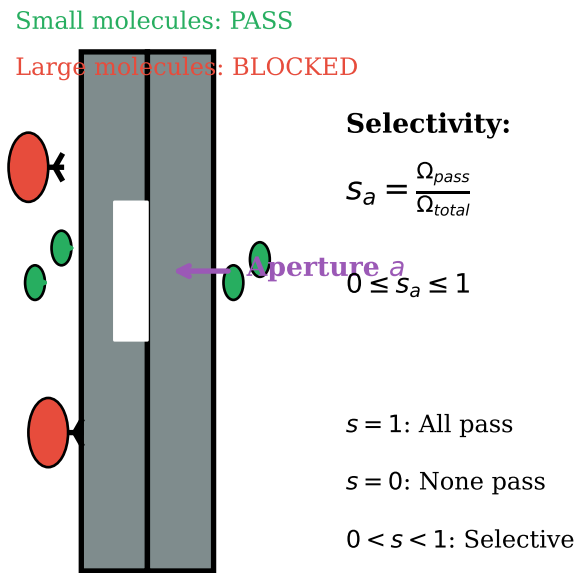
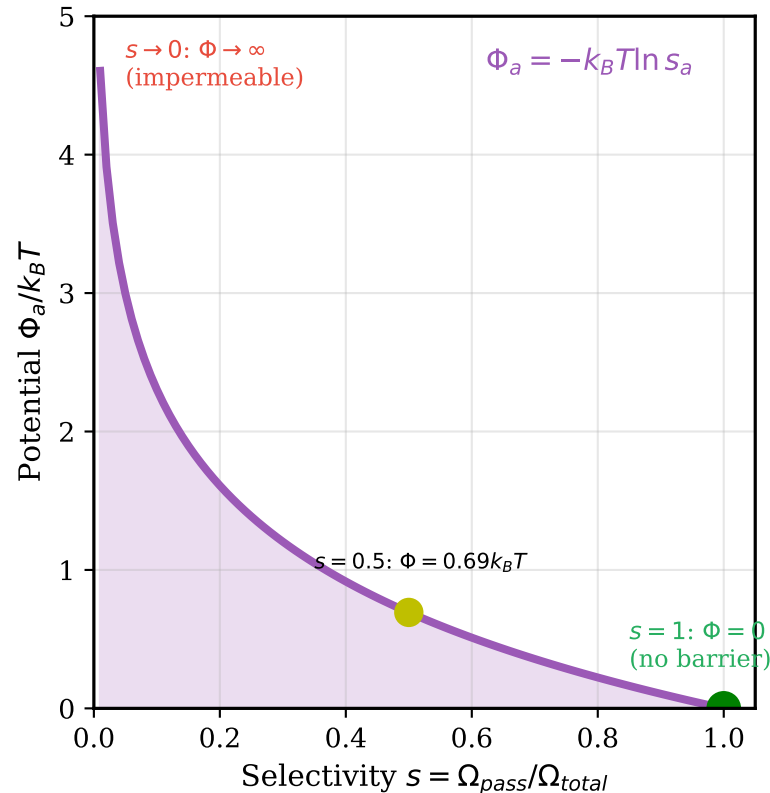


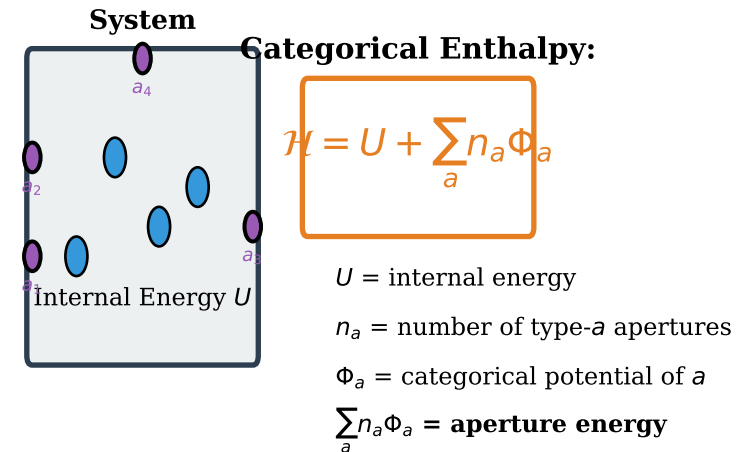
(A) Aperture: Selective Molecular Passage



(B) Categorical Potential vs Selectivity

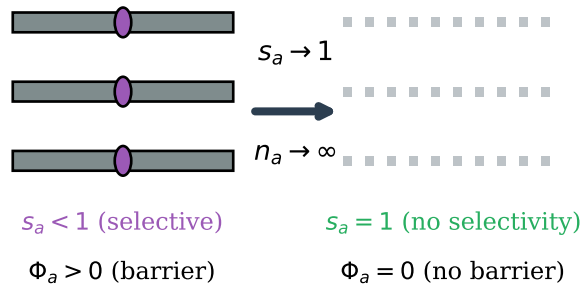


(C) Categorical Enthalpy Definition



(D) Classical Limit: Non-Selective Apertures

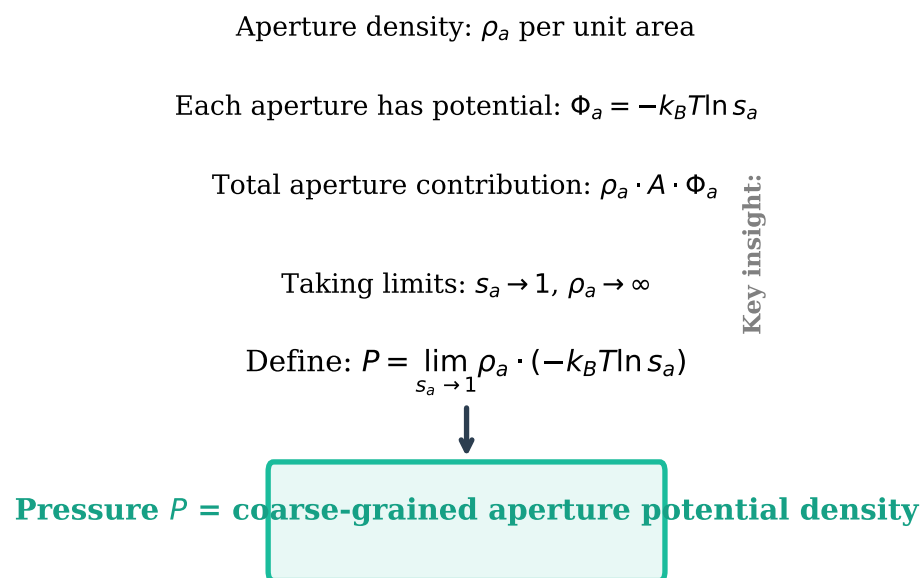
Selective Apertures Non-Selective Limit



In the classical limit:

$$\sum_a n_a \Phi_a \rightarrow \int_{\partial\Omega} P dA = PV$$
$$\mathcal{H} \rightarrow U + PV = H_{classical}$$

(E) Pressure: Emergent from Aperture Statistics



(F) Enthalpy: From Categorical to Classical

