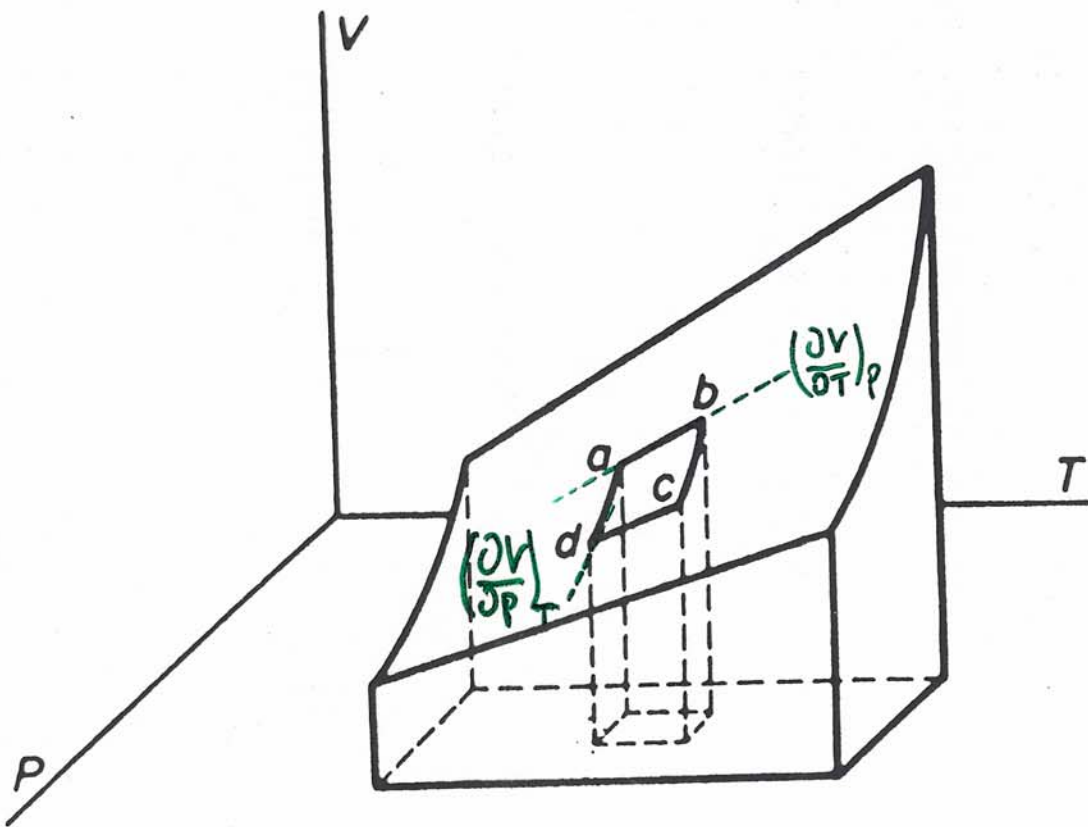


# Zustandsfunktionen u. partielle Ableitungen

$$dV = \left(\frac{\partial V}{\partial T}\right)_P dT + \left(\frac{\partial V}{\partial P}\right)_T dP$$

$dV$  = vollständiges  
Differential



$$\left(\frac{\partial V}{\partial T}\right)_P = \lim_{T \rightarrow 0} \frac{V_b - V_a}{T_b - T_a} \quad (P = \text{const})$$

$$dV_{V_a \rightarrow V_b} = \left(\frac{\partial V}{\partial T}\right)_P dT$$