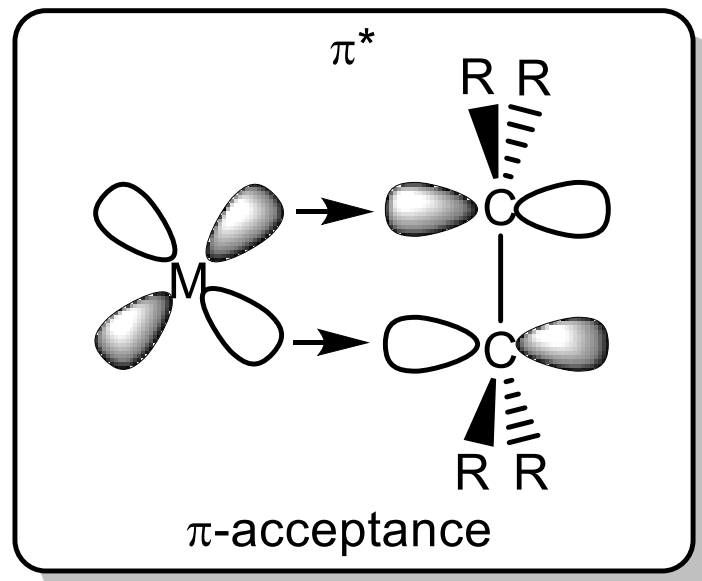
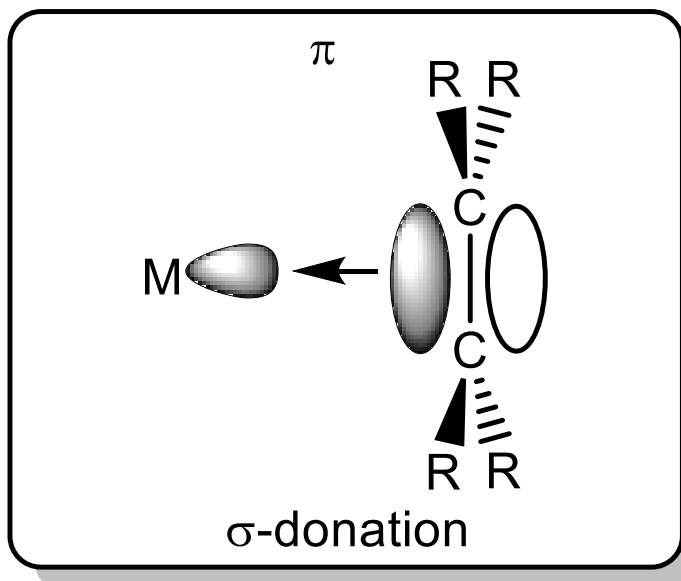


Alkene Complexes:

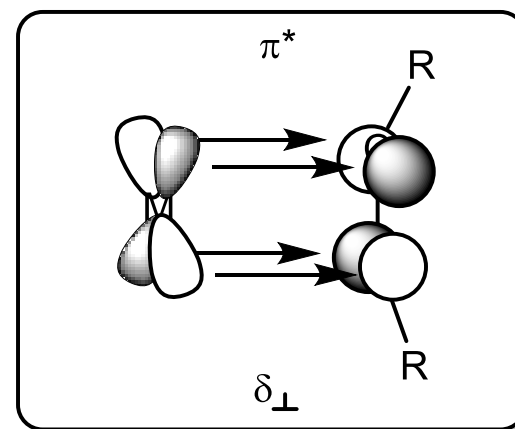
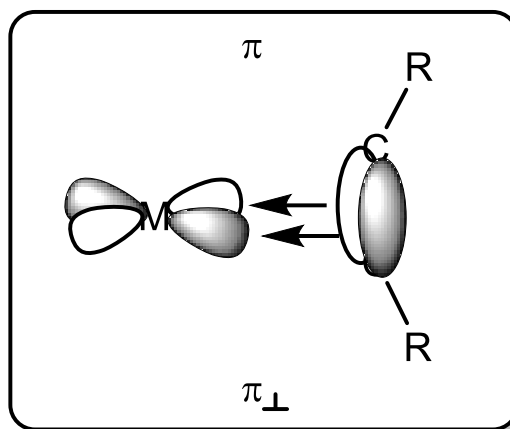
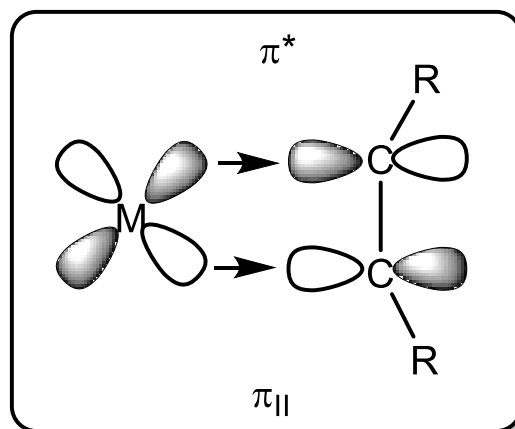
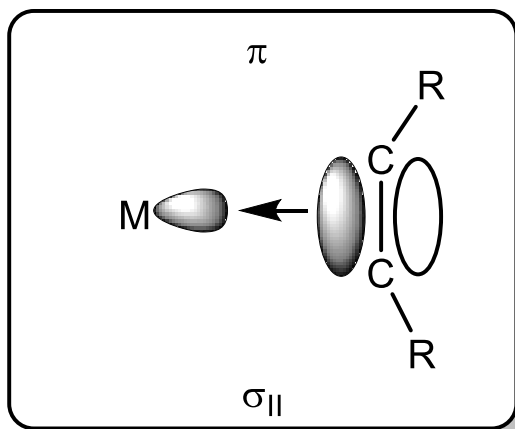
Dewar-Chatt-Duncanson Bonding Model



- Synergic Bonding
- Both σ -donation and π -acceptance weakens the C=C bond

Alkyne Complexes:

Dewar-Chatt-Duncanson Bonding Model



- Synergic Bonding
- All four possible bonding interactions weaken the $\text{C}\equiv\text{C}$ bond
- Alkynes can be 2 or 4 electron donors, depending on whether the π_{\perp} interaction is significant