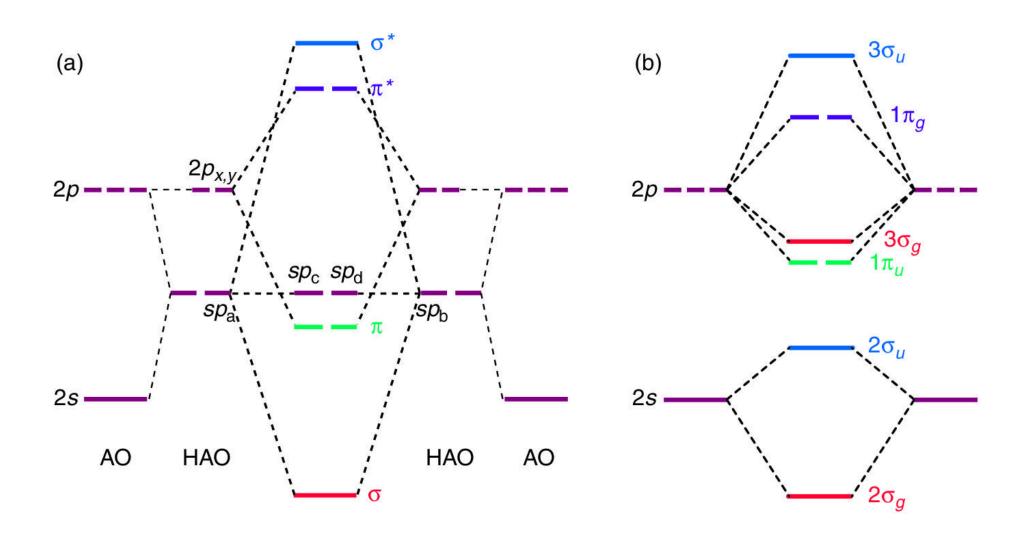
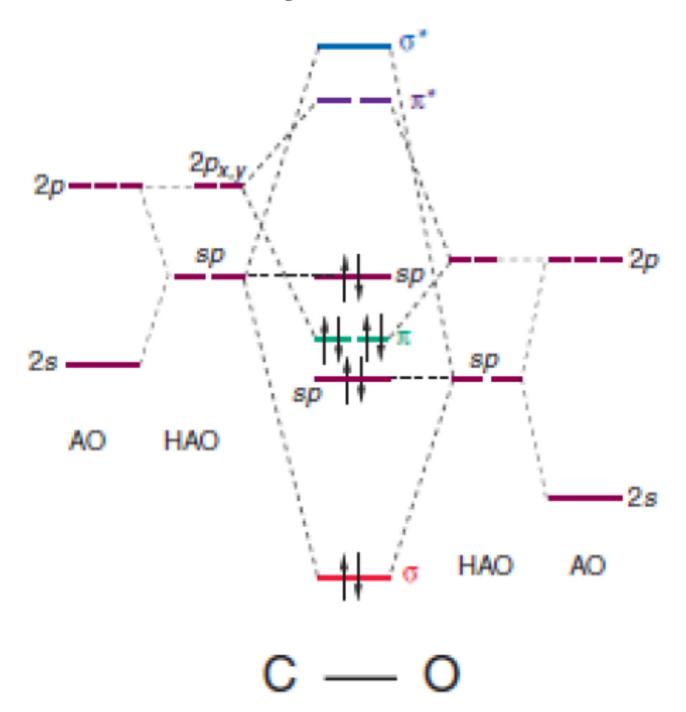
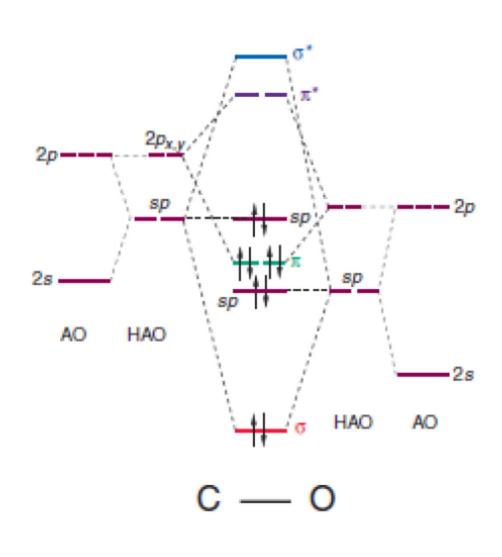
Comparing Hybrid and Full MO for N₂

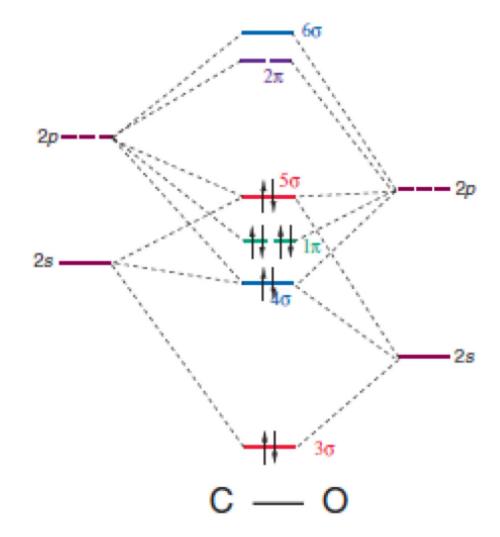


Hybrid MO for CO

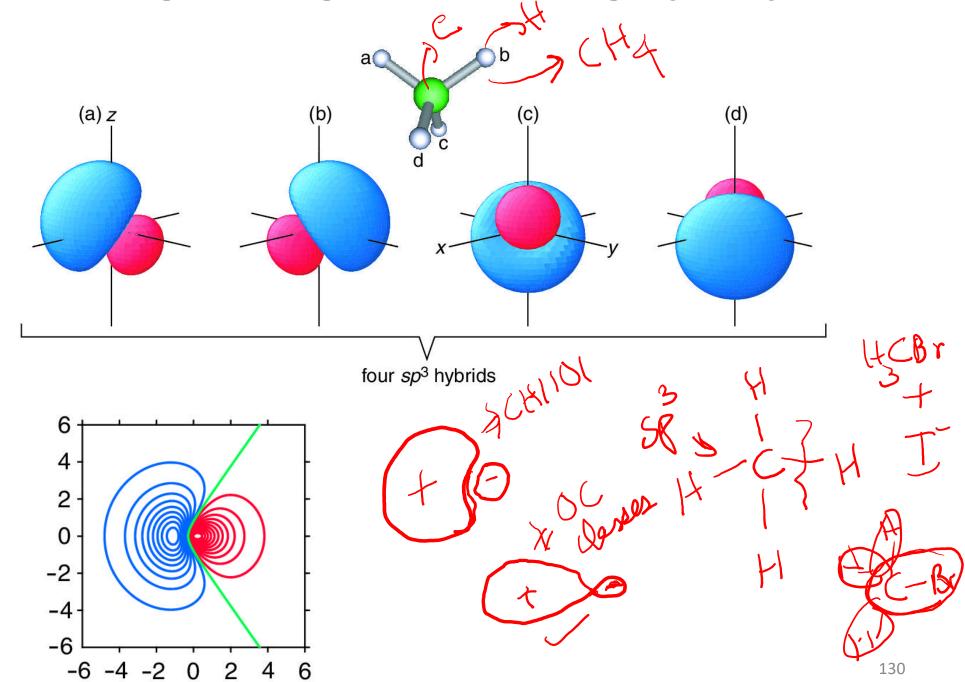


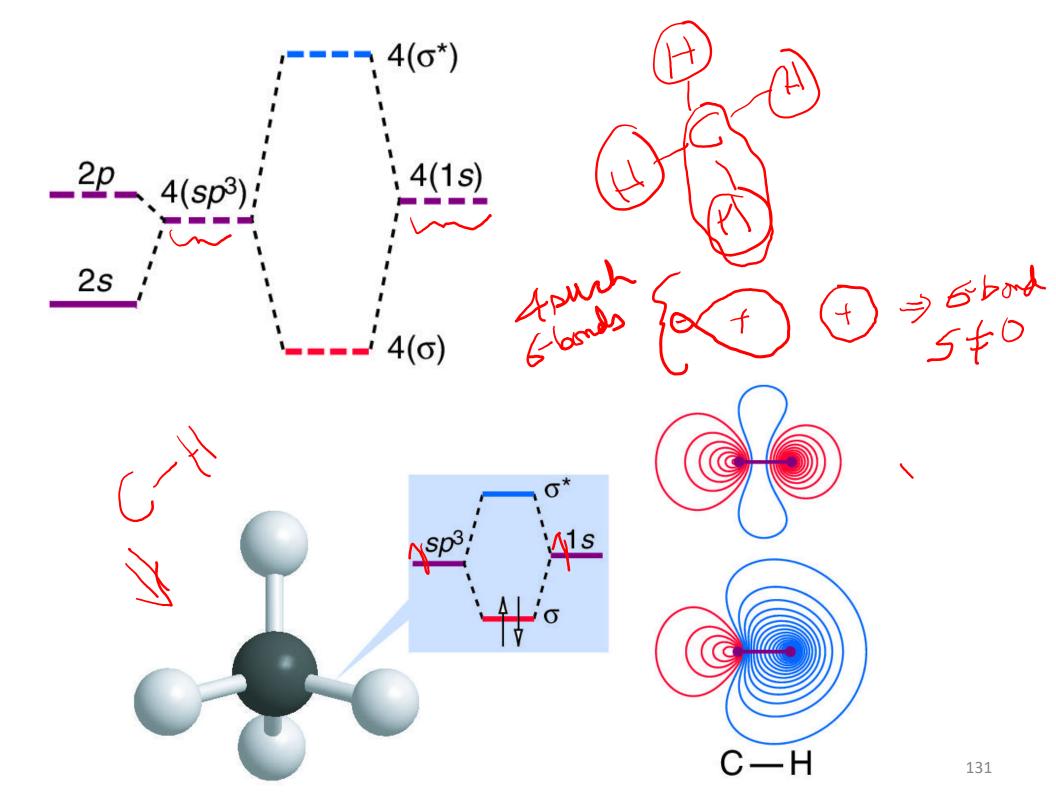
Comparing Hybrid and Full MO for CO



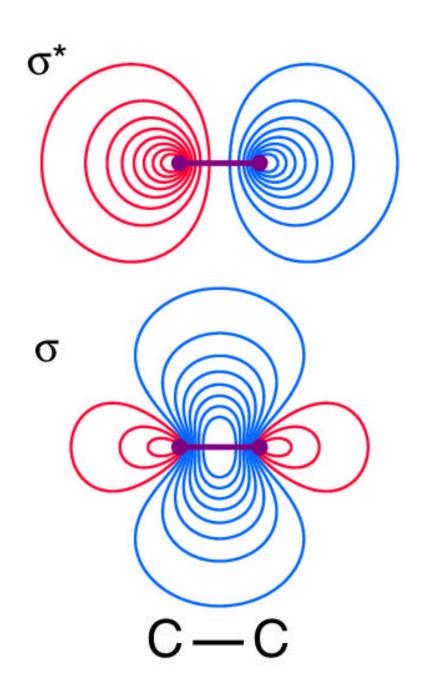


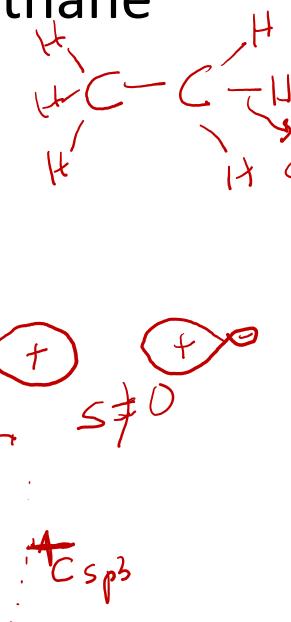
Bonding in Organics: Using sp³ hybrids



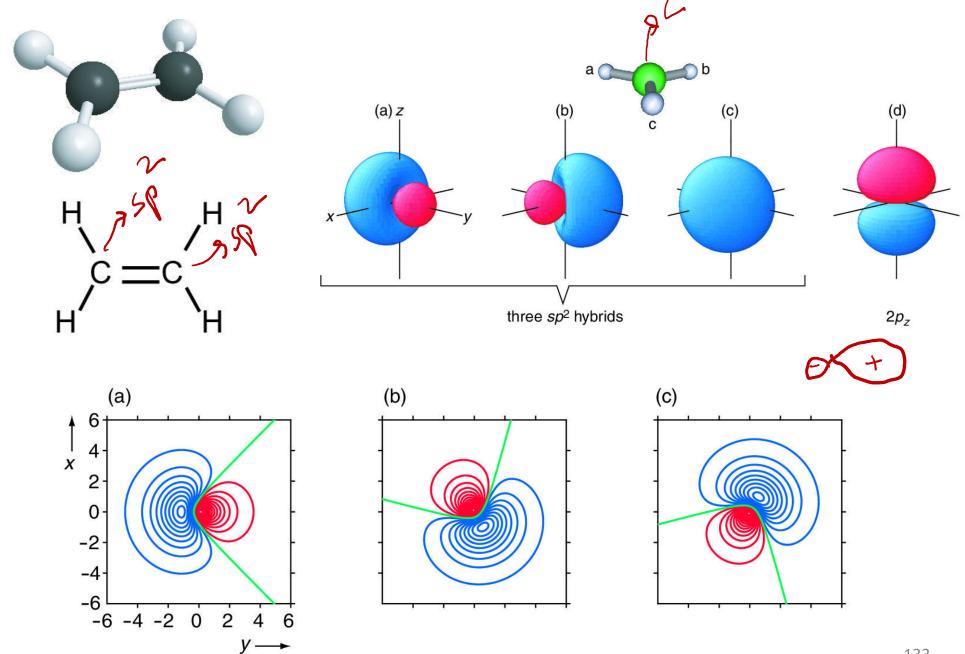


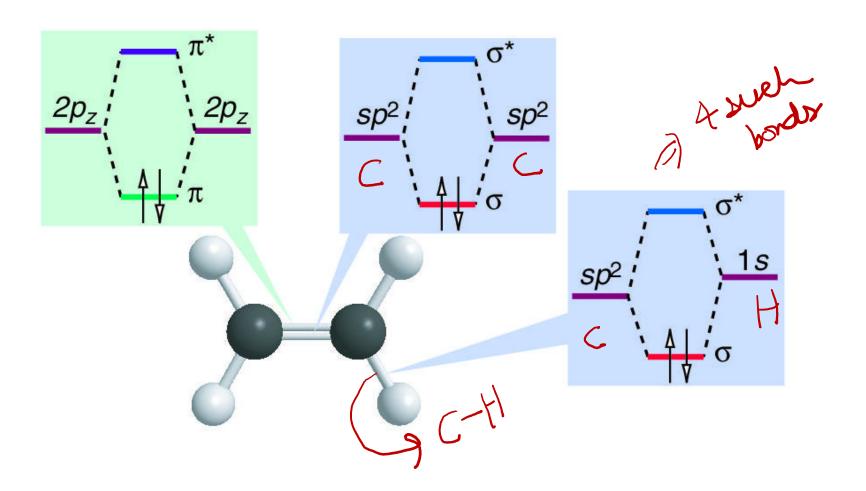
C-C bonds in Ethane

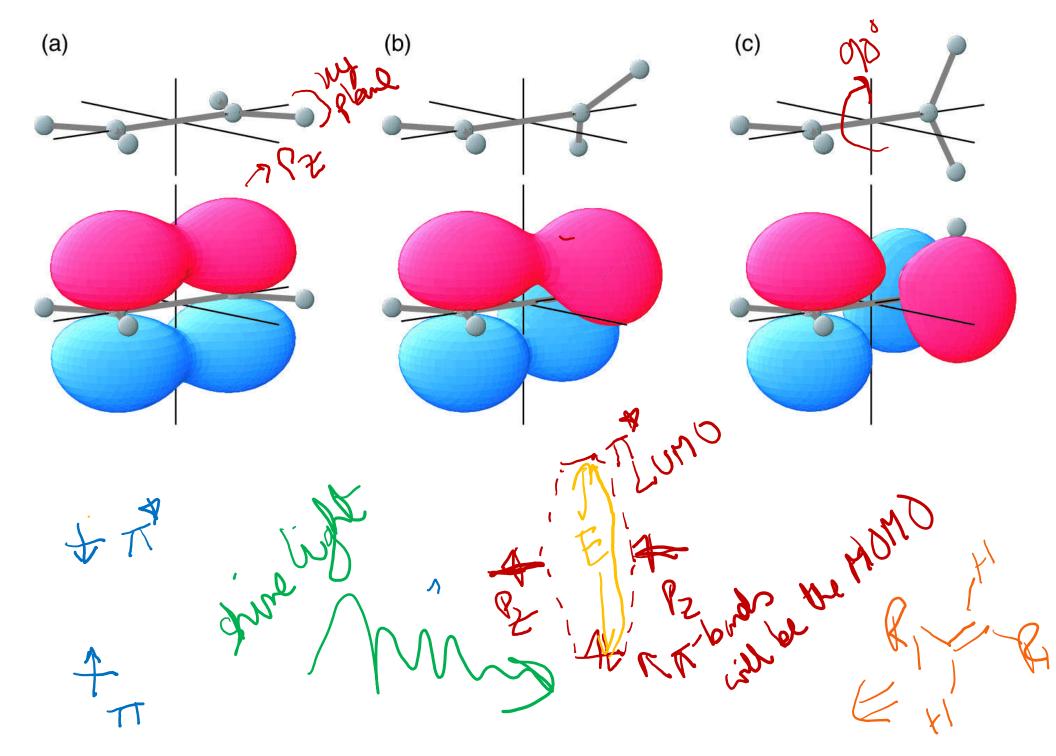




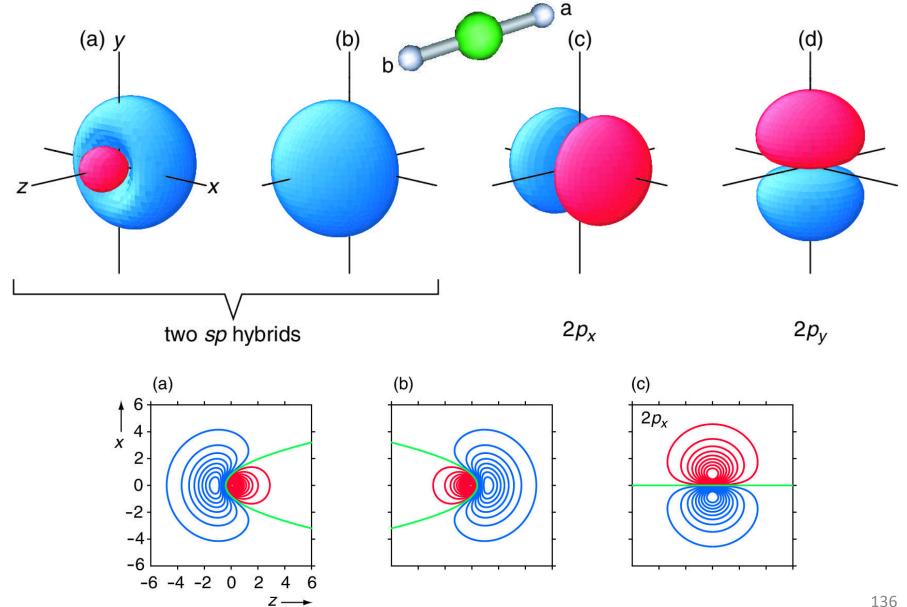
Doubly bonded C: sp² Hybrids

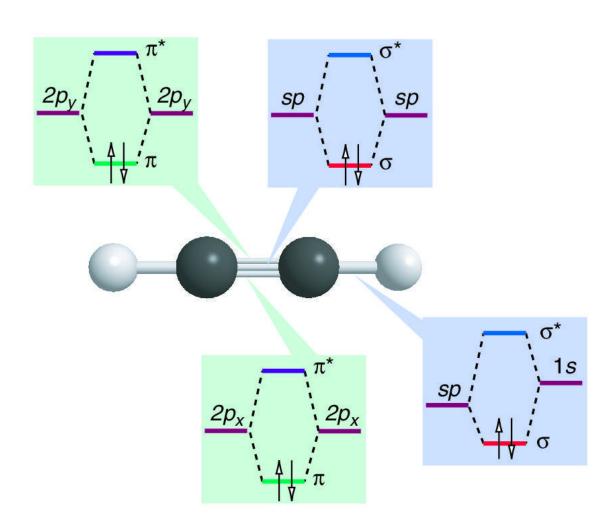






Triply Bonded Carbon: sp Hybrids

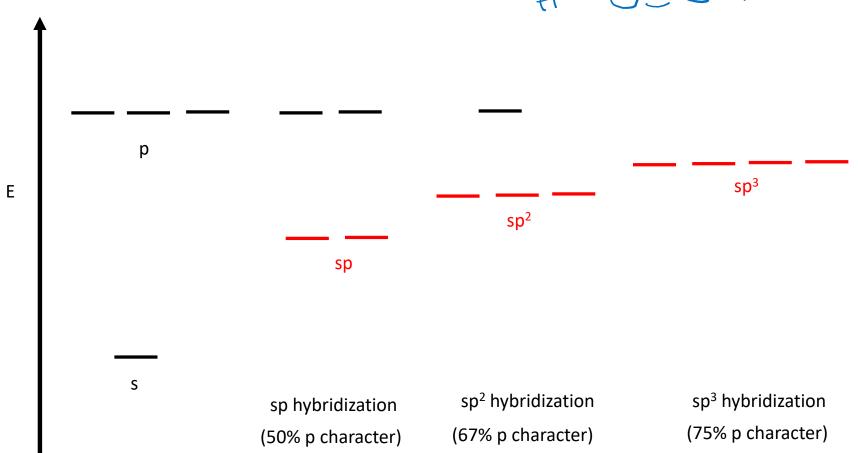




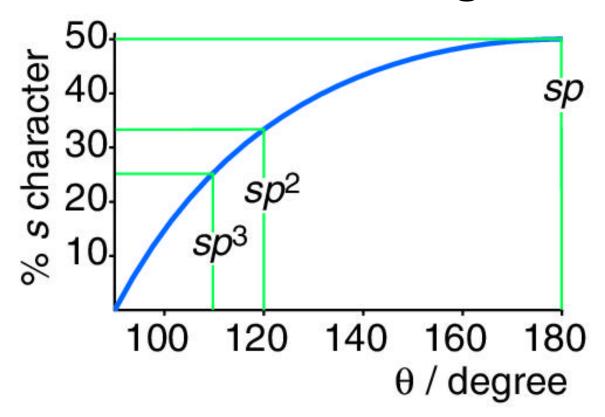
s-character and energy







s-character as function of angle between them



- From sp³ to sp both the s-character and angle between the hybrids increase
- By selecting the correct s-character we can achieve any angle we like between the hybrids
- When you form HOAs from the 2s and three 2p AOs, you need not make all the resulting HAO's equivalent
- You can add different proportion of s-character in each hybrids: overall proportion of 2s has to be 25%
- They MUST be orthogonal to each other