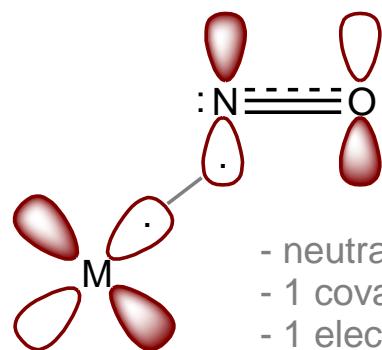


Nitrosyl (linear or bent): A Redox Active Ligand

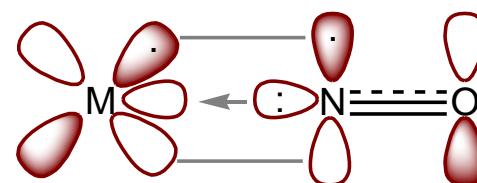
- NO is a redox active ligand – the number of electrons in a complex varies depending on whether NO is linear (NO^+) or bent (NO^-).

Bent Nitrosyl



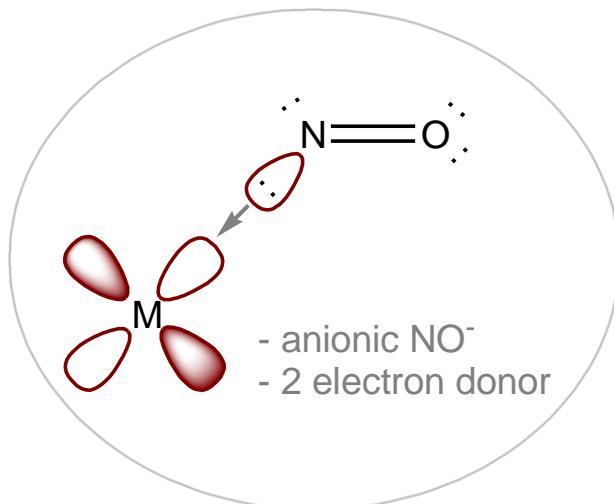
- neutral NO
- 1 covalent bond
- 1 electron donor

Linear Nitrosyl

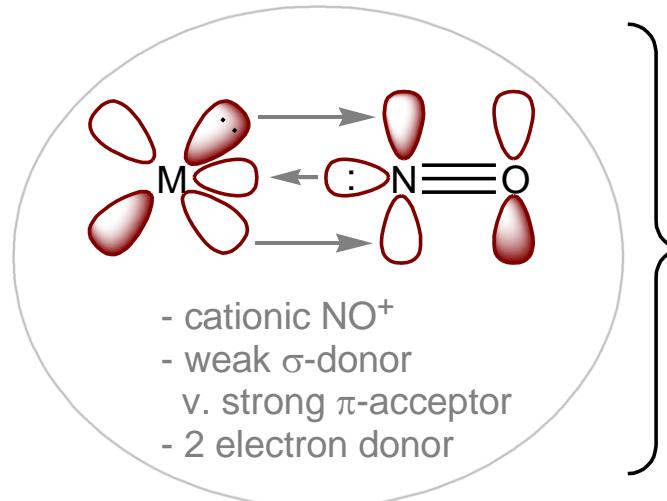


- neutral NO
- 2 covalent bonds
- 3 electron donor

Ligands viewed as
being neutral



- anionic NO^-
- 2 electron donor



- cationic NO^+
- weak σ -donor
- v. strong π -acceptor
- 2 electron donor

Ligands not neutral