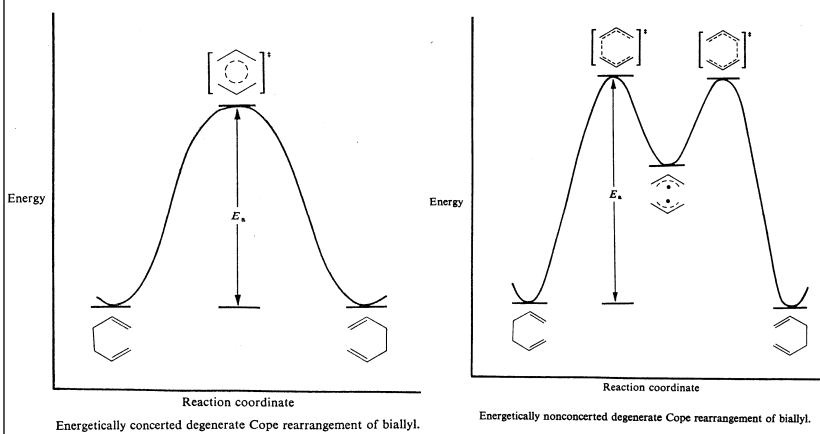


## Pericyclic Reactions

- among the reactants and products usually at least one molecule is unsaturated
- the reactions involve the formation or scission of  $\sigma$ -bonds and the consumption or generation of  $\pi$ -bonds
- the electronic reorganization occurs in some sort of cyclic array of the participating atomic centers.

Pericyclic reactions are apparently **concerted**: the electronic rearrangements involved in bond-making/bond-breaking proceed simultaneously in a one-step (one  $TS^\ddagger$ ) process.

A single kinetic step is a characteristic of a concerted reaction; a concerted reaction in which all changes in bonding occur in comparable extents in the transition state is commonly defined as **synchronous**.



### Pericyclic 6-el. Processes:

