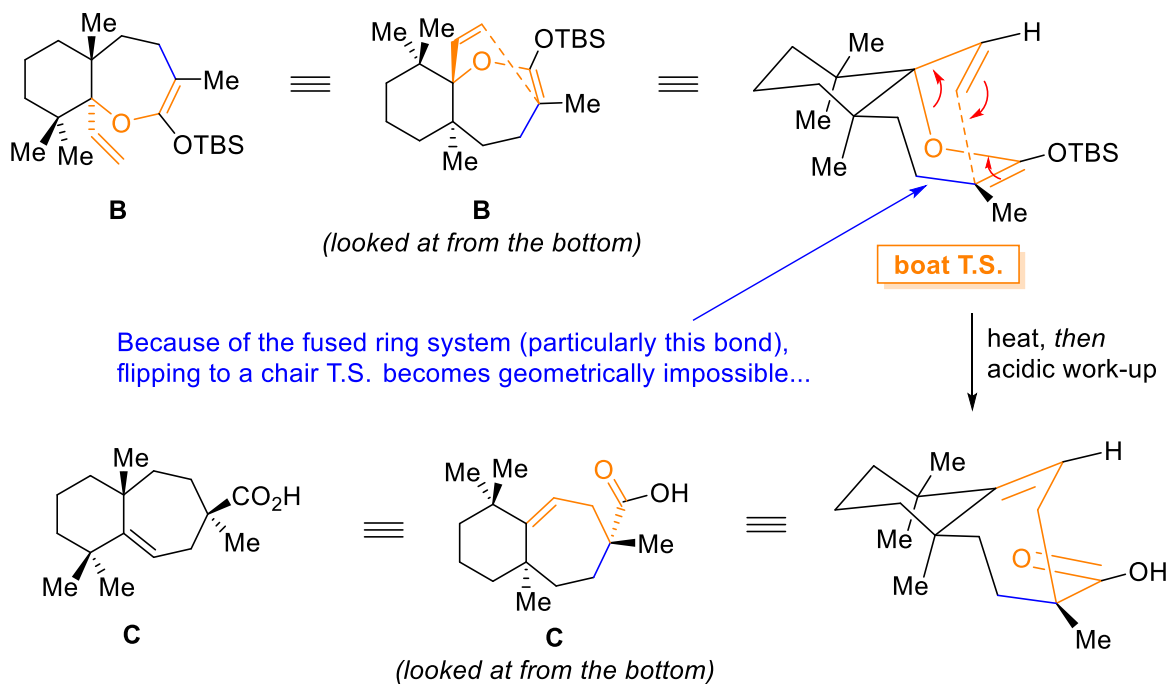


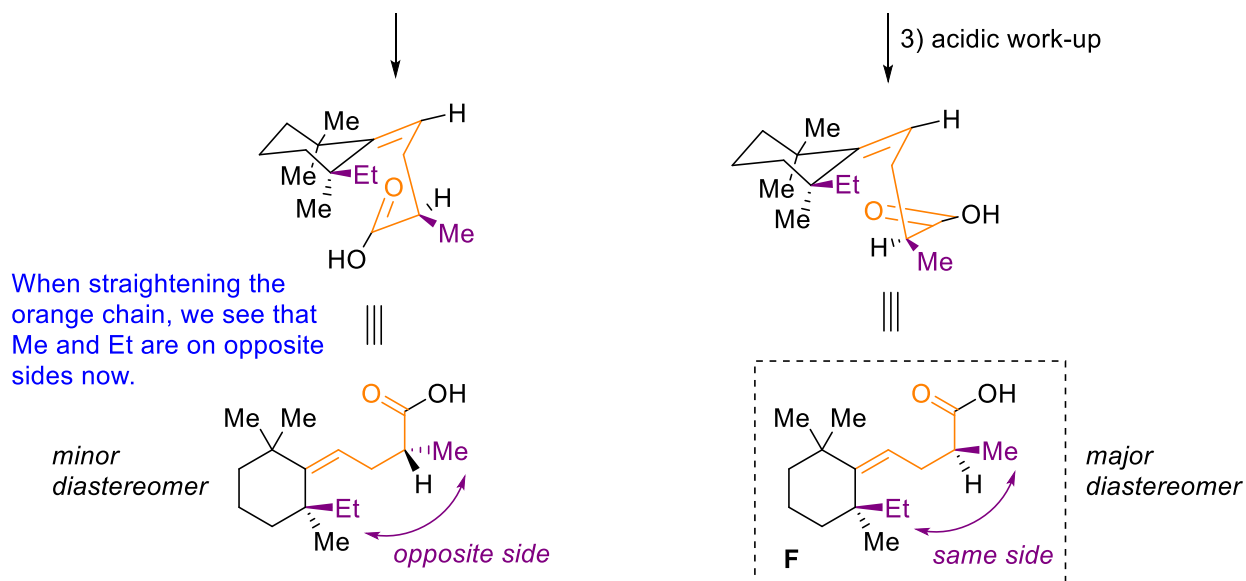
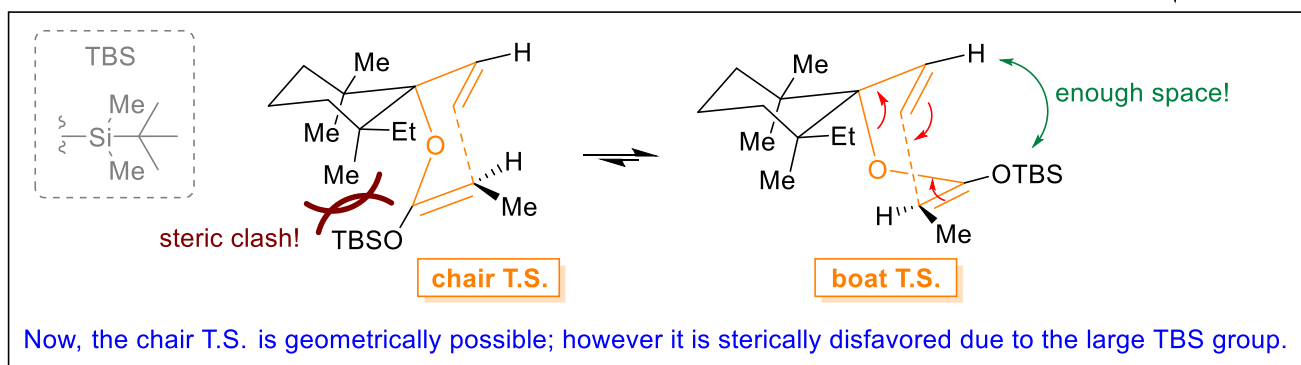
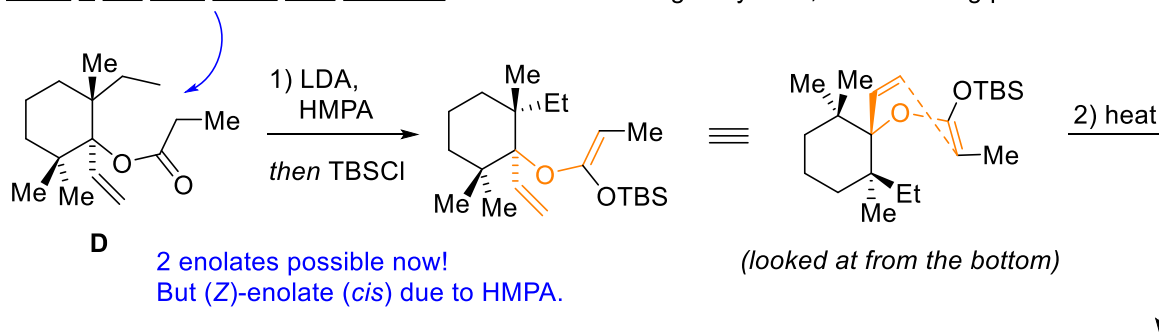
Why only 1 diastereomer possible?

Due to geometric constraints: (i) only one enolate formation possible \Rightarrow product as single diastereomer
(ii) only one 6-memb. T.S. possible



What if the blue bond was absent?

--> no fused rings anymore, but still 1 ring present



What if no HMPA added?

Tight chair T.S. during deprotonation (cfr. course notes) would give the (E)-enolate (Me & OTBS are trans) --> after Ireland-Claisen with boat T.S., we end up with the opposite relative stereochemistry.

