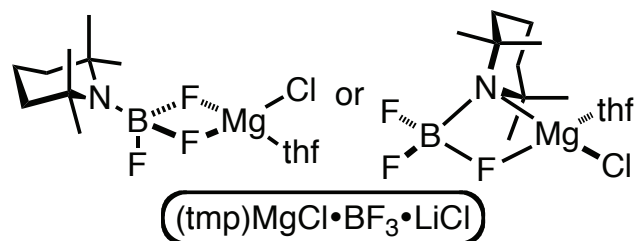
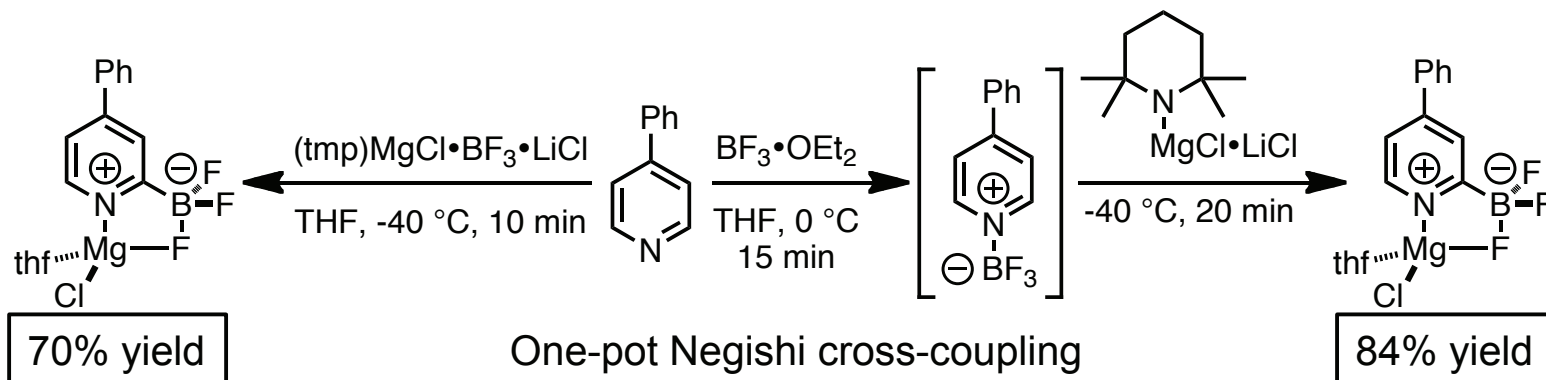
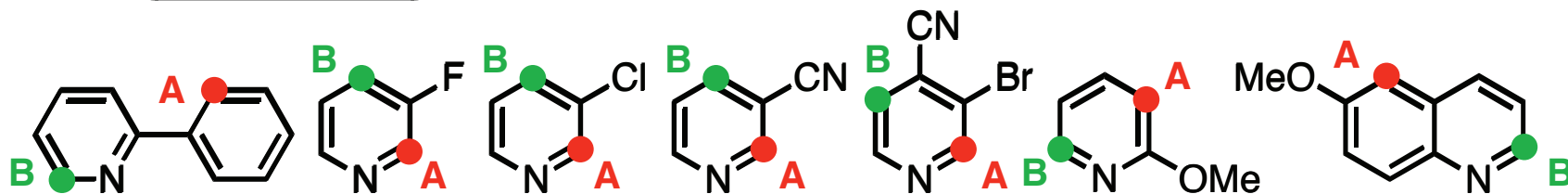


BF₃-Assisted, Direct Metalation of Unactivated Heteroaryl Compounds



Procedure A: No BF₃, $(\text{tmp})\text{MgCl}\cdot\text{LiCl}$, $(\text{tmp})\text{ZnCl}\cdot\text{LiCl}$, $(\text{tmp})_2\text{Zn}\cdot 2\text{MgCl}_2\cdot 2\text{LiCl}$, or $(\text{tmp})_3\text{Al}\cdot 3\text{LiCl}$
Procedure B: BF₃ precomplex, $(\text{tmp})\text{MgCl}\cdot\text{LiCl}$ or $(\text{tmp})_2\text{Zn}\cdot 2\text{MgCl}_2\cdot 2\text{LiCl}$



Possible steric influence of the BF₃-complex on site-selectivity of metalation