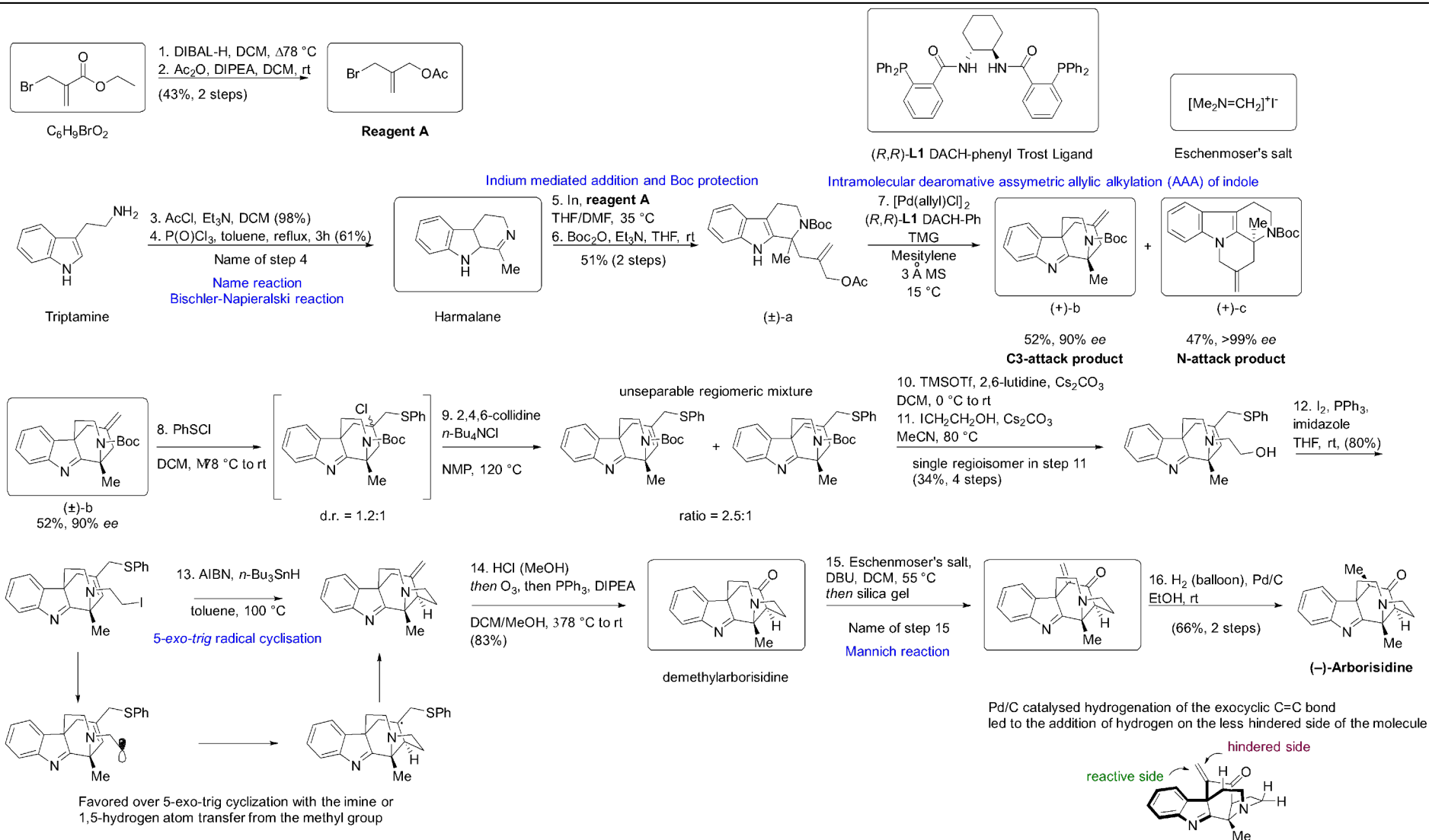
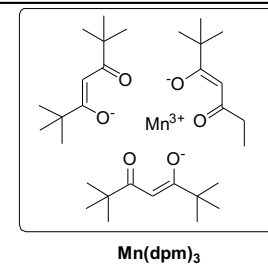
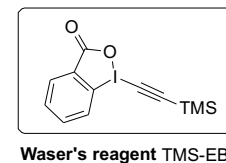
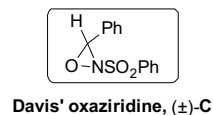
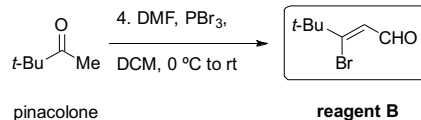
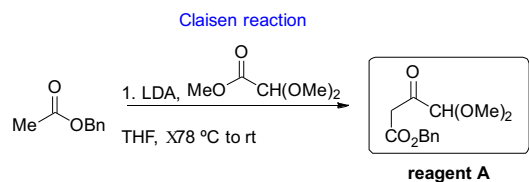


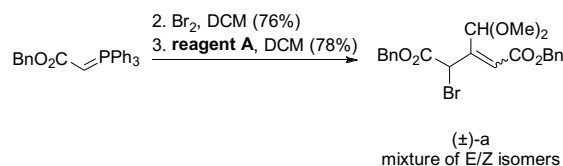
E166: Synthesis of (-)-Arborisidine^[1] and (-)-Bilobalide^{[2][3]}



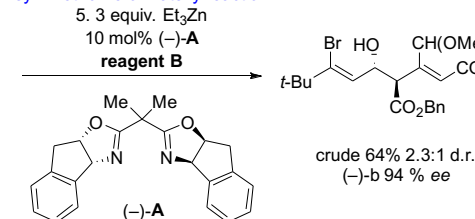
[1] F.-Y. Wang, L. Jiao, *Angew. Chem. Int. Ed.* **2021**, *60*, 12732–12736



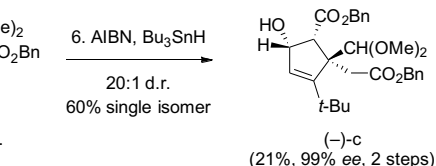
Wittig Olefination (two-step) procedure



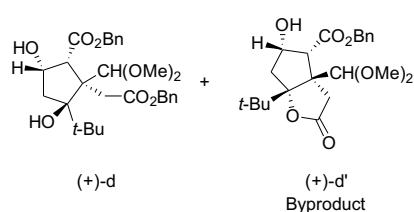
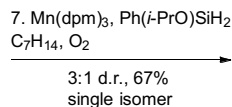
Asymmetric Reformatsky reaction



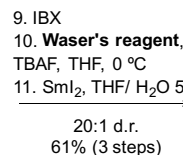
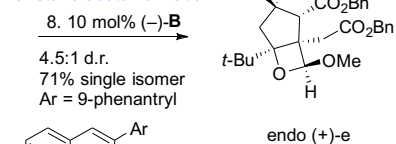
Giessere-type 5-exo-trig cyclisation



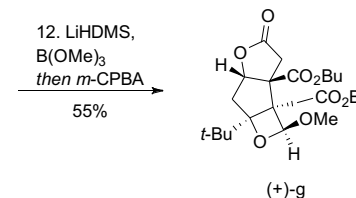
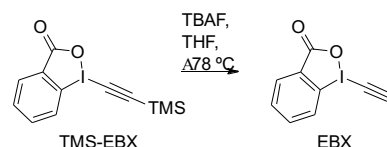
Mukaiyama hydration



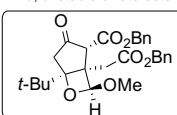
Oxetane-acetal formation



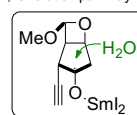
Alkyne oxidation
Mechanism step Z



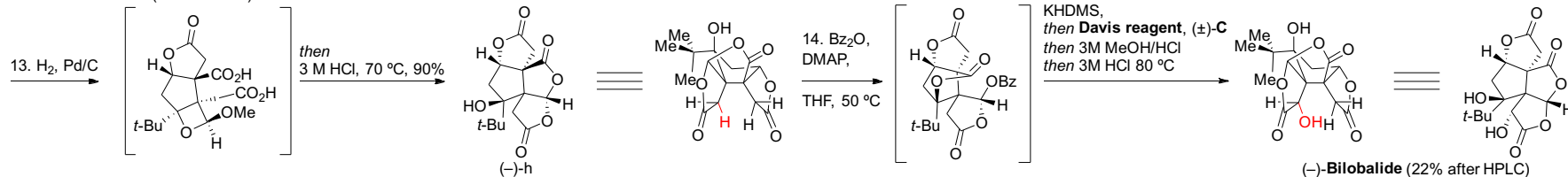
In 9, unstable β-keto ester



In 11, Chelation pathway for reduction

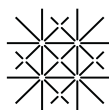


Hydrogenolysis and in situ acidic hydrolysis
(Corset effect)



[2] Baker, M.A., Demoret R.M., Ohtawa, M. *et al. Nature* **2020**, 575, 643–646

[3] Baker, M.A., Demoret R.M., Ohtawa, M. *et al. J. Am. Chem. Soc.* **2020**, 142, 18599–18618



University
of Basel

Sparr Group Seminar
10.11.2021
Lucía Reyes Méndez