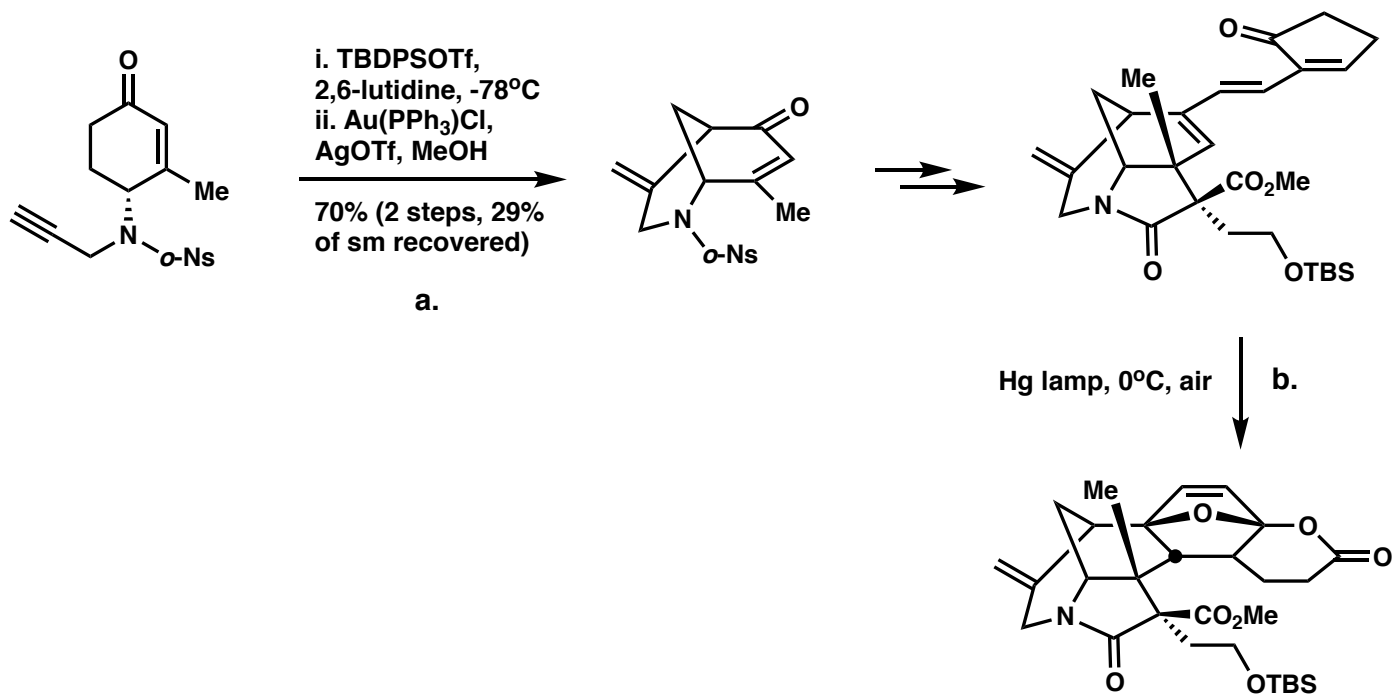


1. Draw the mechanism of a) and b)

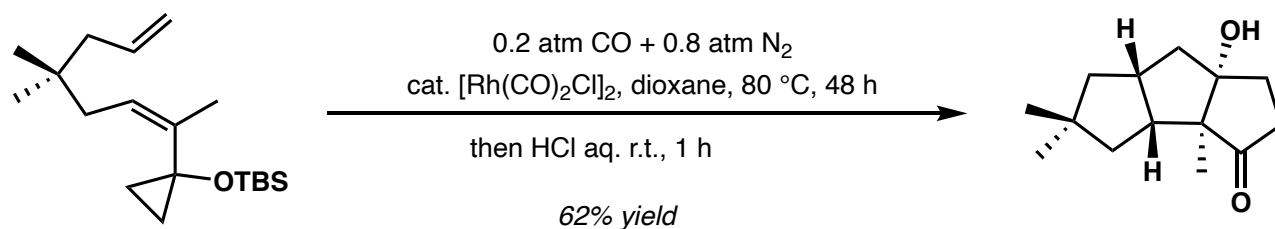
*In a), could there be a reason that lutidine was employed, but not a stronger or a weaker base?

(Total Synthesis of the Daphniphyllum Alkaloid Daphenylline. Ang Li. et al. Nat. Chem. 2013, 5, 679)



2. Please provide the mechanism for the following transformation.

J. Am. Chem. Soc. **2008**, 130, 13, 4421



For undergrads: Please provide the mechanism for the following transformation.

Org. Lett. **2023** <https://doi.org/10.1021/acs.orglett.3c01277>

