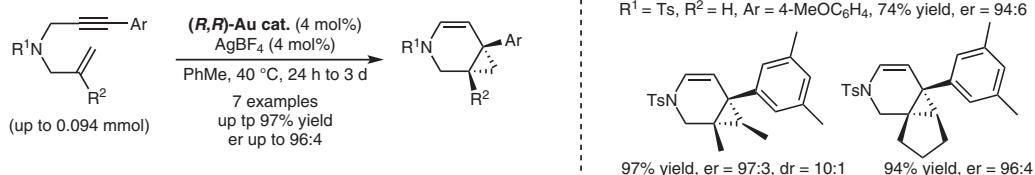
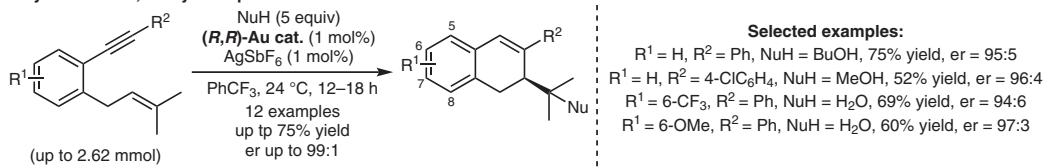


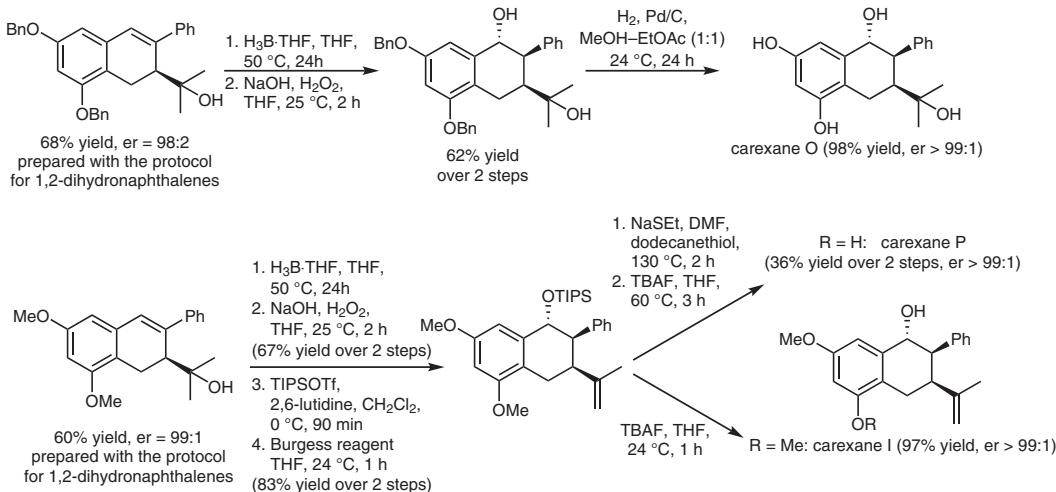
Synthesis of azabicyclo[4.1.0]hept-4-enes:



Synthesis of 1,2-dihydroronaphthalenes:



Asymmetric total syntheses of carexanes I, O, and P:



Significance: Various cyclizations were realized in an enantioselective fashion through the use of a modified JohnPhos ligand with a distal C₂-chiral element.

Comment: Hydrocyclization products were used successfully in the first enantioselective total syntheses of three natural products from the carexane family.