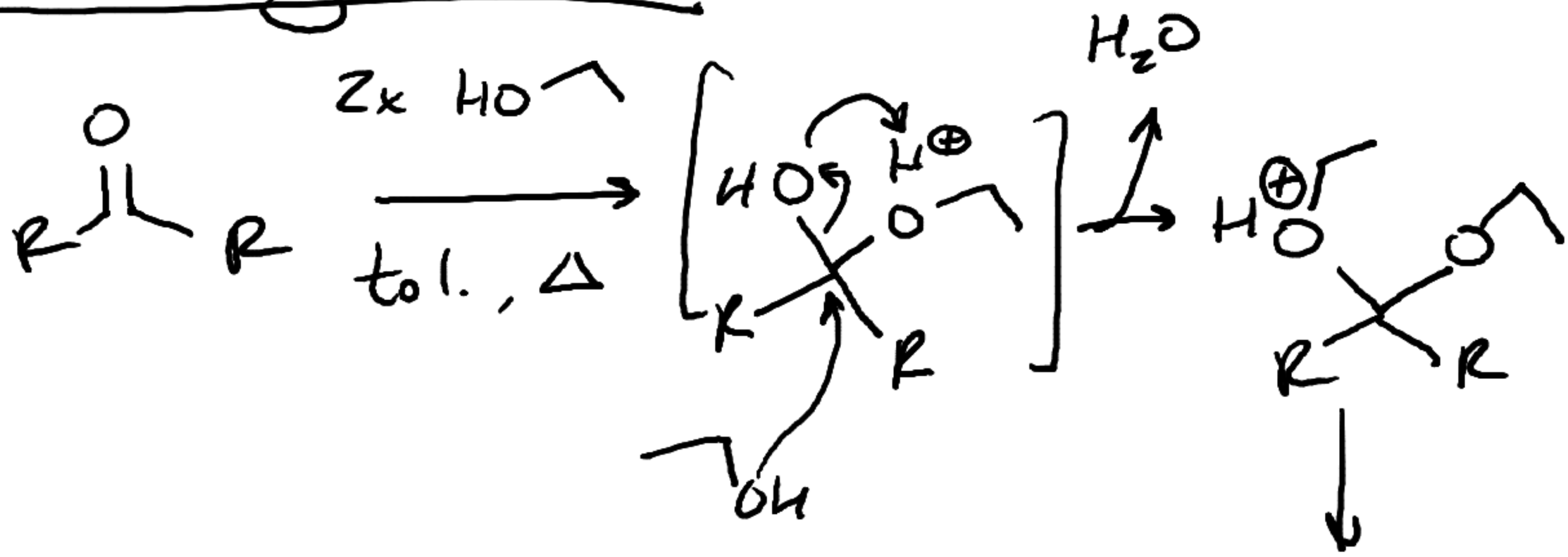
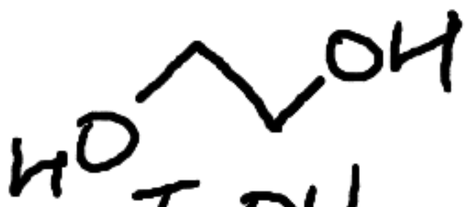
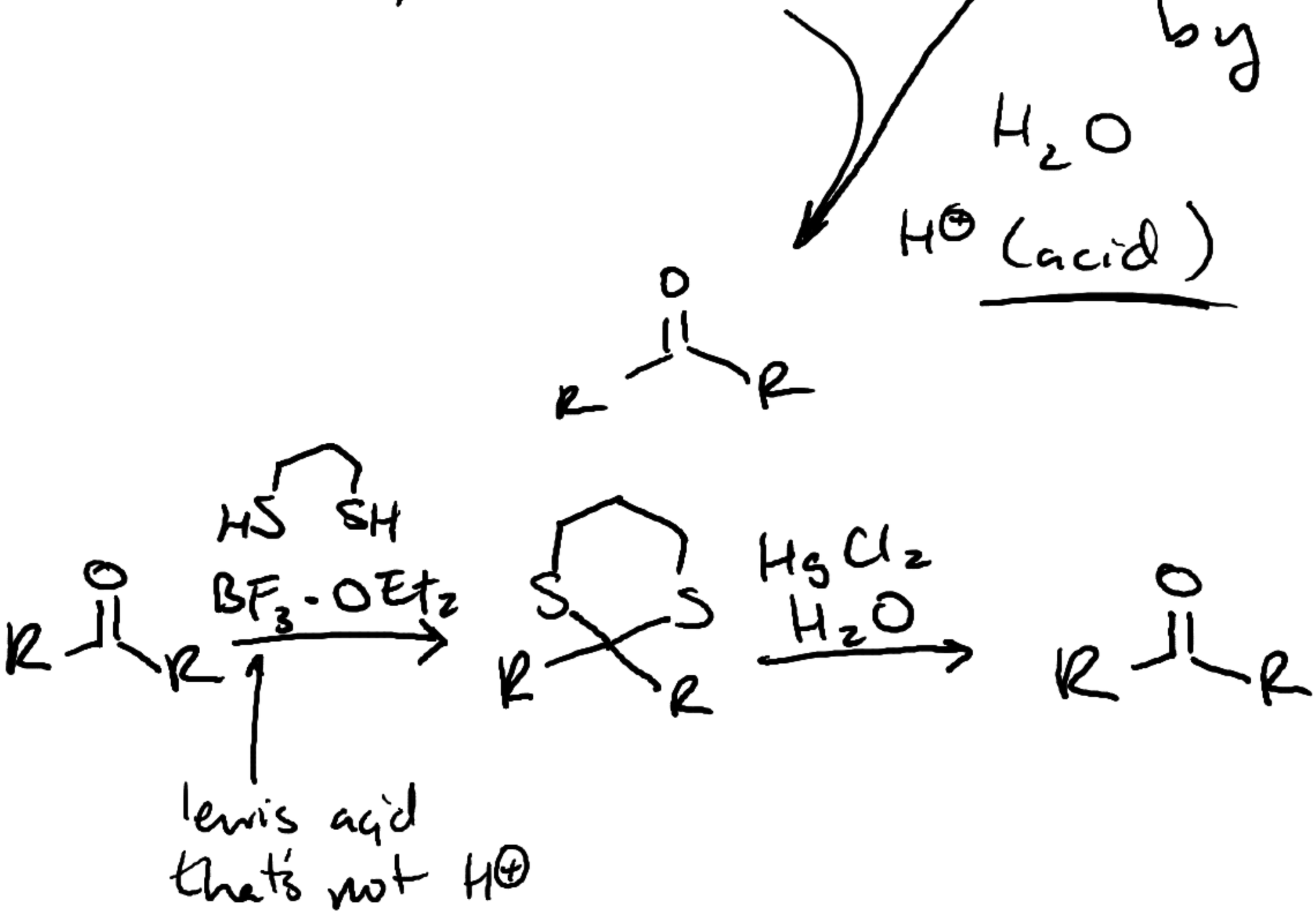
Carbonyl PGs







CONSIDER RECOVERY CONDITIONS!!

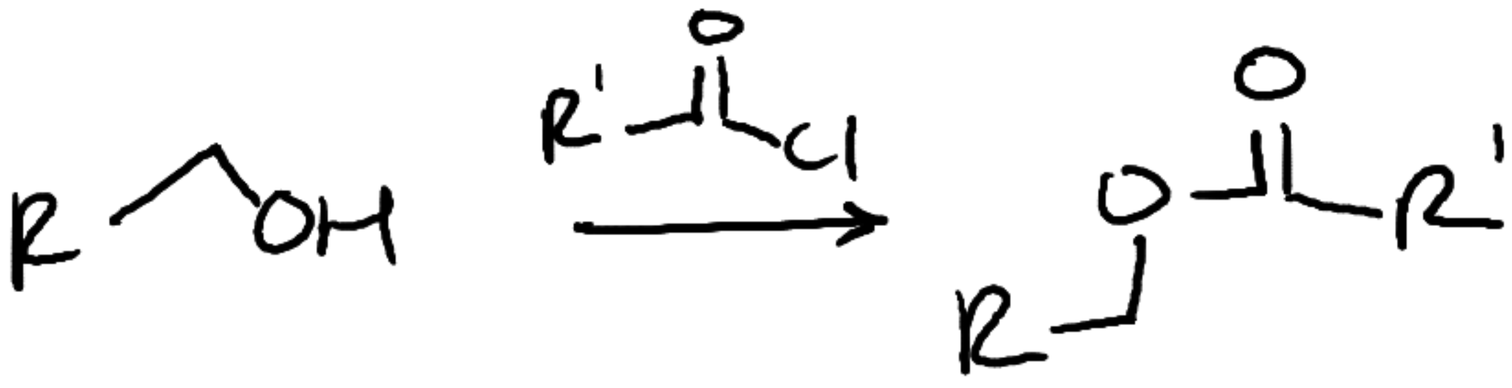
Selectivity of PG:

	Stable	Unstable
acetal	basic conditions reductions	acidic " "
	basic oxidations	acidic " "
dithiane	everything except	metal-catalyzed hydrogenation

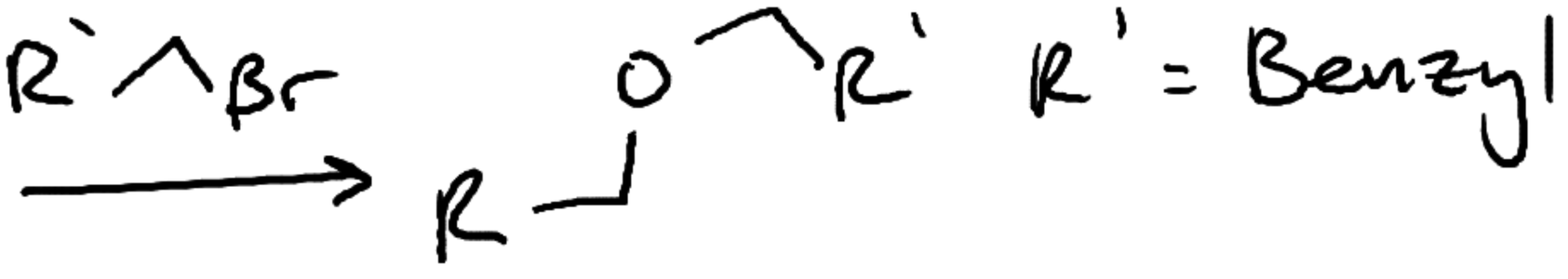
Alcohol PG

Basic Principle:

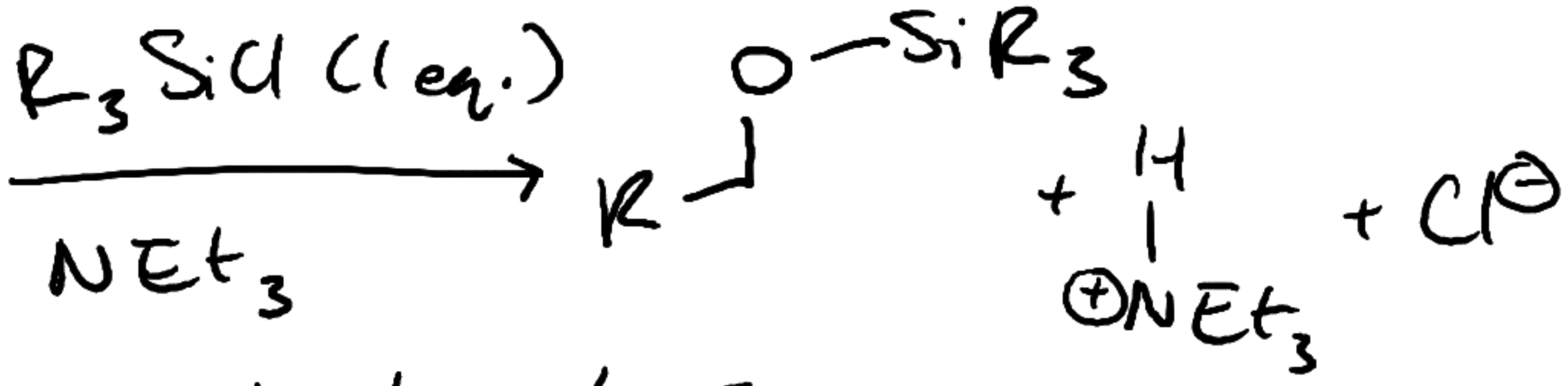
R—OH discourage H from deprotonation
to prevent nucleophilic atk



deprotect w/ reduction, hydrolysis



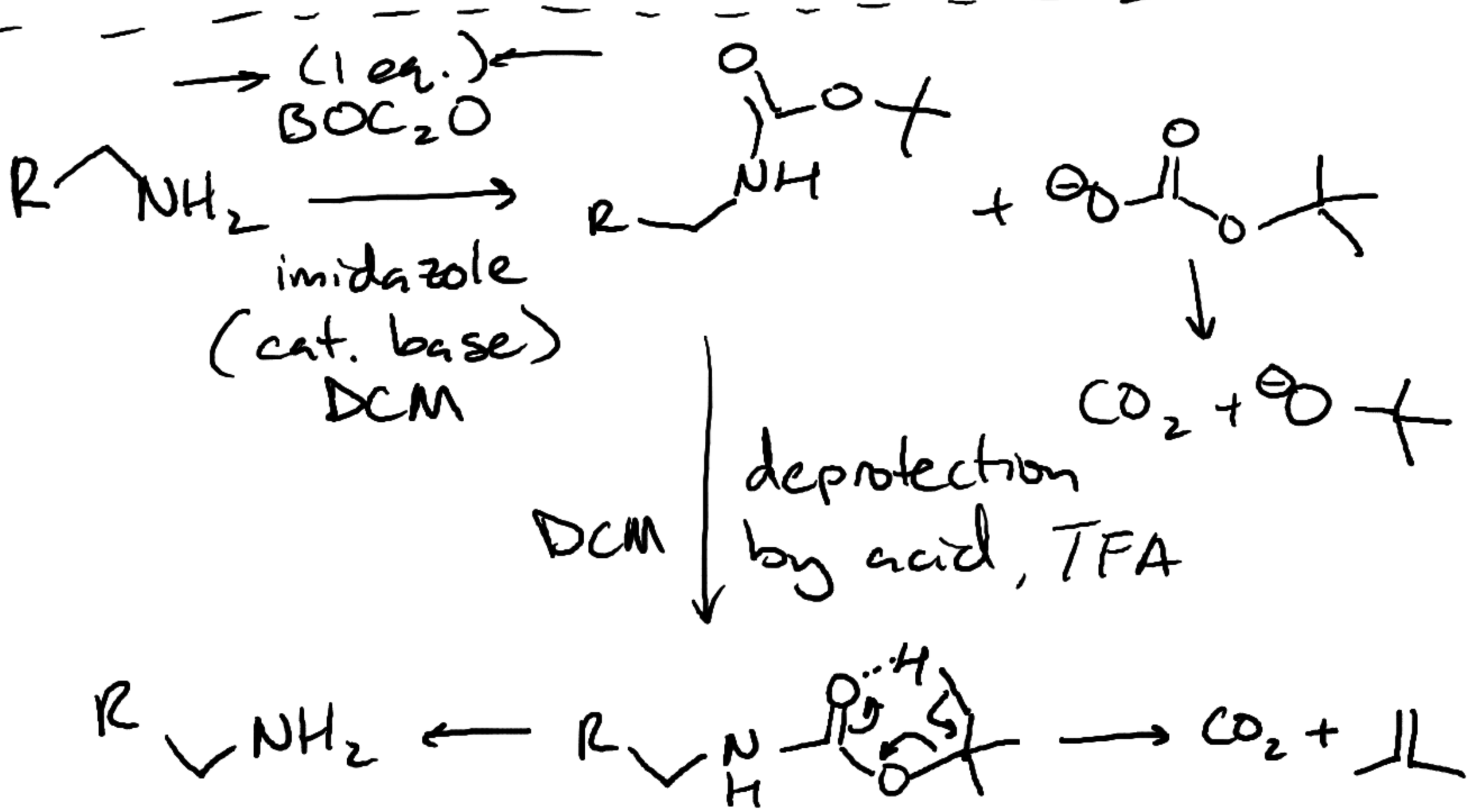
deprotect w/ H_2, Pd/C



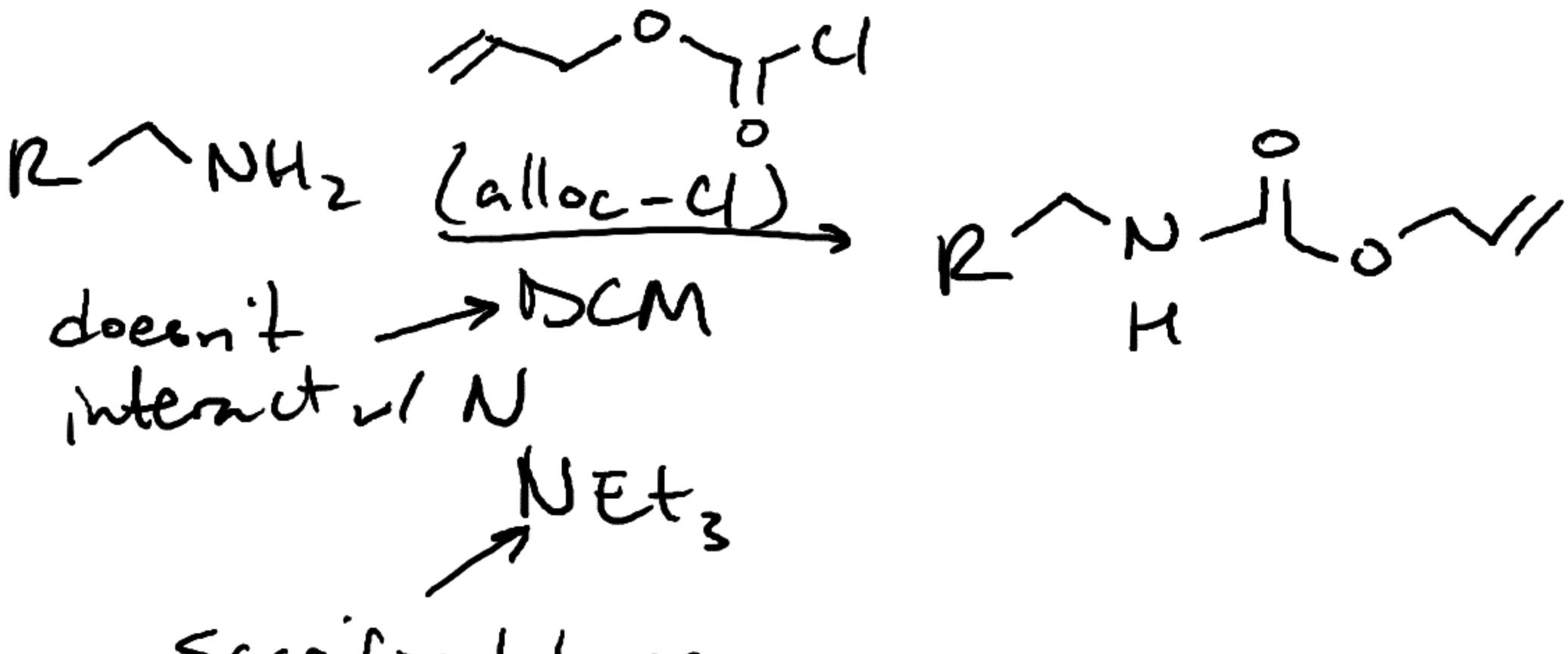
deprotect w/ TBAF in THF
& acid work-up

Amine Protecting Groups

Basic Principle:
want to change N behavior a way from a nucleophile



more on next pg →


R NH2
(alloc-Cl)
DCM
doesn't interact w/ N
NEt3
Sacrifizial base, good base, weak nuc⊖
(Cbz-Cl)
Ph
deprotect both w/ H2, Pd/C, DCM
R NH2 + CO2 +