PB&J: Phosphorus and Boron at the Junction of Two \( \pi \)-Systems

**Significance:** The 1,1-alkenyloboration of alkynes is an unique route to large conjugated \( \pi \)-systems. Erker and co-workers demonstrate that the 1,1-alkenyloboration of diarylphosphino-enynes proceeds similarly to give hexatrienes 1. Upon thermolysis, two concurrent transformations occur: \( 6\pi \)-electrocyclic ring closure of the hexatriene moiety and nucleophilic aromatic substitution (SNAr) of a pentafluorophenyl group by the phosphine nucleophile to yield heterotricyclic products 2.

**Comment:** These reactions are a convenient synthetic route to new molecules containing vicinal P/B Lewis pairs. Thermolysis products are only reported for 1a and 1b. Would the thermolysis of 1c and 1d, which contain bulky (Mes)\(_2\)P nucleophiles, result in electrocyclic ring closure without concurrent SNAr?