A new synthesis of heterocycles from o-substituted aryl benzyl ethers

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The [1,2]-Wittig rearrangement has not been widely exploited synthetically. Treatment of the oxazoline-containing benzyl ether **1** with BuⁿLi does give the rearrangement product **2** in low yield. However simply adding KOBu^t to the reaction mixture changes the outcome completely and gives a high yield of 3-aminobenzofuran **3**. This method has been extended to the benzyl sulfide **4** and amine **5** which give respectively the 3-aminobenzothiophene **6** and indole **7**.

By moving to the secondary amide $\bf 8$, [1,2]-Wittig rearrangement is achieved in high yield with Bu n Li, and the initial product $\bf 9$ is readily converted into either the phthalide $\bf 10$ or the hydroxyisoindolone $\bf 11$.