Oxidative decarboxylative coupling reactions provide an attractive route to generate a diverse array of functionalized arenes from inexpensive and readily available carboxylic acids. These methods, however, are under utilized, in part, due to limitations in the scope of the carboxylic acid coupling partner. First-row transition metal catalysts offer an opportunity to overcome these challenges, yet there are limited examples of transformations of this type. We have recently developed copper and nickel catalyst systems capable of enabling the decarboxylative (hetero)arylation of C-H bonds. Our ongoing work to extend the reactivity, explore the reaction mechanisms, and understand the substrate limitations of these systems will be presented.