This reactivity of heterocyclic α–C–H positions with organolanthanides raises the intriguing question of whether similar processes might be employed to activate other heterocyclic 2–position functionalities such as organometalloids. For example, trialkyltin groups might be catalytically transferred from the heterocyclic 2–position to generate valuable new organotin compounds. If α–C–SnR3 activation using 2(trimethylstannyl)pyridine (1) as the substrate proceeded similarly, subsequent insertive chemistry at Cp*2La(2–pyridyl) (3) would then produce Cp*2La(2–(2–pyridyl)ethyl) complexes. Subsequent α–C–SnR3/C–La σ–bond metathesis by a new molecule of 1 would then regenerate 3 and produce 2–[2(trimethylstannyl)ethyl]pyridine (4). In this study we explore the novel activation of 2–(Me3Sn)arenes as an approach to accessing a variety of novel organotin species. It will be seen that ethylene undergoes insertion into the La–C bond of the Cp*2La(2–pyridyl) (3) intermediate at 25 °C, followed by carbostannolysis, to catalytically generate 2–(2(trimethylstannyl)ethyl)pyridine (4). Furthermore, the organolanthanide alkyl Cp*2LaCH(TMS)2 (2a) and organolanthanide hydride (Cp*2LaH)2 (2b) both initiate the conversion of 2(trimethylstannyl)pyridine (1) with 1–hexyne to yield (E)–2butyl–1–(trimethylstannyl)–oct–1–en–3–yne ((E)–9). This transformation appears to be general for α–monosubstituted and αdisubstituted terminal alkynes.