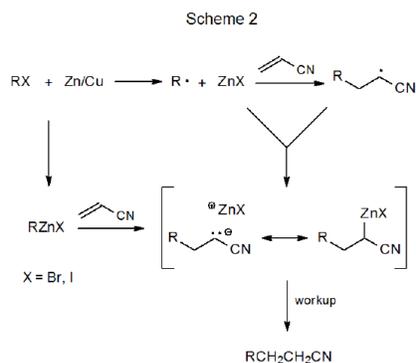


IV. Reaction Mechanism

Although the radical mechanism shown in [Scheme 1](#) offers a reasonable explanation for the reactions pictured in [eq 2](#), there is uncertainty in some reactions involving redox couples about whether a free-radical is ever produced. This uncertainty is reflected in the reaction mechanism shown in Scheme 2, which describes two possible pathways for participation of a zinc–copper couple in an addition reaction. One pathway involves radical formation by electron transfer, and the second describes formation of an organo-zinc intermediate. The stereochemical evidence and solvent effects described in the next two sections offer insight into the nature of the reactive species generated by a typical redox couple.



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