Hom-Lie algebras, Lie color algebras, Lie superalgebras and other type of generalized Lie algebras are recovered by means of an iterated construction, known as monadic decomposition of functors, which is based on Eilenberg-Moore categories.

This talk is mainly based on the work [A. Ardizzoni and C. Menini, "Milnor-Moore Categories and Monadic Decomposition", submitted. (arXiv:1401.2037)] (Received August 14, 2014)