Abstract: Quantum electrodynamics is a very mature subject by now. Surprisingly, some of its symmetries have only been properly understood in the last couple of years. Specifically, QED has a very rich set of symmetries, involving modern notions such as higher-form symmetries, higher-group symmetries, and categorical symmetries. A proper understanding of these generalized symmetries is not really crucial if we are interested in scattering processes involving leptons and photons only, but it does become quite essential if we want to add monopoles into the mix.