Abstract: Nonlocal generalizations of Einstein's general relativity have been a promising attempt in order to construct a healthy quantum theory of gravity so far. Despite their increasing popularity, there are still many aspects which need to be further investigated. In this talk we will consider the possibility to enlarge the class of symmetries under which a local (polynomial) action is invariant by introducing nonlocal (non-polynomial) operators. In particular, we will show how to construct nonlocal actions, consisting of infinite order derivatives, which are invariant under a wider class of symmetries, containing the Galilean shift symmetry as a subclass. Motivated by this, we will consider the case of a scalar field and discuss the pole structure of the propagator which has infinitely many complex conjugate poles, but satisfies the tree-level unitarity. We will also consider the possibility to construct UV complete Galilean theories by showing how the ultraviolet behavior of loop integrals can be ameliorated. Moreover, we will consider kinetic operators respecting the same symmetries in the context of linearized gravity. In such a scenario, the graviton propagator turns out to be ghost-free and the spacetime metric generated by a point-like source is nonsingular. These new models might open a new branch of nonlocal theories.