On the unexpected fate of scientific ideas

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I will start from a recent personal experience. In 1965, I published a paper, exhibiting an hitherto unknown limit of the Lorentz group, which I called the « Carroll group » because of its seemingly paradoxical physical contents.Since I saw it as more curious than than relevant, so that I published in French in a journal far from the mainstream. It was most gratifying to notice the quite unexpected favour this paper started to enjoy a few years ago, so that a so-called « Carrollian physics » is now developing, with applications in various domains of forefront theoretical physics, such as supersymmetry, string theory, etc. Generalizing the theme, and drawing examples from group theory, I will reflect on the very diverse time scales with which scientific ideas develop — or not.