Abstract Why were the poorer countries of the European periphery latecomers to the Age of Mass Migration? We test the diffusion hypothesis, which explains the delayed migration puzzle by arguing that mass migration from peripheral countries was delayed by a lack of exposure to migration networks, and that the geographic expansion of these networks in a process of spatial diffusion was the main factor that eventually triggered mass migration. Focusing on post-unification Italy, we construct a comprehensive commune- and district-level panel of annual emigration data over four decades. We develop a new set of stylized facts on Italian emigration that are consistent with four main predictions of the diffusion hypothesis. Among these, we show that Italian mass migration to North America began in a few separate epicenters and expanded from there in an orderly pattern of spatial expansion over time. Using a new instrumental variables strategy, we show that this pattern was the product of a mechanism in which emigration from one commune was affected by emigration from its neighbors. These findings strongly support the diffusion hypothesis, and call for a revision of our understanding of one of the most important features of the Age of Mass Migration.