The behavior of the norms of ergodic sums can be used to characterize coboundaries. But the behavior of the norms of ergodic sums can be fairly chaotic. Moreover, for a given function, which classes of transformations have that function as a coboundary is a complex issue. These types of things will be considered in some detail for general ergodic transformations of a probability space. (Received August 19, 2013)