The Eulerian polynomials are closely related to permutations. In 1954 Carlitz defined a generalization, $q$-Eulerian polynomials. The connection between these polynomials and permutations was only discovered about 20 years later. Another generalization of the Eulerian polynomials, the so-called degenerate Eulerian polynomials, was proposed by Carlitz in 1956. In this work we will define a new class of generalized permutations and demonstrate a relation between them and the degenerate Eulerian polynomials. (Received September 15, 2019)