In his study of the totally nonnegative Grassmannian, Postnikov introduced several combinatorial objects linked to a Grassmannian permutation \( w = w_\lambda \). We study the connection between these objects when \( w \) is no longer required to be Grassmannian. These objects include regions in the inversion hyperplane arrangement of \( w \), rook placements on the complement of the diagram of \( w \), “Le”-fillings of the diagram of \( w \), and permutations below \( w \) in the strong Bruhat order. We show that for any fixed permutation \( w \) the number of regions equals the number of rook placements and the number of certain fillings related to “Le”-fillings. Then thanks to a conjecture of Postnikov, settled by Hultman-Linusson-Shareshian-Sjöstrand, we relate this number of regions/placements/fillings and one of its \( q \)-analogues to the number of permutations below \( w \) in the Bruhat order. This last relation settles part of a conjecture with Klein and Lewis. (Received September 17, 2013)