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Yan Zhang* (yanzhang@fas.harvard.edu), 550 Mather House Mail Center, Cambridge, MA 02138. *A Relationship between the Robinson-Schensted-Knuth Correspondence (RSK) and Permutation Containment.*

The study of permutation containment and avoidance is a well-established and well-studied field in enumerative combinatorics. The Robinson-Schensted-Knuth Algorithm (RSK) is a powerful tool in the studies of permutations which gives a correspondence between permutations and pairs of Young tableaux. Here, we note a relationship between one permutation's containment of another and the ordering of the Young tableaux which arise as a result of RSK applied to the said permutations. We also discuss possible extensions and improvements of the result in this direction. (Received September 22, 2006)