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George E. Andrews* (andrews@math.psu.edu), Dept. of Math., McAllister Bldg., Penn State University, University Park, PA 16802. *On symmetry in q -series transformations.*

In the late 19th century, L.J. Rogers began his celebrated work on q -series by considering symmetry in the transformations of Heine's q -hypergeometric series [Proc. London Math. Soc., 24(1893), 171-179]. Recently vexing questions have arisen concerning symmetry in the study of k -marked Durfee symbols [Invent. Math., 169(2007), 37-73]. We propose looking at transformations of the general very well-poised q -hypergeometric series with an eye to preserving as much symmetry as possible. We provide some new transformations and consider their applications. (Received July 31, 2007)