

ON A TRANSFORMATION OF RIORDAN ARRAYS

Paul Barry

Waterford Institute of Technology

Let $a_{n,k}$ denote the general element of a Riordan array A . For every non-negative integer r we define a new array $A^{(r)}$ with general term

$$a_{n,k}^{(r)} = \sum_{i=0}^{n+r} \binom{n+r}{i} a_{n,i+k}.$$

We show that the matrix $A^{(r)}$ is a Riordan array, and we characterize its A -sequence in terms of that of A . We illustrate these results in the case of some well known Riordan arrays.