

Understanding the linking possibilities in Scottish Records and an algorithmic approach to full linkage

Dearle, A^{1*}, Kirby, G¹, Williamson, L², and Dibben, C²

¹University of St Andrews

²University of Edinburgh

In this paper we systematically analyse all of the linkage possibilities that may be formed using Scottish birth, death and marriage records. We distinguish entity linkage, in which a single individual is identified as appearing in two records, and relationship linkage in which relationships between the individuals appearing on records are established. We identify a subset of the linkages that are possible which we call strong linkage opportunities in which links are established using many fields. Using multiple strong linkage opportunities and the relationships between different actors on the records we show how linkage confidence may be increased. Finally we demonstrate how these links may be combined to perform full linkage over the Scottish records being digitised in the Digitising Scotland project.

*Corresponding Author:

Email Address: al@st-andrews.ac.uk (A Dearle)

