The study of sound change has evolved from a heuristic tool for 19th century comparative historical reconstruction into the backbone of the rigid approach to language change developed by the Neogrammarians. In the course of the 20th and early 21st century it has become the main meeting point for a range of subdisciplines of linguistics (historical linguistics, dialectology, sociolinguistics, phonology, phonetics and cognitivist approaches to phonetic variation). In this lecture I will sketch some of the main aspects of the approaches to sound change taken in these various corners of the field. By way of a synthesis I will propose a model in which three approaches to sound change dovetail to account for the huge and seemingly chaotic body of insights into the phenomenon. An empirical study of an instance of historical sound change which affected a subset of the Brabant dialects of Dutch will serve to illustrate several parts of the model.