This paper argues for the adoption of a construction-based perspective to the investigation of diachronic shifts in valency, which is a hitherto largely neglected topic in the framework of valency grammar. On the basis of a comparison of the set of verbs attested in the double object argument structure pattern in a corpus of 18th-century British English with the construction’s present-day semantic range, I will distinguish between three kinds of valency shifts. It will be shown that the semantic ranges of schematic argument structure constructions are subject to diachronic change, and that the shifts in valency observed in individual verbs are often part of more general changes at the level of the associated argument structure constructions. The latter part of the paper explores frequency shifts in valency and constructional semantics.