Processing of speech sounds depends on interactive context effects: Evidence from electrophysiology with omissions

Human speech is hardly ever produced in a canonical way: Reductions of single sounds or entire words, or complete omissions of both kinds abound in naturally produced speech. Recent electrophysiological findings converge with the well-attested phonemic restoration effect in that they show that missing evidence can be filled in by contextual, lexical knowledge. However, if this knowledge accounts for these restorations, does it directly relate to lexical variables, such as phoneme- or word-frequency?
I provide evidence from several electroencephalography (EEG) studies that neural indices of segment and word omissions are indeed modulated by lexical variables. Even more importantly: The influence of these variables seems to apply in a hierarchical manner, with contextual probability overriding word frequency, and word frequency overriding segment frequency effects. The results are discussed on the background of interactive speech processing models.