

## Introduction

This monograph is devoted to the study of the dynamics of phonotactic patterns in Polish. Phonotactics is a subbranch of phonology, concerned with permissible sound combinations within words and syllables. It formulates restrictions or constraints on the occurrence of single phonemes or sequences of sounds. Polish is a consonantal language with conspicuously rich phonotactics, which has occupied linguists since the half of the 20th century. Numerous works were devoted to the description of phonotactic patterns in terms of their phonological composition, text frequency as well their interpretation in theoretical frameworks such as Government Phonology, Optimality Theory or Natural Phonology. Selected aspects of phonotactics were also investigated from the point of view of speakers' performance in the first and second language as well as in processing by adults.

The relatively recent field of morphonotactics, i.e. morphologically-generated phonotactics, has shed a new light on the analysis of consonant clusters in written and spoken corpora (Dressler and Dziubalska-Kołodziejczyk 2006a, 2006b). Morphonotactics allows for specifying clusters which occur due to the intervention of morphology, and dissociating them from phonotactic clusters which naturally occur within roots. This approach has been adopted by Dziubalska-Kołodziejczyk (2014), Zydorowicz et al. (2016) and Zydorowicz and Orzechowska (2017) to describe Polish (mor)phonotactics in various written corpora. Apart from the morphologically-oriented study of Polish clusters, a parallel qualitative phonological approach has been adopted. The framework in which the aforementioned studies are embedded is that of Natural Phonology, and the model used for the description of phonotactic patterns is Beats-and-Binding (Dziubalska-Kołodziejczyk 2002a, 2009). The quality of Polish clusters has been evaluated in terms of cluster goodness and expressed by means of the Net Auditory Distance Principle (henceforth NAD).

The goal of the present work is to continue this line of research and enrich the extant literature by contributing behavioural data from three fields of external evidence, namely first language acquisition by Polish children, spontaneous production of adult speakers of Polish as well as psycholinguistic data of cluster processing. In particular, apart from

providing descriptive quantitative data on cluster production in child and adult language (in terms of cluster length, size, the use of simplification strategies), the following theoretically-based questions will be addressed: 1) Do cluster production rates reflect the degree of cluster preferability / markedness as expressed by the Net Auditory Distance Principle and the traditional Sonority Sequencing Generalisation? 2) Does the morphological status of a cluster have an impeding effect of cluster simplification? 3) Are adult speakers of Polish sensitive to the presence of a morphological boundary in a cluster while performing sublexical and lexical tasks?

The present work consists of six chapters and a conclusion. In Chapter 1, Polish descriptive phonotactics is characterised, and the notions of the syllable, sonority and markedness are discussed. Chapter 2 is devoted to the description of the framework, i.e. Natural Phonology and the introduction of morphonotactics. An essential part of this chapter is devoted to the extension of morphonotactics by systematising data on Polish morphonotactically-relevant affixes which trigger the emergence of morphologically complex clusters. Chapter 3 provides an overview of the most significant findings in the study of phonotactics in first language acquisition, connected speech and processing by adults. Chapters 4-6 are empirical in nature and present the methodology of the studies as well as the results. Developmental, spontaneous and processing data are analysed in the three consecutive chapters, respectively. The section Conclusion recapitulates the major findings and outlines the directions of prospective research.

It is hoped that this monograph will constitute a valuable contribution to the pool of crosslinguistic studies on the acquisition of L1 phonotactics, cluster production in spontaneous speech and cluster processing by adults. Secondly, it will verify claims and assumptions of morphonotactics and the Beat-and-Binding model of phonotactics.