This part, consisting of two comprehensive chapters, gives the fundamentals of regulated grammars. It classifies these grammars into two categories—context-based regulated grammars (Chap. 4) and rule-based regulated grammars (Chap. 5).

Chapter 4 gives an extensive and thorough coverage of regulated grammars that generate languages under various context-related restrictions. First, it views classical grammars as context-based regulated grammars. Then, it studies context-conditional grammars and their variants, including random context grammars, generalized forbidding grammars, semi-conditional grammars, and simple semi-conditional grammars. They all have their rules enriched by permitting and forbidding strings, referred to as permitting and forbidding conditions, respectively. These grammars regulate the language generation process so they require the presence of permitting conditions and, simultaneously, the absence of forbidding conditions in the rewritten sentential forms. Finally, this chapter covers scattered context grammars, which regulate their language generation so they simultaneously rewrite several prescribed nonterminals scattered throughout sentential forms.

Chapter 5 studies grammatical regulation underlain by restrictions placed on the use of rules. Four types of grammars regulated in this way are covered—namely, regular-controlled, matrix, programmed, and state grammars. Regular-controlled grammars control the use of rules by regular languages. Matrix grammars represent special cases of regular-control grammars whose control languages have the form of the iteration of finite languages. Programmed grammars base their regulation on binary relations over the sets of rules. Finally, state grammars regulate the use of rules by states in a way that strongly resembles the finite-state control of finite automata.