CHAPTER FIFTEEN

TOWARDS A MAXIMUM MATRIX OF PHRASES

15.1 INTRODUCTION

In the preceding chapters we have investigated the structure of phrases and the order of phrase atoms and expansions. The regularities we have discovered enable us to define a ‘maximum matrix of phrase structure’. Such a matrix is a linear model that indicates the order of all slots that are present within a phrase. In the present chapter we define the maximum matrix of phrase atoms (§ 15.2), summarize our observations on the ways in which phrase atoms can be extended (§ 15.3), and suggest a maximum matrix of phrase structure (§ 15.4). We will end this chapter with some remarks about the interrelationship of phrase structure and clause structure. The latter will be the subject of Part Four. In the present paragraph we will make some general remarks on the notion of a ‘maximum matrix’.

The ‘maximum matrix’ is a tool to describe the internal structure of phrases. Each phrase contains a head (phrase atom). If this head consists of more than one word, the word order is well-defined (e.g. Preposition–Noun). The head may take a number of extensions (Adjective, d-Noun etc.). Each type of extension has its own slot in the maximum matrix. That is to say: the slot may be empty, but if it is filled, the place of the extension in relation to the head and other extensions follows a fixed pattern.

The model of a maximum matrix indicates not only the constituents of a clause, but also its boundaries. Elements that have a position outside the maximum matrix do not belong to the phrase. At first sight this suggests that the size of phrases is rather limited: the maximum matrix contains a number of slots, and when all the slots are filled, the maximum has been reached. We will see, however, that the maximum
matrix contains a recursive element which enables long strings of words to occupy a single slot in it.¹

We are not aware of any attempt in Hebrew or Aramaic/Syriac studies to describe phrase structure with the help of a maximum matrix. But we can compare models of syntactic analysis at sentence level in which sentences are described as a sequence of positions. The position that a word occupies depends on its grammatical function and the information structure of the clause.

A number of scholars have used such a model to describe clause structure in Biblical Hebrew. W. Gross, for example, uses the Stellungsfeldermodell that has been developed by German linguists in his description of word order in Biblical Hebrew verbal clauses.² He argues that this model is useful to describe complete sentences in contrast to one-sided approaches that restrict themselves to the relative order of the subject and the verb.³ Gross distinguishes between (a) the Vorfeld, the part of the sentence that comes before the verb, (b) the verbal predicate, and (c) the Hauptfeld, containing all constituents following the verbal predicate.

The Stellungsfeldermodell has been criticized because it concerns a linear rather than a hierarchical description.⁴ However, the validity of this criticism is limited because the description of regularities of surface phenomena is an integrated part of linguistic analysis. Gross argues that word order is such a surface phenomenon par excellence, and that the Stellungsfeldermodell is very helpful to describe the linear order of the elements in a sentence.⁵

In his 2001 publication (Vorfeld) Gross also uses concepts that play an important role in Functional Grammar, such as Topic and Comment, Theme and Rheme, and Focus and Background. In Functional Grammar it is assumed that these functions, if present, each occupy their own slot in the sentence pattern. In this context mention should

¹ For examples see below, § 15.4.
³ Gross, Satzteilfolge, 46. In the field of phrase structure we see a comparable one-sided focus on the relation between the head and one specification (e.g. the ‘genitive’) rather than complete clause constituents (§ 9.1, end).
⁴ Cf. Dürscheid, Modelle der Satzanalyse, 11–18.
⁵ Gross, Satzteilfolge, 43–48. For the role of ‘surface structure’ in the study of Syriac word order, compare Kutty, ‘Particle dăn’, 196.