Chapter 1 introduces the two central modules of this architecture: semantics and syntax. The semantic module generates Function/Argument (FA) structures, which determine how the meanings of lexical items, phrases and sentences are composed. The syntax module generates phrase/sentence structure, as standardly assumed in generative frameworks. The syntactic rules of representation come in a standard, if conservative generative format (e.g. \( S \rightarrow NP, VP \)). The semantic rules also come in a conservative, categorial format. For instance, an object of type \( F_{\text{op}} \) is a function that takes an argument object of type \( a \) as an input, and returns a type \( p \) proposition as a result (cf. Cresswell 1973). Lexical items are initially defined as pairings of F/A and syntactic representations, which include information about category and distribution. For instance, the intransitive verb "sneeze" has F/A type \( F_a \) and syntactic category "V in \([VP \_\_]\)" (i.e. it is a verb in a VP).

Chapter 2 presents the interface module and its three core principles. The first is lexical correspondence: each lexical item must have a representation in each module/dimension. The second is categorial correspondence: categories from different modules are mapped in a homogenous way (e.g. NPs to arguments, propositions to sentences). The third is geometric correspondence: relations from one dimension (e.g. c-command in syntax) must correspond to relation in another dimension (e.g. scope in semantics). Since the theory assumes that different rules generate syntactic and semantic representations, which are however connected via precise mappings, it predicts that discrepancies and asymmetries among representations can arise. For instance, copular sentences such as Sally is a carpenter are analysed as including lexical correspondence discrepancies. The copula and indefinite article are treated as having null semantic representations, the NPs Sally and carpenter as having semantic representations that combine to form a proposition (i.e. argument for Sally, predicate for carpenter). The interface module maps these NPs to respectively argument and predicate type representations, and copula and indefinite article to null representations. Hence, lexical and categorial correspondence are maintained even if not all syntactic representations correspond to non-null semantic representations.

Chapter 3 adds the role (also event, cognitive) structure module, which determines the event structure and thematic roles associated to lexical items and sentences. Only three roles are postulated: proto-agent, proto-patient, and ancillary participant (cf. Dowty 1991). Thus, the role structure of a verb such as put can be represented as “RS: “put” (type), AGT, PAT, ANC”. Notably, role structures are assumed to be “flat” sequences including event type and roles. The assumption of a distinct role structure module is motivated via the analysis of voice
phenomena and relations among the role structures of verbs. For instance, passive and active sentences are analysed as involving subject NPs that have an argument (semantic) type, but distinct role values (agent for active sentences, patient for passive ones). Antonym verb pairs such as buy and sell involve the same patient (the goods being sold), but different types of agent roles, “buyers” and “sellers”.

Chapter 4 introduces the Linear Order Component (LOC) module, which determines word order according to three principles. First, non-head lexical items can either precede or follow heads. Second, the structural complexity of lexical items determines more specific ordering relations. For instance, NPs are considered as less complex than PPs, PPs less complex than VPs and S nodes (cf. Perlmutter’s 1971 complexity hypothesis). Third, language-specific rules can also play a role. One example of how these rules interact is as follows. The syntactic representation of an interrogative sentence (e.g. who came to the party?) involves a wh-pronoun in its object position (roughly, came to the party who). However, its linearization in English can involve a wh-pronoun in sentence-initial position, since an NP is less complex than the sentence S it is part of. In Mandarin, less complex items are assumed to follow more complex ones. Thus, the wh-pronoun occurs in sentence-final position, instead:

Chapter 5 presents the morphology module, which involves rules to derive stems (i.e. sub-word units) and words via four types of operations, labelled as morphological derivation, inflection, cliticization and derivational cliticization. Hence, a lexical item representation also includes the morphological process underpinning its structure, and a distinct morphophonological representation (i.e. its corresponding exponent). Building on this distinction, apparently distinct phenomena receive similar analyses. For instance, cliticization, incorporation and tense/aspect realization in auxiliary verbs are analysed as involving “words” formed by combining distinct syntactic units. The combination of a root node with a “sing” value, and a tense node with the “past” value yields the word sang.

Chapter 6 analyses gaps and other defective patterns. According to the automodular analysis, lexical items can feature mismatches amongst levels of representation: one or more levels can feature null representations. Consequently, a wide range of phenomena find a unified account, such as zero morphemes (i.e. morphemes with a null exponent), verb and VP ellipsis (i.e. verbs and VPs with a null exponent in context, respectively), and though constructions, involving gap NPs with no other representational content. Chapter 7 presents a theory of conflicts resolution in possible mappings amongst representations (e.g. scope ambiguities, different word orders). The guiding assumption is that conflicts are resolved according to the “great chain of speaking” hierarchy. For instance, conflicts between LOC and syntax (e.g. particle shift) are resolved in favour of higher ranking LOC. Since a particle is considered a more complex item than an NP, it acts as a head following its argument. Chapter 8 offers the conclusions, and sketches some brief comparisons with other models of grammar, e.g. Culicover and Jackendoff (2005).

Overall, the book presents automodular grammar in a clear and compact manner, testing the theory against a wealth of cross-linguistic and “cross-modular” data. However, certain peripheral aspects of the theory could have benefitted from a more thorough discussion of, and comparison with previous literature. For instance, the use of the Modularity of Mind/Grammar hypothesis could have been motivated in more detail. In the original Fodorian formulation, Modularity also involved the assumption that the same cross-modular rules generate representations: nodules share “language of thought” (cf. Fodor 1975). Consequently, one would not expect linear representations (e.g. role structure, LOC strings) to exist in parallel with binary trees, in a modularity-based grammar. Although empirically adequate, these divergences from the core tenets of Modularity could have benefitted from a more careful discussion. Furthermore, the heterogeneous nature of modules and building blocks seems could have been more thoroughly motivated. An open question, for instance, is why F/A and role
structures form distinct modules, since propositions and events are often considered part of a single semantic ontology (cf. Krifka 1998). Also, the resemblance with other representational frameworks implementing inter-modular mapping principles is at times mentioned, but never addressed in full detail (e.g. LFG, Bresnan 2001, HPSG, Sag, Wasow & Bender 2003). Even if such theoretical reflections would have benefitted the theory’s case in a more thorough manner, it is fair to say that the book still presents a solid case for automodular grammar.

References