Clitics are a notoriously difficult topic that has received much attention, from a number of theoretical vantage points, since the appearance of Zwicky’s (1977) seminal article “On clitics.” What emerges from this vast body of work is that clitics are more easily characterized by what they are not, than by what they are. Elements referred to as clitics systematically defy the general distributional and other principles that otherwise hold in the grammar. But while the phonology and syntax of clitics appears to be unlike the phonology and syntax of other linguistic elements, there are no obvious phonological or syntactic properties that uniquely characterize the class of clitics.

These and other important issues are addressed, and insightfully disentangled, in Steven Anderson’s important and much needed book *Aspects of the Theory of Clitics*. This is a tightly organized study, with each chapter filling in a portion of the overall formal landscape of the theory of clitics, and is a follow up on Anderson’s earlier work on this topic (Anderson 1992, 1993, 2000). It relies on a large data base and has an impressive empirical coverage which does justice to the diversity of this linguistic phenomenon. The central theme of this work is how to capture the behavior of clitics by invoking the formal mechanisms that can handle the intricacies of clitics while also accounting for linguistic phenomena other than clitics. In other words, Anderson’s theory subsumes clitics under the general principles of the grammar, in sharp contrast to some earlier approaches which treat them as idiosyncratic elements that call for clitic-specific grammatical devices. But while in Anderson’s theory the class of elements descriptively referred to as clitics are accommodated by general formal mechanisms, clitics do not emerge as a single formal class. Rather, they are characterized as “linguistic elements that display prosodically deficient phonology, anomalous morphosyntax, or both” (p.33).

We now turn to the details of Anderson’s account, which begins with an attempt to answer the difficult question, what is a clitic. Anderson starts with a negative characterization: clitics are not a primitive category, either lexical, or grammatical, or prosodic. For the positive characterization of clitics, Anderson takes as his point of departure Zwicky’s (1977) well-known classification into simple clitics, special clitics, and bound words. In this classification, simple and special clitics differ from bound words by possessing non-clitic alternants (e.g., the clitic *me* alternates with *moi* in French), while simple clitics, whose syntax is in no way special, differ from special clitics, which are characterized by special positioning within a syntactic domain (e.g., initial, second or final). Anderson’s theory of clitics adopts only the latter two classes. Simple, or phonological clitics, as Anderson calls them, are defined by their prosodic deficiency, while special clitics are defined by their special morphosyntax. However, these two characterizations of clitics are, according to Anderson, “logically separable, and empirically distinct” (p. 32). While special clitics may be prosodically deficient, they do not have to be, as argued by the rare cases (such as *loro* in Italian or *tayo* in Tagalog) that display special morphosyntax but no deficient prosody. In sum, the overall characterization of clitics is disjunctive. The two properties of clitics – prosodic deficiency and special morphosyntax – need not coincide and are captured by different formal mechanisms, and in different components of the grammar.

The account of the proposed theory of clitics, phonological as well as special, is presented in chapters 3, 4, 5, and 6. Phonological clitics and their formal characterization are the
subject of chapter 3. The theoretical frame of reference is prosodic phonology; more specifically, its hierarchical organization, as originally proposed in Selkirk (1981, 1984, 1995) and Nespor and Vogel (1986). Within this general framework, Anderson develops the prosodic aspects of the theory of clitics. A phonological clitic is characterized as a linguistic element “whose phonological form is deficient in that it lacks prosodic structure” at one specific prosodic level, that of the prosodic word (p.23). It is of course natural to ask what makes a linguistic element prosodically deficient. This, according to Anderson, follows from the bifurcation of the lexicon into lexical (or content) and functional elements. Only lexical elements acquire the prosodic status of phonological words, while functional elements, in particular, monosyllabic function words, are designated as prosodically deficient, and therefore subject to the prosodic mechanisms reserved for the “stray adjunction” of prosodically deficient material; that is, they become phonological clitics. Whether a function word will be a phonological clitic is thus predictable from its prosodic size. On Anderson’s account “much of the phonology of cliticization comes down to the principles of prosodic organization and their consequences” (p.42). In particular, the prosody of clitics is equated with the prosody of function words. In this, Anderson agrees with accounts such as Selkirk (1995) and Peperkemp (1997), but departs from some earlier influential accounts: Klavans’s (1982, 1985) parametric characterization of clitics, and Inkelas’s (1989) prosodic theory of clitics with subcategorization frames as its central trait. Crucially, these approaches treat clitics as idiosyncratic formal elements, which further calls for idiosyncratic formal devices. Under this view, while all clitics are function words, not all function words, including the prosodically deficient ones, are necessarily clitics. Arguing against such proposals, Anderson takes the strong position that all aspects of the grammar of phonological clitics can be accommodated by, and are therefore subject to, the general principles of prosodic organization. In an Optimality Theory framework, this is delegated to the constraints that govern the prosodic constituency and their interactions. Relevant constraint interactions include violations of some aspects of the overall architecture of the prosodic hierarchy, such as adherence to strict layering or prohibitions against recursive configurations, but are taken to be a necessary compromise in accommodating clitics into an otherwise well-behaved prosodic constituency. What is crucial in Anderson’s account is that the prosodic configurations of clitics, rather than being assigned by mechanisms specifically designed for this phenomenon, emerge from the general principles of the grammar. In sum, according to Anderson, phonological clitics are prosodically deficient but their behavior is not prosodically idiosyncratic.

Chapters 4, 5, and 6 are dedicated to special clitics and their integration into the grammar. Having identified special morphosyntax as their defining property, Anderson essentially relies on the set of parameters for clitic placement developed in Klavans (1982, 1985). According to this classification, a clitic is located within a domain, which corresponds to a syntactic constituent; it has an anchor, a designated daughter of this domain, either first or last; and is specified for its order with respect to the anchor, which it either precedes or follows. From this it follows that a special clitic could be positioned as a first, last, second, or penultimate element within its domain. However, there is a crucial difference between Anderson’s and Klavans’ approaches. According to Klavans, clitics are idiosyncratic elements whose distribution cannot be captured by the general principles of the grammar; the special set of distributional parameters she proposes take care of specific aspects of their idiosyncracy. By contrast, Anderson proposes to characterize the special morphosyntax of clitics in more general terms. While adopting Klavans’ distributional parameters, he is in search of formal mechanisms that are not specifically tailored to this phenomenon. Anderson’s proposal is to capture what’s special about special clitics in the
morphological component. Crucial for him is the analogy between the range of phrasal positions occupied by special clitics and the range of word internal positions occupied by affixes. Affixes are attached as prefixes, suffixes and infixes (at either edge of the word), paralleling the first, last, second, and penultimate positions of special clitics. This analogy provides motivation for treating special clitics as phrasal affixes, subject to the principles of word internal, or lexical, morphology which, in this special case, operate in the post-lexical domain. Anderson points to other parallels between word internal affixes and special clitics: both are characterized by virtual absence of penultimate positioning, a logical possibility that is only marginally attested for either class; both exhibit fixed mutual order that often bears no resemblance to the ordering of the syntactic constituents in the language; both can assume either concatenative or non-concatenative form. These, according to Anderson, constitute further arguments for placing special clitics in morphology.

Anderson’s position goes against what syntacticians have traditionally assumed: that special clitics are to be accounted for in the syntactic component. Syntactic debates have mostly focused on the placement of second position clitics, and the proposals range from those that fully rely on syntactic devices to those that introduce further formal devices, those in particular that belong to the phonological component. Crucial for invoking components of the grammar other than syntax is Bošković’s (1995, 2000, 2001) important observation that second position clitics are not associated with a fixed structural position. Bošković takes this as evidence for a role of phonology in clitic positioning. However, Anderson takes this as further evidence for placing special clitics squarely within the morphological component.

Anderson invokes other aspects of the grammar of special clitics which place them outside the sphere of syntax. In some cases, the element that precedes second position clitics has to be characterized in prosodic, rather than in syntactic, terms. Furthermore, mutual ordering within the clitic complex (as well as various cases of clitic allomorphy) are governed by organizational principles that are closer to the principles of morphological and phonological components, than to those of syntax. While granting morphology a central role in the placement of special clitics, Anderson also allows for a role of phonology which, as he argues in chapter 3, is necessary for phonological clitics. However, the relevance of the syntactic component for the formal characterization of special clitics is less clear. According to Anderson, “the clitic is not itself a syntactic constituent of its phrasal domain, but rather a phonological marker of some feature(s) associated with the domain” (p.141), which precludes its ordering by syntactic means. But while the ordering of clitics is delegated to morphology, their domains and hosts are by and large syntactic. In sum, as phrasal affixes, special clitics are present in the syntactic component but are not subject to its organizational principles.

This general scenario sets the stage for Anderson’s own account of clitics with special morphosyntax, which is presented in chapter 6. Anderson argues that a constraint based theory is particularly suited for the intricacies of special clitic placement. He proposes a set of Optimality Theory constraints for clitic placement modeled on constraints that govern the distribution of word internal affixes. The proposed set of constraints, while mimicking the effect of Klavans’ parameters, provides a different conceptualization of the relevant issues, and a far more efficient mode of positioning special clitics. Crucially, a clitic is positioned as either a leftmost or a rightmost element in its domain, captured by the constraints $\text{LeftMost}(\text{cl}) (\text{Domain})$ and $\text{RightMost}(\text{cl}) (\text{Domain})$, respectively. This is sufficient for domain initial and domain final clitics, which correspond respectively to prefixes and suffixes. Second position clitics, which are modeled on (post-initial) infixes, require further constraint types. One is a set of constraints that
prohibits initial positioning, neutrally termed NonInitial (cl\textit{i}) (Domain) (and its mirror image NonFinal); the other is the Integrity family of constraints that ban the intrusion of clitics into phrases or words. With an undominated Integrity (XP) constraint, second position clitics can come after syntactic phrases but not after any smaller units. When Integrity (XP) is dominated by both NonInitial and LeftMost, clitics may break syntactic constituents and follow the first word. The dramatic case of endoclitics results if the dominated constraint is Integrity (Word). The second position is thus a result of different requirements placed on individual clitics by several types of constraints, and negotiations among these constraints implemented by constraint ranking. While these constraints can also effect the penultimate placement of clitics, this clitic position has not been properly attested, and presents a logical possibility that may or may not be needed in the grammar. Because more than one constraint can target individual clitics, the overall system is fairly flexible and allows for mismatches: LeftMost could make reference to one domain, and NonInitial to another, while both target the same individual clitic, as exemplified in the analysis of Czech. The full potential of the proposed system is impressively demonstrated in the analysis of Tagalog. While Tagalog clitics occupy the second position, this position is defined in slightly different ways for different clitics. Anderson captures this by judiciously varying domain specifications of individual clitics for both LeftMost and NonInitial; the domains may be CP or IP, and for some particle clitics may even vary with their semantic scope. The account covers both the positioning of clitics within a larger domain, and their ordering within the clitic sequence. The latter is accomplished by placing the constraints on phonological and special clitics into a single hierarchy and putting to work their fairly complex interactions.

Chapter 7, 8, and 9 address further issues that are directly, or indirectly, related to the grammar of clitics, thus placing the proposed account in a broader perspective. Chapter 7 raises the question whether the second position is a more general type distribution, and points to verb second as a phenomenon parallel to clitic second that calls for the same types of constraints. The crucial difference is that, unlike the morphological nature of the constraints on clitic placement, those that handle verb second phenomena reside in the syntactic component. Chapter 8 proposes a mechanism for the insertion of pronominal clitics into the larger structure that is consistent with the proposed theory of clitics, while chapter 9 proposes a formal treatment of incorporation, again consistent with the overall approach to the grammar of clitics developed in this work.

To sum up, Anderson’s theory of clitics convincingly factors out different aspects of this complex phenomenon, and in this it crucially relies on the interplay among different components of the grammar. It abounds in important formal insights, and sheds new light on quite a range of data. My comments will focus on broadening even further the already large empirical base of this study; one of its many virtues is that it is sufficiently detailed to allow for empirical scrutiny. Further data, and specifically, further “difficult” data, can be unearthed even for the well studied cases. I begin with phonological clitics. In his account Anderson in effect reduces the phonological theory of clitics to a phonological theory of function words: function words in general, and clitics as their special subclass, are taken to be exclusively governed by general constraints on prosodic structure, a position originally proposed by Berendsen (1986) and advocated later by Selkirk (1995) and Peperkemp (1997); and by Anderson in this and other works. While commendable for its simplicity and elegance, this may well be an overly optimistic program. There are some theoretical consequences of this position that can be challenged on empirical grounds. One prediction is that deficient function words should be subject to the same prosodic constraints regardless of their morphological category. However, this is not the case in
English, where only finite auxiliaries fail to reduce in phrase final position, as in *Fred hasn’t responded, but Liz [hæz] /*[(h)æz]; non-finite auxiliaries do reduce in this position, as in *Fred couldn’t have responded, but Liz could *[hæv]/[əv], and the same is true of object pronouns.

While Anderson does not discuss these cases, Selkirk (1995) addresses the prosody of pronouns, and proposes different syntactic configurations for their reduced and unreduced versions. Again, a special mechanism is called for, and prosodic subcategorization may well be at least as intuitive as the syntactic solution proposed by Selkirk. Next, it should follow that phonological clitics will be only those function words whose size precludes their prosodic word status; if phonological words are minimally disyllabic, phonological clitics will invariably be monosyllabic. Counterevidence for this is found in Standard Serbian. While general constraints on prosodic structure assign the prosodic word status to disyllabic function words, phonological clitics are exempt from this general mechanism. However, function words that are, in a narrow sense, clitics can be either monosyllabic or disyllabic, including both those that occupy the second position, such as pronouns and auxiliaries, and those that occur in situ, such as prepositions and conjunctions (Zec 2005). Moreover, there is no difference, prosodic or distributional, between monosyllabic and disyllabic clitics. The obvious question is how to ensure that constraints on prosodic word formation target only those disyllabic function words that are not clitics. This idiosyncratic behavior cannot be captured by general constraints on prosodic structure, and calls for a mechanism comparable to prosodic subcategorization.

Turning to special clitics, I will comment on the placement of clitics in the second position, in particular, those for which more than one characterization of what comes as first is available within a single language. Most of the syntacticians’ efforts went into reducing the first word and first constituent cases to a single syntactic host type. Under this view, also shared by Anderson, first word cases are special first constituent cases that result from a designated syntactic mechanism such as scrambling. Even if this is so in the crucial cases such as Warlpiri and some versions of Serbo-Croatian that have been analyzed this way, it may well be that this analysis does not go through for each known or yet to be discovered case of a dually characterized first position. In other words, there may well be cases with both first word and first constituent clitic hosts that cannot be reduced to a single syntactic host type. While such cases would be a challenge for syntactic accounts, they would be perfectly manageable in Anderson’s theory. In fact, Anderson notes that Tagalog provides such a case (p.167): while the first word is a readily available clitic host, some initial constituents cannot be broken by clitics and obligatorily act as phrasal hosts. Anderson makes a case for fine-graining the Integrity constraint, thus acknowledging, and admitting into his theory, non-unique characterizations of clitic hosts.

I will point at some further intricacies concerning dual host characterizations. As argued in Legate (2008), Warlpiri clitics follow the first word of an initial predicate phrase, and the first constituent of an initial argument. A comparable but more complex case is reported in Diesing et al.’s (to appear) experimental study: in Standard Sebian, the preferred position of second position clitics is after a phrasal host if an initial constituent is an argument, and after a first word, if the host belongs to the predicate; only word sized hosts are available with some types of predicates, in particular, with finite verb phrases. It would be of great interest to see whether the first word/first constituent cases in Tagalog, discussed above, could be differentiated along the predicate/argument lines. If so, we would be building an empirical basis for another important issue in the study of clitics whose broader implications are yet to be understood.
Anderson’s study promotes an interface perspective on the grammar of clitics, with phonology, morphology and syntax all playing a role. This is obviously the right perspective. In fact, another interacting component can be added: semantics, specifically, discourse and information structure. This component is crucial in one specific case: when the first word and the first constituent act as competing clitic hosts, they are selected under different discourse conditions. This is hinted at in Donaldson’s (1980:237) grammar of Ngiyambaa, in which second position clitics may be hosted by either a first constituent or a first word, as shown respectively in ŋandhay guya=ndu dha-yi ‘(You) ate a tasty fish’ where the clitic ndu ‘you’ follows the constituent ‘tasty fish’ and ŋandhay=ndu guya dha-yi ‘(You) ate a tasty fish’, where it follows ‘tasty’. The clitic host has a special discourse status and, as a result, the two sentences differ in their information structure. While Donaldson refers to the clitic host as topic, his description suggests that it is closer to what we would nowadays call focus. A more elaborate case of the same general type is reported in Diesing et al.’s experimental study of Standard Seriban, where it is shown that the “neutral” host in the argument case is the first phrase, while the first word is selected under special focus conditions; whereas in the predicate case the situation is reversed, with the first word acting as the “neutral” host and the first phrase selected under special discourse conditions. Thus, while in these cases the selection of host is optional from the syntactic and morphological perspectives, this apparent optionality disappears once the discourse component is brought in.

To conclude, this study is an invaluable contribution to our understanding of the grammar of clitics. By effectively employing several components of the grammar to jointly account for the grammar of clitics, it seriously casts doubt on approaches that promote single component perspectives on this phenomenon. This study will undoubtedly be a corner stone in any future debates on this important topic.
References