

# 5 Clitics

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## 1 Introduction

While the distinction between independent words or phrases on the one hand and affixes on the other is often fairly clear, many languages have various formatives which are hard to classify as one or the other. Such formatives are often called clitics.<sup>1</sup> As we shall see, the various elements which are called *clitics* form a heterogeneous bunch, at least superficially, and exactly what is meant by “clitic” varies from study to study, though there are two predominant senses.

In some uses, “clitic” denotes any prosodically weak (unaccented) element which is not a canonical inflectional or derivational affix.<sup>2</sup> This is the sense in which the term is usually used in the discussion of phonological issues. Whether such a clitic lacks independent accent inherently or because of some reduction process, it must be incorporated into the accentual structure of an adjacent word or phrase, the clitic’s *host*, since in order to be pronounced, a formative (word, affix, etc.) needs to be part of an accentual unit. This dependency leads to one of the common diagnostics used to distinguish clitics from independent words: they may not constitute an utterance on their own. Clitics which form a prosodic unit with a host on their left are *enclitics*, while those forming a unit to their right are *proclitics*.

Cliticization in this strictly phonological sense need not entail any syntactic consequences. An unstressed word which is otherwise unexceptional is known as a *simple clitic*, after Zwicky (1977); for example, a simple clitic which is a preposition will head a prepositional phrase and be followed by its complement; the resulting phrase will have the distribution of any other PP in the language. In contrast to this prosodic definition of the clitic, syntactic discussions usually use the term to refer to the sort of weak pronoun found in modern Romance languages which appears in a special position in the clause (generally immediately before the verb). However, the syntactic and morphological issues raised by such *special clitics* extend to elements with other functions and other distributions, as we shall see in later sections.

In the remainder of this chapter, I will focus primarily on the behavior of special clitics, but it will be instructive to examine simple clitics first, since some of the apparently distinctive properties of special clitics may result purely from their prosodic weakness rather than anything to do with syntax or morphology (section 2). In sections 3, 4, and 5, we will examine in some detail the behavior of various types of special clitic and the descriptive and theoretical issues they raise. In the final section, we will return to some proposals which aim to provide a general theory of the distribution of clitics.<sup>3</sup>

## 2 Simple clitics – accentless words

Reduced auxiliaries and pronouns in English are often cited as examples of simple clitics; they lack stress, and are pronounced as a single unit with the preceding word, while their distribution is essentially a subset of that which the corresponding unreduced forms occupy. Various function words in most if not all languages may be reduced in this fashion, or perhaps be listed in the lexicon without an inherent accent (see Kaisse 1985 for discussion of these alternatives).

- (1) She will have to find a new job soon. [ʃiwiɪ]/[ʃiɪ]/[ʃɪ]
- (2) Jonathan saw him. [sɔhɪm]/[sɔɪ]/[sɔm]

Simple clitics often do not have the full range of distribution of an independently accented word of the same category, but the restrictions seem to reflect a filtering of the structures permitted by the syntax, rather than some special syntactic status. For instance, fully reduced (i.e. vowel-less) forms of auxiliaries other than *is* and *has*, which are subject to looser constraints, are available only immediately after a subject pronoun, and not after a non-pronominal subject, a nonsubject, or even after a pronoun if the pronoun is part of a coordinate subject.

- (3) He'll have to go now. [hɪ]
- (4) Mary'll have to go now. [mæriɪ]/\*[mæɪ]
- (5) Mary and he'll have to go now. [hɪɪ]/\*[hɪ]

Perhaps more surprisingly, reduced auxiliaries are also sensitive to the following context, being ungrammatical before the site of various elisions, though they are phonologically enclitic.

- (6) John's tired, and Mary is too/\*Mary's \_\_\_\_ too.
- (7) John's as tall as you are/\*you're \_\_\_\_ wide.

These limits on the distribution of reduced auxiliaries have received a good bit of attention (Kaisse 1985, Selkirk 1984), with the nature of the elements to which the constraints must refer – syntactic or prosodic – being the primary theoretical question.<sup>4</sup> Regardless, we may say that the syntax per se, as opposed to postlexical/postsyntactic phonological rules or filters, does not need to give special treatment to reduced auxiliaries.<sup>5</sup>

Regarding the attachment of a clitic to its host, there is considerable debate as to its nature. It is commonly accepted that, for simple clitics, it is of a nonsyntactic nature. Zwicky and Pullum (1983a) consider syntactic irrelevance an important way of distinguishing cliticization from affixation, one of several which have become a standard set of diagnostics.<sup>6</sup> This can be made sharper by contrasting reduced auxiliaries with *n't*, the reduced form of *not*, which does behave like a part of the preceding auxiliary, as illustrated by the fact that it may accompany the auxiliary in subject-auxiliary inversion contexts.

- (8) Isn't/\*Is not Regina going to come to practice tonight?  
 (9) Is Regina not/\*n't going to come to practice tonight?

Various authors have proposed that cliticization involves the formation of a morphological constituent, making it affix-like in this sense, though not syntactically (see esp. Sadock 1991). This is motivated by the fact that cliticization can lead to phonological interactions between a clitic and its host which are not seen between two independent words. However, the phonology and morphology of cliticization is generally not entirely that of an affix. For instance, like suffixes, enclitics in Latin affect the location of stress on their host; independent words, on the other hand, generally do not affect the stress of an adjacent word. Yet, the effect of an enclitic is not the same as the effect of a suffix (Nespor and Vogel 1986: 115–16; Steriade 1988). The addition of a suffix causes stress to shift so that it is located as follows: stress is on the penultimate syllable if that syllable is heavy, but on the antepenultimate syllable if the penult is light, as shown in (10a, b). The addition of a clitic, however, causes stress to appear on the penultimate syllable of the host + clitic sequence regardless of the weight of that syllable, as shown in (10c, d):

- (10) (a) stomachósus 'irritated'  
 (b) homíncŭlus 'little man'  
 (c) rosá=que 'and the rose (nom.)'  
 (d) rosá=que 'and the rose (abl.)'

Simple clitics are also notably lacking in irregularities in their combinations with their hosts; they are not involved in suppletion, and do not generally enter into morphologically conditioned alternations with their hosts. Several explanations of this phonologically and morphologically intermediate behavior have been advanced, including treating clitics as an outer layer of affixation

within a level-ordered morphology (Klavans 1983, Kanerva 1987, Booij and Rubach 1987), treating clitic + host as a *clitic group* – a unique prosodic constituent between the phonological word and the phonological phrase (Hayes 1989a, b; Nespor and Vogel 1986), treating clitics as being adjoined to phonological words or other prosodic constituents (Inkelas 1990, Zec and Inkelas 1991, Lapointe 1991, A. Woodbury 1996).

To sum up, it is quite common for stressless function words to behave in a syntactically normal fashion while being prosodically bound to an adjacent word. Ways in which such a simple clitic differs from a nonclitic may be derived from the surface conditions or filters which the clitic imposes, plausibly reducing to requirements related to the incorporation of a clitic into its host.

### 3 Verbal clitics

In contrast to, say, weak pronouns in English, which occupy essentially the same position as stressed pronouns and nonpronominal NPs, weak pronouns in French do not behave like other noun phrases. Consider the following examples:<sup>7</sup>

- (11) (a) Jean le vois. (Fr)  
*Jean it sees*  
 'Jean sees it.'
- (b) \*Jean vois le.
- (12) (a) Jean vois le livre.  
*Jean sees the book*  
 'Jean sees the book.'
- (b) \*Jean le livre vois.

While nonclitic objects follow the tensed verb in a simple finite clause, clitics must precede it. Similar behavior for weak pronouns is observed in many languages, including nearly all of the modern Romance dialects and several Balkan languages (Greek, Macedonian, Albanian). Their special distribution and other ways in which they differ from independent words distinguish them from simple clitics. At least superficially, there are a variety of types of such special clitics, and I will refer to the type illustrated above as *verbal clitics*.

Kayne (1975) pointed out several respects in which verbal clitics are like inflectional affixes.<sup>8</sup> To begin with, they always appear adjacent to a verb and attach morphologically or phonologically to it.<sup>9</sup> They are also subject to various language-specific co-occurrence conditions which are similar to conditions on the co-occurrence of inflectional affixes; these conditions are often expressed in terms of a *template* which separates clitics into groups which are associated

with an ordered set of slots.<sup>10</sup> A given slot will generally contain at most one clitic, drawn from the relevant group. The classes of clitics associated with a given slot are defined according to a variety of properties, grammatical function and grammatical person being common factors, but phonological shape may also play a role (Schachter 1973, Tegey 1978). Such templates are also known in systems of complex inflectional morphology, as in the Athabaskan languages. Consider the following examples (where '1', '2', '3' means '1st', '2nd', '3rd' person):

- (13) Bulgarian: NEG < FUT < AUX < IO < DO < 3SG.AUX
- (14) French: 1/2.PRO < 3ACC.PRO < 3DAT.PRO < *y* < *en*
- (15) Ngiyambaa: PRT\* < 1PRO < 2PRO < 3NOM.PRO < 3GEN.PRO < 3ABS.PRO  
(Donaldson 1980)
- (16) Tagalog: 1 $\sigma$ .PRO < PRT\* < 2 $\sigma$ .PRO\*

Phonologically speaking, certain nonautomatic alternations are observed between two special clitics and, perhaps less commonly, between special clitics and their host. For instance, Simpson and Withgott (1986: 167) note the arbitrary insertion of [z] in dialectal French *donnez-moi-z-en* 'give me some'. See also Akmajian et al. (1979: 5ff). Morphologically, we also find portmanteau clitics, and clitics whose interpretation depends on the presence or absence of other clitics (Steele et al. 1981: 24ff, Perlmutter 1971, Simpson and Withgott 1986).

Based on such observations, it is generally accepted that verbal clitics are syntactically adjoined to the verb or to a functional head which incorporates the verb. Indeed, they are often assumed to be types of inflectional affixes themselves, perhaps simply agreement markers. This *base generation* approach is a relatively traditional view; within the generative literature, it has been defended within a variety of frameworks (Rivas 1978; Lapointe 1980; Borer 1984; Stump 1980; Jaeggli 1982, 1986b; Suñer 1988; Dobrovie-Sorin 1990; P. Miller 1992). However, despite these similarities between clitics and inflections, there are also several respects in which clitics are not like canonical agreement affixes.

Agreement is usually a local relationship between a head and one of its arguments, and applies obligatorily regardless of the nature of the argument. Inflectional affixes are generally fixed in position with respect to a stem; and object-agreement affixes are generally internal to (or, closer to the stem than) tense, aspect, and subject agreement (Bybee 1985). Finally, inflection often involves a high degree of irregularity, involving selection of particular allomorphs or stem forms, and may sometimes be expressed via a suppletive form. In contrast, a typical special clitic is either in complementary distribution with an overt nonclitic argument or may co-occur with a nonclitic only under restricted circumstances. The ungrammaticality of (17) illustrates that in

French complementarity is obligatory; we will return to contexts where co-occurrence is possible below. Verbal clitics are observed to attach to verbs which are not the source of the theta role to which the clitic is associated, a phenomenon known as *clitic climbing*, and they have greater *mobility* with respect to the verb stem than canonical inflections, in the sense that they may be preverbal in one context but postverbal in another; these points are illustrated in (18)–(20).

- (17) \*Jean le voit le livre. (Fr.) (cf. (11) and (12))
- (18) Je l'ai fait manger aux enfants.  
*I it-have made eat.INF to.the children*  
 'I made the children eat it.'
- (19) J'en ai bu deux verres.  
*I-of.it have drunk two glasses*  
 'I have drunk two glasses of it.'
- (20) (a) Luis trató de comer -las. (Sp.)  
*Luis tried DE to.eat -them*  
 'Luis tried to eat them.'
- (b) Luis las trató de comer.

As for morphological considerations, clitics are generally external to any (other) inflectional affixes.<sup>11</sup> Finally, while they are known to interact with their hosts in somewhat irregular fashions, this is clearly true to a lesser degree than with inflectional affixes: they seldom if ever select for particular stem forms; nor are they sensitive to the morphology of the host, and they are not involved in suppletion.<sup>12</sup>

These are not necessarily fatal blows to the view that clitics are inflectional affixes. We will discuss the complementarity between clitics and other arguments shortly. As for the long distance character of clitic climbing, there are also cases of agreement applying long-distance (Spencer 1991, P. Miller 1992). For both clitics and clear cases of agreement, this probably reflects some sort of *restructuring*, the formation of a complex predicate in which the semantic arguments of one verb act like the syntactic arguments of another (Kayne 1975; Rizzi 1982; Borer 1984a; Jaeggli 1982, 1986b; P. Miller 1992; Manning 1992). Fulmer (1991) and Noyer (1994) have documented cases of mobility of affixes similar to that observed with verbal clitics. As for the peripheral position of clitics, it is clear, even in light of recent suggestions as to how to make syntax more accountable for the structure of words (Baker 1988a and much subsequent work), that syntax cannot completely account for affix ordering; if nothing else, clitic templates clearly involve purely morphological conditions. The limited degree of interaction between verbal clitics and their hosts is matched by that of various affixes, such as English *-ing*, which is fully regular.

These considerations suggest that the theory of inflectional morphology probably has to be powerful enough to accommodate the behavior of verbal clitics. However, there remains some question as to whether verbal clitics should be reduced to inflections, for there remains a difference, if not in absolute (non)attestedness, then in the markedness of the various characteristics: what is marked for a clitic is unmarked for an inflection, and vice versa.

These observations have led to an alternative view of verbal clitics according to which they are generated in a deep-structure argument position just like a nonclitic pronoun and are subsequently adjoined to the position occupied by the verb.<sup>13</sup> This is known as the *movement* approach to clitic placement.

Whereas clitic climbing, the complementarity between clitics and independent noun phrases in, for example, French, and the exterior morphological position of clitics are all complications for a base-generation account, they are the sort of behavior one would expect from the movement approach. However, the ability to explain the complementarity in (17), which is one of the clearest successes of the movement approach, is also one of its greatest stumbling blocks. Unlike standard French, many languages allow clitics and nonclitics serving the same function to co-occur, as in the following Spanish examples. This is known as *clitic doubling*; the nonclitic phrase is sometimes referred to as the clitic's double.

- (21) (Le) puso comida al canario/a un perro. (Sp.)  
*to-him put.3SG food to-the canary/to a dog*  
 'S/he gave food to the canary/to a dog.'
- (22) (%La) oían a Paca/a la niña.  
*her listened.3PL to Paca/to the girl*  
 'They listened to Paca/to the girl.'

Clitic doubling presents the movement approach with a problem which has not really received adequate treatment. The most common tactic is to treat the double as an adjunct rather than an argument (Aoun 1985, Jaeggli 1982).<sup>14</sup> However, several arguments have been made against this view (Borer 1984a, Everett 1987, Jaeggli 1986b, Suñer 1988), and it seems unlikely to provide a universal account of doubling.<sup>15</sup> Nevertheless, most approaches to clitic doubling have made a related assumption: namely, that some clitics do have some argument-like property which prevents the expression of a separate nonclitic argument (and perhaps simultaneously satisfies the subcategorization or theta-role requirements of the verb so that no other argument is necessary). The relevant property is often assumed to be case absorption.<sup>16</sup> This was originally motivated by the *Kayne-Jaeggli generalization*: namely, that doubling is possible only if the double is accompanied by an independent case assigner. In Spanish, doubling is possible only if the double is an indirect object or an animate direct object, both of which are accompanied by the preposition *a*. Inanimate direct objects, which are not accompanied by *a*, may not be doubled:

- (23) \*L<sub>O</sub> compró el libro. (Sp.)  
*it bought.3SG the book*  
 'S/he bought the book.'

Similar facts are observed in connection with the genitive clitics in the Hebrew Construct State, in which doubles must be preceded by the preposition *šel* (Borer 1984a). Consequently, several early works assumed that clitic pronouns always absorb case: for example, Jaeggli 1982, Borer 1984a. However, the presence of an overt case marker, or even overt case marking, is not universal in cases of doubling – see Berent 1980, Joseph 1988, and Everett 1987 for discussion of Macedonian, Modern Greek, and Pirahã respectively.<sup>17</sup> This has suggested that whether or not a clitic absorbs case is a parameter of variation (Jaeggli 1986b, Everett 1990): case-absorbing clitics do not permit doubling (or require doubles to be accompanied by an independent case assigner), while clitics which don't absorb case permit, and in fact require, doubling.

Doubling also turns out to be sensitive to properties of the double; for instance, while Spanish clitics are generally optional in the presence of a nonclitic object, they are obligatory with pronominal objects, as in (24). Another common factor is specificity, as shown in (25) and (26): nonspecific direct objects often can not be doubled. (Examples from Suñer 1988.) Similar specificity effects are observed in Romanian, Macedonian, and Greek (Steriade 1980, Berent 1980, Kazazis and Pentheroudakis 1976). Dobrovie-Sorin (1990) proposes an account of the specificity effect based on the assumption that clitics are base-generated case absorbers in combination with the idea that nonspecific phrases are subject to quantifier raising at LF; however, it is not clear that the account can deal with variation in obligatoriness of doubling such as that which distinguishes Macedonian from Romanian or Spanish.

- (24) Ellos \*(la) llamaron a ella. (Sp.)  
*they her called.3PL A her*  
 'They called her.'
- (25) Diariamente, (la) escuchaba a una mujer que cantaba tangos.  
*daily her listened.3SG to a woman who sang tangos*  
 'S/he listened daily to a woman who sang tangos.'
- (26) (\*La) buscaban a alguien que los ayudara.  
*her searched.for.3PL A somebody who them could-help.SUBJ*  
 'They were looking for somebody who could help them.'

To summarize, common to most approaches to verbal clitics is the view that they in some sense form a morphological or syntactic unit with a verb (or with an inflectional head). Whether they are attached in the lexicon or in the syntax, and if the latter, whether they are base-generated or moved (or copied) from some other position, remains in question. The peripheral position of clitics is

probably the most convincing argument against treating them as inflectional affixes, though this is only an argument if one adheres to a strongly syntactic theory of affix ordering. On the other hand, the facts surrounding doubling suggest strongly that they are not generated in the position of a nonclitic argument.

## 4 Second-position clitics

While verbal clitics have dominated discussion in the syntactic literature, there is a growing appreciation of the fact that several other types exist. The other most commonly discussed type is the *second-position* (2P) clitic, also sometimes known as a *Wackernagel's Law* (WL) clitic, after Wackernagel (1892). As a first approximation, second-position clitics must appear second in the relevant domain.<sup>18</sup> Consequently, they are not attached to a host of any particular category, and do not (necessarily) form a syntactic or semantic constituent with their host. For example, the words in the Serbo-Croatian sentence in (27a) may be rearranged in any order, so long as the clitics (as a group) are second; placing them elsewhere is ungrammatical. In this way they contrast with corresponding full forms: compare the position of *mu* with that of *njemu* in (27b).

- (27) (a) Marija =mu =je dala knjigu. (SCr.)  
*Maria.NOM to.him AUX gave book.ACC*  
 'Maria gave him a book.'
- (b) Njemu =je Marija dala knjigu.  
*to.him AUX Maria.NOM gave book.ACC*  
 'Maria gave HIM a book.'

Note that the clitic *je* is an auxiliary. This illustrates another salient fact about 2P clitics: they may serve a variety of functions other than pronominal, including that of auxiliary, voice marker, discourse particle, and so on. Serbo-Croatian has 2P clitics which function as object pronouns, auxiliaries, and a Y/N question particle. In the ancient Indo-European languages, various Australian languages, Tagalog, and so on, we find a large set of discourse "particles" – markers of voice and mood, discourse connectives, and adverbials – which occupy 2P. Indeed, Kaisse (1982, 1985) suggested that nonpronominal 2P clitics are a prerequisite to pronominal 2P clitics; in support of this, we find that in languages which have both, they are often inseparable. In Serbo-Croatian for instance, pronominal clitics, interrogative *li*, and weak auxiliaries all have to appear in a string and, like verbal clitics, in a fixed order:

- (28) Kad li ćeš joj ih dati? (SCr.)  
*when Q FUT.2SG.AUX to.her them give.INF?*  
 'When will you give them to her?'

*Li* itself is plausibly treated as a complementizer, based on its function and its distribution. Furthermore, we find that in embedded clauses the other clitics must immediately follow a complementizer, just as they follow *li*.

- (29) Mama odgovara da su one u ormaru. (SCr.)  
*mama answers that are they in armoire*  
 ‘Mama answers that they are in the wardrobe.’

Due in part to such observations and in part to analogy to the treatment of verbal clitics, it has been suggested that these clitics occupy some head in the syntax, usually  $C^0$  (Progovac 1996), with the pronominal and auxiliary clitics adjoining to this position. If we assume that the various particle clitics of other languages are also generated in  $C^0$  and that pronominal and auxiliary clitics are adjoined to this position, then we have a partial reconstruction of Kaisse’s claim. This analysis in connection with the view that verbal clitics adjoin to a lower head suggests that perhaps all special clitics occupy a head position, with the difference being the choice of the head. Additional intuitive support for this interpretation of the behavior of 2P clitics comes from the analogy to *verb second* (V2) constructions.<sup>19</sup>

However, this conclusion is less plausible in other languages. We find that in various languages (Sanskrit, Ancient Greek, Tagalog), both particle and pronominal clitics may appear in 2P together in most situations, as in (30), but they may or must be separate in certain contexts, as in (31).

- (30) ou pō pote moi to krēguon eipas. (Gr.)  
*not yet ever to-me the good spoke*  
 ‘You have never yet spoken a good thing to me.’ (*Iliad*, 1.106)
- (31) tōn d’ állōn há moi ésti thoēi para nēi melainēi  
*the.GEN PRT others which me are swift beside ship black*  
 ‘of the others which are with me beside the swift black ship’ (*Iliad*, 1.300)

Given this, we clearly cannot assume that pronominal clitics and particle clitics always occupy the same position in these languages (Hale 1987, Garrett 1990, Taylor 1990). Freeze (1992) and Halpern and Fontana (1994) present other reasons for doubting that all clause-level 2P clitics are adjoined to  $C^0$ . One argument in favor of this view is that no cases of clitics which are proclitic to a complementizer (or other element in  $C^0$ ) have been documented – compare (29); given that the preverbal position is the unmarked case for verbal clitics, this strongly suggests that 2P clitics are not adjoined to  $C^0$ .

Another thing which (31) illustrates is that some 2P clitics follow the first (phonological) word of a clause, while, as we shall see, others follow the first syntactic daughter (Browne 1974, K. Hale 1973b). I refer to these options as 2W (for “second word”) and 2D (for “second daughter”) respectively. In some languages, the choice between 2D and 2W is fixed, while in others there is either free or conditioned variation. Particle clitics in Ancient Greek follow a single (phonological) word, as just illustrated. The following examples illustrate that

Serbo-Croatian allows alternation between the two, while Czech clitics must appear in 2D.

- (32) (a) [Taj čovek]<sub>NP</sub> joj ga je poklonio. (2D) (SCr.)  
*that man her it AUX presented*  
 'That man presented her with it.'
- (b) Taj joj ga je čovek poklonio. (2W)
- (33) (a) Ten básník mi čte ze své knihy. (Cz.)  
*that poet to.me reads from his book*  
 'That poet reads to me from his book.'
- (b) \*Ten mi básník čte ze své knihy.

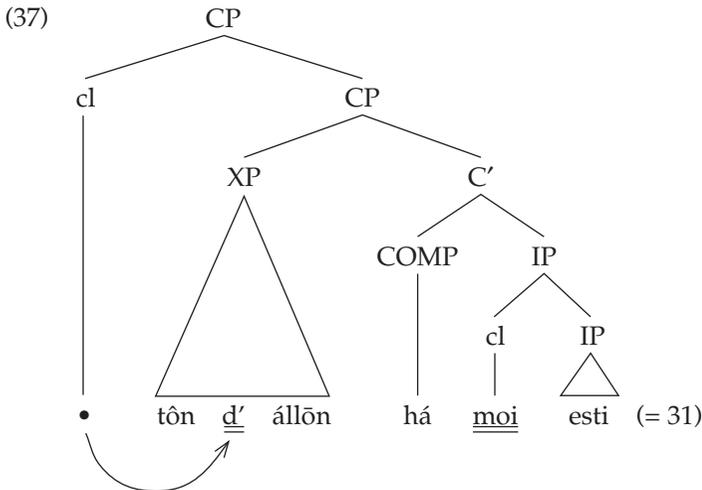
It has been noted that many languages which allow 2W placement of clitics permit extensive discontinuous constituency (Klavans 1982, Nevis 1988, Kaisse 1985), suggesting that 2W may ultimately reduce to 2D. In support of this, several languages which allow for 2W placement in some circumstances require 2D placement in others, as illustrated in (34)–(36) for Serbo-Croatian. Crucially, those constructions which require 2D placement of clitics are also more resistant to discontinuous expression. See Kroeger 1993 for discussion of this with respect to Tagalog, and Progovac 1996 for Serbo-Croatian.

- (34) (a) Prijatelji moje sestre su upravo stigli. (SCr.)  
*friends my.GEN sister.GEN AUX just arrived*  
 'My sister's friends have just arrived.'
- (b) \*Prijatelji su moje sestre upravo stigli.
- (35) (a) Studenti iz Beograda su upravo stigli.  
*students from Belgrade AUX just arrived*  
 'Students from Belgrade have just arrived.'
- (b) \*Studenti su iz Beograda upravo stigli.
- (36) (a) Lav Tolstoj je veliki ruski pisac.  
*Leo Tolstoj AUX great Russian writer*  
 'Leo Tolstoj is a great Russian writer.'
- (b) %\*Lav je Tolstoj veliki ruski pisac.

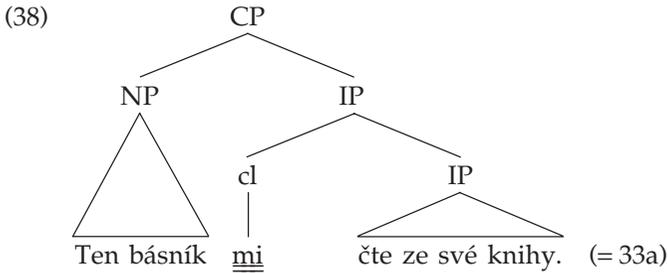
However, there are certain problems with this view as a general approach to 2W. For one thing, some speakers apparently accept (36b) without allowing for more extensive discontinuous constituency (Browne 1975: 113–14). More generally, 2W is possible in languages or constructions where there is no other possibility for discontinuous constituency (Steele 1976: 610, Halpern 1995: 48–52). Another problem is that while considerable discontinuous constituency is possible in the ancient Indo-European languages, such an approach

doesn't explain the fact that the relevant clitics never appear at the end of a multi-word constituent. Treating 2P clitics in these languages as following a full syntactic daughter of the clause would force us to claim that there is some special syntactic construction which allows only constituents comprised of a single (phonological) word to be fronted (Schäufele 1991, Taylor 1992). Indeed, similar arguments can be made with respect to Tagalog, where clitics must follow the first word of certain sorts of constituents. Thus, while some apparent cases of 2W placement may reduce to 2D with discontinuous constituency, there are other cases where clitics may truly be located with respect to a prosodic constituent (the first phonological word) rather than a syntactic one.

Another approach to 2W which has been pursued by several authors (Sadock 1985, 1991; Marantz 1988, 1989; Sproat 1988; M. Hale 1987, 1996; Taylor 1990, 1992, 1996; Halpern 1995) is to assume that, syntactically, 2W clitics are initial within their domain, perhaps adjoined to an entire phrasal constituent, but that their requirement for a preceding host triggers metathesis of the clitic and the syntactically following phonological word, an effect we might refer to as *prosodic inversion*. For instance, particle clitics in Ancient Greek could be treated as being left-adjoined to CP (or as heads which take CP as their complement), but surfacing after the first word of the CP because of their enclitic status. Assuming that prosodic inversion takes place only if necessary to provide the clitic with a host, we may account for the placement of Sanskrit pronominal clitics by assuming that they are syntactically adjoined to IP, with inversion taking place when they are adjoined to a bare IP (to put them in 2W of a simple clause), but not when other material from the same clause precedes the IP, such as a complementizer or a *wh*-word.<sup>20</sup>



Similarly, 2D clitic placement would presumably result if the initial constituent is outside the domain of the clitic; for instance, we might propose that clitics in Czech are adjoined to IP, and that the initial constituent in a main clause occupies SpecCP.



One final point about 2P clitics is that in perhaps all languages with 2P clitics, certain sentence-initial constituents have to be ignored for the purpose of determining the second position, as illustrated in (39). Such *skipping* is generally assumed to indicate that the skipped constituents are in some sense invisible to the clitic, or outside the domain relevant for the calculation of second position. Studies differ as to the notion of domain which is relevant, whether it is syntactic (e.g. phrases outside CP don't count) or prosodic (e.g. phrases outside the intonational phrase containing the verb don't count). See, for instance, Fontana 1993 for the syntactic approach, and Radanović-Kocić 1988 and Hock 1992, 1996, for the prosodic approach.

- (39) (a) *Ove godine, taj pesnik mi je napisao knjigu* (SCr.)  
*this year that poet me AUX wrote book*  
 'This year that poet wrote me a book.'
- (b) *Ove godine, taj mi je napisao knjigu.*

## 5 Other special clitics

In this section, I will briefly mention some additional types of special clitics. One interesting case to begin with is that of clitics in Old French, especially in the earliest texts (de Kok 1985, Cardinaletti and Roberts, to appear), and Bulgarian (Hauge 1976, Ewen 1979). Like verbal clitics, clitics in OFr. and Bg. are always adjacent to a verb; however, the choice of pre- or postverbal positioning is determined as follows: they are preverbal unless this would make them 'sentence-initial', in which case they are postverbal, regardless of the finiteness or mood of the clause. This is known, within the Romance tradition, as the *Tobler–Mussafia Law*.

- (40) (a) Az mu go dávam. (Bg.)  
*I to.him IT give.1SG*  
 'I give it to him.'
- (b) Dávam mu go.

- (41) Včera v gradinata Daniela mu gi dade.  
*yesterday in the.garden Daniela to.him them gave*  
 ‘Yesterday in the garden Daniela gave them to him.’
- (42) Falt me li cuer. (OFr.)  
*lack to.me the heart*  
 ‘I lack the courage.’ (*Eneas*, 1274)
- (43) [L]essiez le et me prenez.  
*leave him and me take*  
 ‘Leave him and take me.’ (*Mort Artu*, 41, 126)

This mobility of the clitics suggests that the connection between the verb and the clitic is not as direct as in the mainstream modern Romance languages.<sup>21</sup> The specific pattern suggests that the clitics require some constituent to precede them, much like 2P clitics.<sup>22</sup> Lema and Rivero (1989) suggest that this requirement can force the verb to raise exceptionally to a position above a clitic if nothing else precedes it; see also Cardinaletti and Roberts, to appear. Alternatively, Halpern (1995: 26–32) suggests that clitics are syntactically preverbal in these languages, but may undergo prosodic inversion to avoid being sentence-initial – see Rivero 1993 for additional evidence for something like prosodic inversion in Bulgarian. As with second-position clitics, we must refine the notion ‘sentence-initial’ to allow for certain fronted constituents to be skipped.

- (44) Ivan, vidjah go včera. (Bg.)  
*Ivan, saw.1SG him yesterday.*  
 ‘Ivan, I saw him yesterday.’

European Portuguese offers another interesting variation on the verbal clitic in that the choice of pre- and postverbal conditioning is sensitive to a wider range of factors than in the standard modern Romance paradigm. Here, clitics are preverbal in embedded clauses, but may appear before the verb in a main clause only if preceded by certain types of constituents: negation, a universally quantified subject, a *wh*-phrase, or a focused constituent.

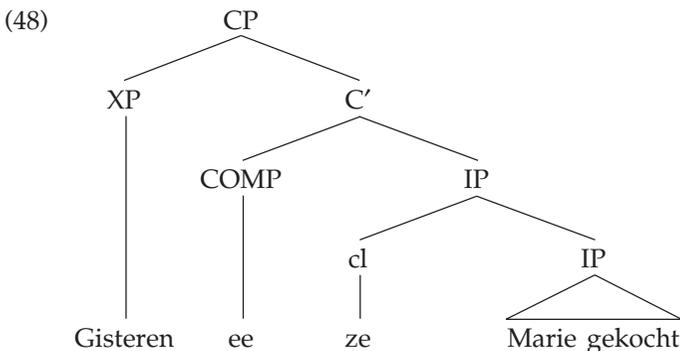
- (45) (a) O Pedro encontrou a. (EP)  
*the Peter met her*  
 ‘Peter met her.’
- (b) Dizem que o Pedro a encontrou.  
*say.3PL that the Peter her met*  
 ‘They say that Peter met her.’
- (c) Onde a encontrou o Pedro?  
*where her met the Peter*  
 ‘Where did Peter meet her?’

- (46) (a) Todos los rapazes me ajudaram.  
*all the boys me helped*  
 'All the boys helped me.'
- (b) Alguns rapazes ajudaram -me.  
*some boys helped me*  
 'Some boys helped me.'

Spencer (1991) and Barbosa (1996) suggest that this pattern results from the same sort of skipping which is observed with 2P clitics in Old French and Bulgarian; the difference between Portuguese and Old French/Bulgarian would have to do with the syntactic conditions on the skipped constituents. See Manzini 1994 for an alternative based on differences in the order of movement of clitics and the inflected verb to their surface position.

Several recent studies (Pintzuk 1991; Cardinaletti 1992; Cardinaletti and Roberts, to appear; Zwart 1993, 1996; Haegeman 1992; Fontana 1993; Halpern and Fontana 1994) have suggested that weak pronouns in various Germanic and Old Romance languages are closely related to the behavior of second-position clitics, despite substantial superficial divergence from this pattern. For instance, in West Flemish, clitics are third (postverbal) in V2 main clauses, but second (immediately after the complementizer) in embedded clauses and V1 main clauses, as illustrated in (47). Assuming that verb-second in West Flemish involves the verb occupying  $C^0$  with a topic occupying SpecCP, the clitic pronouns may be assumed to occupy the same position as those of the ancient Indo-European languages (see above). One analysis is schematized in (48).

- (47) (a) Gisteren ee ze Marie gekocht. (WF)  
*yesterday has them Mary bought*  
 'Yesterday Mary bought them.'
- (b) da et Marie gisteren gekocht eet  
*that it Mary yesterday bought has*  
 'that Mary bought it yesterday'



Still other types of special clitics have been documented which are less well understood. Polish pronouns and past tense (preterite) markers have considerable distributional freedom, but show signs of being clitics (Sussex 1980, Booij and Rubach 1987, Spencer 1991). Other cases are interesting because they contrast different types of clitics within a single language; Pashto (Tegey 1978) and Bulgarian (Hauge 1976, Ewen 1979) distinguish a set of 2P clitics from a set of verbal clitics, as illustrated in the following examples, suggesting that verbal clitics and 2P clitics should not be reduced to a single source. On the other hand, various Ngumpin languages (McConvell 1978, 1996) suggest precisely the opposite conclusion, as pronominal clitics in these languages may alternate between 2P and verbal placement.

- (49) Nova-ta li riza ti podari Krasi? (Bg.)  
*new-DEF Q shirt to.you gave Krassi*  
 'Did Krassi give you the new shirt?'
- (50) Nen me dafter pe pak ke. (Pa.)  
*today I office with-him cleaned*  
 'I made him clean the office today.'

Other distributions are known as well. Phrase-final locative clitics which apparently undergo climbing are discussed by Kaufman (1974); other phrase-final clitics are discussed in Zwicky 1977. Possible cases of second-to-last clitics (the mirror image of 2P clitics) in Nghanhcara and Modern Greek are discussed by Klavans (1985: 104–5) and Sadock (1991: 171), but see Marantz (1988: 268) and Halpern (1995: 34–6) for critical assessments of these examples.

## 6 Prospects for a unified theory of clitics?

We have seen that there are various ways in which clitics may be distributed. Ultimately, evaluating approaches to clitics amounts as much to deciding which cases deserve a unified treatment as it does getting the facts of particular examples correct. So far, I have focused on the behavior of certain individual types of clitics, and on primarily syntactic accounts of their behavior. In the last fifteen years, several general theories of the behavior of clitics which seek to provide a unified (parametric) account of the different types have been proposed.

Klavans (1980, 1985) was perhaps the first to suggest that the distribution of all clitics could be accounted for by a limited set of parameters. (Verbal clitics may not be part of this system – Klavans 1985: 100.) In addition to the specification that a given formative is a clitic and that it has a certain domain, she proposed that they be specified for the following three parameters:

- (51) P1: Initial/Final  
 P2: After/Before  
 P3: Proclitic/Enclitic

The specification for P1 indicates whether a clitic should be positioned with respect to the first or last (syntactic) daughter of the domain; P2 specifies whether it should appear before or after this daughter; and P3 specifies whether it is enclitic or proclitic. This theory predicted that there should be eight basic types of clitics, corresponding to the eight ways of setting these parameters. For example, one type would involve an enclitic which appeared before the first constituent of its domain. A classic example of this are the Kwakwala case-marking determiners: syntactically part of the following noun phrase, they are phonologically part of the preceding word. This example also illustrates one of the points of Klavans's work which has gained the widest acceptance: namely, the independence of syntactic affiliation and phonological/morphological attachment of clitics. The attachment is thus viewed as something which is syntactically irrelevant, the behavior of verbal clitics aside.

Subsequent work in the same general vein (Marantz 1988; Sadock 1985, 1991; Sproat 1988; Taylor 1990; Pintzuk 1991; Halpern 1995; Fontana 1993) has led to certain alternative proposals in both the distribution and the attachment. One common change is to assume that the work of P1 and P2 should be reduced to independent syntactic principles. Regarding P3, the attachment parameter, some recent work concurs with Klavans in assuming that cliticization is simply a matter of stray-adjointing clitics to adjacent material (Nespor and Vogel 1986, Anderson 1993), while other theories assume that the attachment may effect an adjustment in the surface position of the clitic, as per the discussion of prosodic inversion above; more dramatic versions of this (Marantz 1988, 1989; Sadock 1991) allow a clitic which is associated to an entire phrase in the syntax to incorporate into the head of that phrase in the morphology/phonology.

Of these latter approaches, Sadock's proposal is the most thoroughly worked out. It is based on the central idea of Autolexical Theory that there are several levels of grammatical representation which must be put in correspondence with one another according to certain constraints. For clitics and certain other phenomena (e.g. noun incorporation), it is the morphological and syntactic representations which are relevant. Both the syntactic and the morphological representation encode linear order, but the orders involved may diverge when necessary to satisfy the requirements of each level. The divergence, however, must satisfy the following conditions (Sadock 1991: 103; cf. also Sproat *MORPHOLOGY AS COMPONENT OR MODULE*):

- (52) Linearity constraints
- (a) Strong: The associated elements of morphological and syntactic representations must occur in the same linear order.

- (b) Weak: The associated elements of morphological and syntactic representations must occur in as close to the same linear order as the morphological requirements of the lexemes allow.

Constructional integrity constraints

- (a) Strong: If a lexeme combines with a phrase P in the syntax and with a host in the morphology, then the morphological host must be associated with the head of the syntactic phrase P.
- (b) Weak: If a lexeme combines with a phrase P in the syntax and with a host in the morphology, then the morphological host must be associated with some element of the syntactic phrase P.

A given association between morphology and syntax must either satisfy the strong version of one of the constraints or satisfy at least the weak version of both constraints (Sadock 1991: 104). See Lapointe (1991: 149–50) and A. Woodbury (1996) for proposed revisions within the basic autolexical framework, especially the question of whether the behavior of clitics involves morphological or prosodic conditions.

Anderson (1992, 1993) argues for a conceptually very distinct approach to special clitics, according to which they are the result of an entirely different mechanism: namely, the application of morphological spellout rules applied to a phrase. (Simple clitics, in contrast, are syntactic words which are phonologically stray-adjoined to adjacent material.) The range of possible spellouts for a clitic, given in (53), is entirely parallel to that of word-level spellouts except for the nature of the input (the phrase as opposed to the word).

- (53) The distribution of special clitics (quoted from Anderson 1992):
  - (a) The clitic is located in the scope of some syntactic constituent (S, VP, NP, etc.: probably only  $X^{max}$  but perhaps e.g.  $V'$  as well) which constitutes its domain.
  - (b) The clitic is located by reference to the {FIRST VS LAST VS HEAD element} of the constituent in which it appears.
  - (c) The clitic {PRECEDES VS FOLLOWS} this reference point.

In favor of this treatment, which is essentially the extension to the phrasal domain of his treatment of (inflectional) morphology, Anderson points out that there is a strong parallel between the properties of clitics on the one hand and affixes on the other. Similar generalizations can be drawn about their distributions – abstracting away from the difference in their domains (i.e. affixes being related to wards, and clitics being related to phrases).

All such general theories of clitics run the risk of over-generalizing. For instance, several authors have questioned whether indeed all eight types predicted by Klavans are attested. Specifically, proclitics appearing after the first constituent of their domain, proclitics appearing after the last constituent of their domain, proclitics before the last constituent of their domain, and enclitics

before the last constituent of their domain are all at best questionably attested (Marantz 1988, Sadock 1991, Halpern 1995). The lack of so many types of proclitics suggests that perhaps independent factors conspire against procliticization, much as suffixation is more common than prefixation. However, at least at its simplest articulation, there is a problem with this: there are certainly plenty of simple clitics which attach to the beginning of their domain (proclitic determiners, prepositions, complementizers, etc.), and procliticization is in fact the norm rather than the exception with verbal clitics. In contrast, sentence-initial special clitics (pronominal or particle) are virtually unknown – though see Pintzuk 1991: ch. 4 for a discussion of Old English clitic pronouns, which could appear sentence-initially. This is a fact which remains unexplained in any framework to my knowledge.

Another sort of approach to clitics which we have discussed indirectly throughout the chapter would treat all clitics as being syntactically incorporated into a head. Everett (1996) argues for a particularly strong version of this view, according to which all clitics and inflectional affixes are syntactically the same type of element, differing only in their requirements for morphological or phonological support. We have seen ways in which simple versions of the view that clitics are adjoined to a head are problematic (e.g. 2P clitics need not adjoin to an overt head at all; the split between 2P clitics and verbal clitics mentioned above for Pashto and Bulgarian indicates that these must be differently represented in the syntax). It is likely that the problems may be overcome by appeal to a sufficiently rich theory of functional heads. Whether such a theory of heads can be independently motivated remains to be seen.

In this chapter, we have reviewed various characteristic properties of clitics. We have also seen that there is significant variation from clitic to clitic which resists reduction to a single invariant characterization, though parametric approaches are highly promising for certain subsets of clitics. Determining the nature of these parameters ultimately depends not only on the behavior of individual cases, but also on deciding which phenomena deserve a unified treatment. We must ask whether there is a significant split between simple and special clitics, between verbal clitics and other (special) clitics, between clitics and affixes, or between clitics and independent words. It is my sense that answers to these questions go hand in hand with a theory of the distinction between independent words and affixes. Consequently, the behavior of clitics is a problem which any theory of grammar must face; but we also expect that our theory of grammar will help us understand the behavior of clitics, as indeed many of the works reviewed above have done.

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## NOTES

- 1 I use the term “formative” here rather than “morpheme” or the like because various clitics seem to be at least partially segmentable into meaningful parts. The question of whether clitics may be morphologically complex has received a certain amount of attention. See Inkelas, 1990: 302 for the view that clitics – like function words – must be simplex, but see also Klavans 1985: 115 for an example which is arguably complex.
- 2 While clitics may in some cases come to bear stress, they do so only by forming a unit with an adjacent element.
- 3 Due to the scope of this chapter, many interesting topics pertaining to clitics will have to be given cursory treatment. In addition to the original sources cited throughout the chapter, the reader is urged to consult Nevis et al. 1994.
- 4 The conditions on auxiliary reduction, and on the distribution of other simple clitics, are very similar to those which affect the application of postlexical phonological (external sandhi) rules, and raise similar issues regarding the correct formulation of syntactic conditions on phonological or prosodic processes.
- 5 But see Kaisse 1985: 43, for some respects in which reduced auxiliaries are syntactically exceptional as well.
- 6 Other tests include selectivity with respect to the host, morphological conditioning on the interaction between bound form and host, idiosyncrasies in interpretation, peripherality of attachment.
- 7 I will use a double underscore to identify special clitics throughout. This is a variation on the usual use of ‘=’ between a clitic and its host. In various cases, it is unclear from the literature whether a given clitic is an enclitic or a proclitic, or the language allows some variation – see e.g. de Kok 1985: 152ff on the attachment of clitics in Old French. Moreover, cases have been reported of words which have the distribution of a special clitic but do not seem to be phonologically dependent on an adjacent host – for instance, Warlpiri clitic sequences involving a disyllabic base (K. Hale 1973b: 312), various adverbials in Finnish (Nevis 1988).
- 8 Ironically, some of Kayne’s more influential arguments may have more to do with clitics’ prosodic dependency than any particular syntactic status: he noted that verbal clitics in French, like affixes, cannot be modified, conjoined, used in isolation, or emphasized; but this turns out to be true of reduced auxiliaries and pronouns in English as well, which are much less plausibly affixes, making these points rather weak arguments for affixal status.
- 9 There are limited, unproductive exceptions to this claim, of the sort in *en bien parler*, which I ignore here.

- 10 See Perlmutter 1971, Schachter 1973, Bonet 1991, Stump 1993c, Inkelas 1993, Halpern 1995, for various approaches to formalizing the notion of the template.
- 11 Various exceptions arise; e.g. in both Greek and Portuguese, clitics may come between the verb stem and certain tenses (see Joseph 1988, Spencer 1991). At least in the Portuguese case, this seems to reflect the fact that the morphemes expressing these tenses became verbal affixes more recently, if indeed one can claim them to be fully affixal at this point.
- 12 See Poser 1985, Nevis 1988, Zwicky 1987, Lapointe 1991, P. Miller 1992, and Halpern 1995, for discussion of some problems with this generalization which either require clitics to interact in nonautomatic fashions with their hosts, or require a more flexible theory of the distribution of inflectional affixes than is generally assumed.
- 13 Kayne (1975) suggested that verbal clitics were generated as pronouns and were subsequently adjoined to a verb to yield the structure [<sub>v</sub> cl V]. More recent formulations have proposed adjoining clitics not to the verb but to some higher functional head (Kayne 1990, 1991).
- 14 There are a couple of variants of the movement approach worth mentioning, though they fare little better in accounting for the full complexity of doubling. One is to assume that clitics are not pronouns but, rather, some functional head generated inside the noun phrase but subsequently incorporated into the verb. The other would be to decompose movement into two operations: copying and deletion, with doubling resulting from the application of the former only. Regarding the first of these, it is not clear what position the clitic could be assumed to originate in. There seems to be no language in which verbal clitics are in complementary distribution with some noun-phrase-internal function words; furthermore, this makes it all the more surprising that clitics are obligatory with pronominal objects in Spanish, where pronouns are cross-linguistically not usually accompanied by other nominal heads (determiners, etc.). Regarding the second option, two problems arise. First, the conditions on deletion which would effect the variability of doubling would be completely ad hoc. Second, in many cases it is unclear what could be being copied, aside from a set of features; the common similarity between the shape of definite articles and pronominal clitics suggests that the article itself is being copied, and that such clitics are generally a type of definite article, but examples such as (25) where an indefinite noun phrase is doubled then become problematic.
- 15 See Bresnan and Mchombo 1987 for some cases which do seem best analyzed by treating the double as an adjunct.
- 16 See *ibid.* for an alternative view.
- 17 Indeed, Suñer (1988: 399ff) discusses dialects in which this constraint does not hold.
- 18 We will only consider clitics which are in second position with respect to the clause here; however, there are also examples of clitics in second position within other domains, such as possessive pronouns or determiners in 2P of the noun phrase, prepositions in 2P of the prepositional phrase, etc.
- 19 This analogy between 2P and V2 has also been noted in connection with very different proposals, as in

- Anderson 1993, but also as far back as Wackernagel 1892.
- 20 The view that 2P clitics are adjoined to phrases treats them like adverbs distributionally, a connection also noted by Nevis (1988).
- 21 In other old Romance languages, clitics are still less connected to the verb, and may indeed be separated from it (Ramsden 1963, Wanner 1987). In the literature on Old Romance, the separation of clitics from the verb has been viewed as
- the marked case and is known as *interpolation*.
- 22 Interestingly, it appears that this is true even when the clitics are attached to a following host – see de Kok (1985: 152ff), Ewen (1979: 5). This suggests that clitics may impose constraints independent from their host requirement, a hypothesis which is reinforced by the behavior of reduced auxiliaries discussed in connection with (6) and (7).