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Typological and theoretical speculations about clitics require that the CLITIC be adequately distinguished from the INFLECTIONAL AFFIX on the one hand and from the INDEPENDENT WORD on the other. The first of these tasks has been attended to, but the second has been slighted, with the result that many items labeled 'particles' have been treated as clitics.

After some remarks on the nature of 'tests' in linguistics, a series of tests is provided here for distinguishing clitics from independent words. On the basis of these, it is concluded that most of the 'particles' in the literature are simply words; from this conclusion, it is argued that treating words with idiosyncratic distributions as acategorial 'particles' is wrong.

We then consider the relevance of various cases of 'particles'—in German, Chrau, Hidatsa, and Welsh—to theoretical proposals about special clitics. These examples include some items that are independent words, some that are inflectional affixes, and others that are independent words with simple clitic variants.

Finally, a class of DISCOURSE MARKERS is delineated: a grammatical category of items which are often classified as 'particles' but which turn out, again, to be independent words rather than clitics of any sort.*

The recent flurry of work on clitics—especially the description of clitic systems in various languages and the examination of the status of clitics in a general theory of language structure—has made the task of distinguishing clitics from affixes, on the one hand, and independent words, on the other, an especially pressing piece of business for linguists.

One of the main reasons for linguists' interest in the clitic systems of individual languages is that they hope to use data from a variety of languages to formulate inductive generalizations about language—in particular, inductive generalizations that might be useful in typological studies. Obviously, if such generalizations are to have any value, the phenomena on which they are based must involve cliticization, not ordinary morphology or ordinary syntax.

The same is true for investigations in which theory construction is the chief goal. There is not much point in proposing that cliticization is an ordinary syntactic operation, describable by the same formalism as ordinary syntactic rules, and capable of interacting with them; or that it is a type of affixation, describable by the same formalism as ordinary inflectional affixation, and interacting with other morphological rules but not with ordinary syntactic rules; or that it is a special type of rule, subject to its own formal constraints and interacting with other types so as to operate on the output of syntactic rules as a group, and to provide the input for morphological rules as a group—so

long as the evidence for the theoretical position involves linguistic units whose status as affixes, clitics, or words is unclear.

A few remarks on recent history are in order. My early investigation of clitics (Zwicky 1977b) was pretheoretical in nature, and did not address these issues seriously. Klavans 1982 takes the position that clitics are to be distinguished in linguistic theory from affixes and words (so that 'clitic' is a theoretical construct, not merely a useful pretheoretical cover term); but she supplies little in the way of tests to distinguish clitics from other units. Given what was said above, such tests are important, if the theoretical enterprise is to advance. Zwicky & Pullum 1983a attempt to bring together a list of tests for one side of the clitic-hood question, viz. the differentiation of clitics from affixes; and Klavans 1985 (§3) examines the same question. But there is no comparable summary treatment of the other side of the question: the differentiation of clitics from independent words. Certainly the matter isn't clear; language descriptions abound with references to 'particles' whose classification as clitics, or words, or something else is not at all obvious. As it happens, the recent literature on clitics is very much inclined to assume that anything labeled a 'particle' is a clitic; thus a basic unclarity is carried through from the original language descriptions, where these fundamental conceptual distinctions are not the focus, to general surveys like Zwicky 1977b, and to theoretical proposals and typological speculations like those in Kaisse 1982. In this context, the conceptual distinctions are crucial.

My first purpose here, then, is to provide a list of tests that might be used in an attempt to distinguish clitics from independent words (§2). As preface, (§1), I remark briefly on what is meant by a TEST in discussions of theoretical constructs like 'word' and 'clitic'. I then observe (§3) that, on the tests of §2, the typical item labeled a particle (and consequently assigned to no syntactic category) is not a clitic, but rather an independent word; I maintain that such a word should not be treated acategorially, but rather as a member of a syntactic category. The moral (so far as I can see) is that 'particle', in its customary broad usage, is a pretheoretical notion that has no translation into a theoretical construct of linguistics, and must be eliminated in favor of such constructs. I then return (§4) to the 'particles' that have figured in theoretical discussions—in particular, to those assumed to be SPECIAL CLITICS. I show that various 'particles' in German, Chrau, Hidatsa, and Welsh are not special clitics: they are independent words, inflectional affixes, or independent words with SIMPLE CLITIC variants, and so do not bear on generalizations about special clitics. Finally, I observe (§5) that, within the huge class of things that have been classified as 'particles', there is in fact a grammatical category of some importance, namely the one comprising DISCOURSE MARKERS. But like the 'particles' examined in §3, these are demonstrably independent words, not clitics of any sort.

1. 'TESTS' IN LINGUISTICS. It is easy to mistake the nature of familiar tests for membership in a syntactic category, application of a particular syntactic transformation, classification as a word or affix, and the like. The temptation

is to see these tests as necessary and sufficient conditions for the applicability of a theoretical term, i.e. as DEFINITIONS of the term. But what is normally intended, when such tests are appealed to, is more analogous to medical diagnosis than to operations using an axiomatic system. The tests point to characteristic SYMPTOMS of a linguistic state of affairs, not to invariant concomitants of it.

In general, the linguistic literature has not been very clear about the distinction between definitional criteria and symptoms, possibly because scholars in general are so anxious to 'define their terms' properly. Nevertheless, lists of symptoms are always useful; and in the case of terms (like 'word' and 'clitic') which function as theoretical primitives, ONLY lists of symptoms can be provided.[1] These matters are discussed in considerable detail in Zwicky 1977a; here I will merely illustrate the 'symptomatic' character of some of the tests in the literature on clitics.

Consider, among the tests listed by Zwicky & Pullum 1983a, these two: 'Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems' (503), and 'Arbitrary gaps in the set of combinations are more characteristic of affixed words than clitic groups' (504). For the most part, Z&P's tests are stated in terms of tendencies; in any case, their inferences work only in one direction. If you're looking at an affix, it probably exhibits a high degree of selection; if there are arbitrary gaps in the set of combinations, you're probably looking at an affix. The tests are often useful because they work in most clear cases: indubitable affixes usually do exhibit a high degree of selection with respect to their stems (and so do some, but not all, indubitable clitics), and arbitrary gaps rarely exist in the set of indubitable clitic groups. However, as in medical diagnosis, interfering factors can prevent even clear cases from exhibiting a certain symptom, and a particular symptom might result from some condition other than the one at issue.

Note that a test can be useful even when its basis is poorly understood. Sometimes, of course, tests follow from theoretical assumptions, but their utility is independent of these assumptions. To see this, consider the two tests of Z&P (504) that are stated absolutely and bidirectionally: 'Syntactic rules can affect affixed words, but cannot affect clitic groups', and 'Clitics can attach to material already containing clitics, but affixes cannot.' These two tests follow from the theoretical assumption that no syntactic operations (including those of government and agreement) can follow cliticization operations. However, even those who do not share this assumption are entitled to use in their argumentation the fact that a word-like unit affected by a syntactic operation is usually (if not necessarily) an affixed word, as well as the fact that an affix-like unit attached to material already containing a clitic is usually (if not necessarily) itself a clitic.

On occasion we must proceed in a state of imperfect understanding about

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[1] This latter point can be seen as the main lesson of Johnson's 1977 critique of Keenan's 1976 'definition' of SUBJECT in grammatical theory.

why tests work as they do; but wherever possible, of course, we should seek a rationale for them. I attempt to do this for the tests enumerated in the following section.

2. DISTINGUISHING CLITICS FROM WORDS. I now turn to a series of pretheoretical and theoretical observations about affixes, clitics, words, and phrases—leading to tests that might, in favorable circumstances, distinguish clitics from words. The tests all depend on the general observations that, when contrasted with independent words, clitics have some of the properties of affixes (especially inflectional affixes); and that when contrasted with clitics, words have some of the properties of syntactic phrases.

2.1. PHONOLOGICAL TESTS. The first relevant observation about the clitic is that it forms a phonological unit with an independent word.[2] However, some non-clitic words also form phonological units with words adjacent to them, e.g. English prepositions with the NP's following them. The difference between the [clitic + word] and [word + word] cases is that between PHONOLOGICAL WORDS and PHONOLOGICAL PHRASES.

2.11. INTERNAL/EXTERNAL SANDHI. The foregoing means, at least, that specifically 'internal sandhi' rules apply only within phonological words, whereas specifically 'external sandhi' rules apply only between phonological words and not within them. Consequently, an element affected by or conditioning a sandhi rule otherwise known to be internal should be a clitic, not an independent word. An element affected by or conditioning a sandhi rule otherwise known to be external should be an independent word, not a clitic.

2.12. WORD/PHRASE DOMAINS IN PROSODIC PHONOLOGY. Rules of sandhi affect segmental features. But rules of prosodic phonology—which assign accent, tone, or length—can also be sensitive to the distinction between phonological words and phonological phrases: the domain within which a prosodic feature is distributed can be either the phonological word or the phonological phrase (or some other prosodic unit, like the syllable). Consequently, if an element counts as belonging to a phonological word for the purposes of accent, tone, or length assignment, then it should be a clitic. If an element counts as belonging to a phonological phrase for these purposes, it should be an independent word.

2.13. WORD/PHRASE DOMAINS IN SEGMENTAL PHONOLOGY. Finally, there are phonological rules—rules of vowel harmony are familiar examples—which affect segmental features, but which nevertheless are 'prosodic' in character, since their domains of applicability are prosodic units. If an element counts as

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[2] Strictly speaking, this discussion should proceed in terms of MORPHS rather than MORPHEMES. An independent word can have a number of phonological forms, e.g. Eng. /hæz həz æz əz/ representing the auxiliary verb *has*; and a clitic having one set of phonological forms can alternate with an independent word having another, e.g. the Eng. clitic /z s əz/ in alternation with the independent auxiliary *has*. Because of these phenomena, any discussion of the difference between clitics and words should be framed in terms of the classification of particular MORPHS—pairings of phonological form and lexical identity—and not in terms of any more abstract construct like the MORPHEME. We will want to say that auxiliary /hæz/ is an independent word, and that auxiliary /z/ is a clitic; we will want to avoid classifying the auxiliary morpheme *has* as one or the other.

belonging to a phonological word for the purposes of such rules, then it should be a clitic. If an element counts as belonging to a phonological phrase for these purposes, it should be an independent word.

2.2. AN ACCENTUAL TEST. Clitics are accentually dependent, while full words are accentually independent. That is, an element which does not bear an accent of its own is probably a clitic, whereas one which can bear the accent in its phrase or sentence is almost surely a word. (In a few cases, analysts have opted for an ad-hoc labeling of certain items, which would otherwise have been classified as clitics, on the grounds that they are not necessarily stressless; so Speiser 1941:166–7 introduces the term ASSOCIATIVE, and Derbyshire 1979:35 calls on the ubiquitous PARTICLE.)

This accentual test is probably the most popular rule-of-thumb for distinguishing clitics from independent words, but it is most unreliable; it should never, I think, be used as the sole (or even major) criterion for a classification, though it can support a classification established on other criteria. The test has two problems, one minor and one major. The minor problem is that some languages do permit clitics to be accented in certain circumstances; Klavans (1982, §5) surveys cases in which clitics receive accent through the operation of general accentual rules, or for emphasis or contrast. The major problem is that many clearly independent words—e.g. English prepositions, determiners, and auxiliary verbs of English—normally occur without phrasal accent (such words are called LEANERS in Zwicky 1982).

2.3. TESTS USING SIMILARITIES BETWEEN CLITICS AND INFLECTIONAL AFFIXES. In contrast to independent words, clitics are affix-like; indeed, they resemble inflectional affixes. At least six tests exploit this difference.

2.31. BINDING. We expect that bound elements will be affixes, but that free elements will constitute independent words. Correspondingly, if an element is bound, and especially if it cannot occur in complete isolation, it should be a clitic; if free, and especially if it occurs in complete isolation, it should be an independent word.

2.32. CLOSURE. Typically, certain inflectional affixes 'close off' words to further affixation. Correspondingly, an element that closes off combinations to affixation, or indeed to cliticization, should be a clitic.

2.33. CONSTRUCTION. Inflectional affixes combine with stems or full words, whereas words combine with other words or with phrases. The constructional properties of clitics are a matter of some controversy. Insofar as clitics are affix-like, we should expect that, if the distribution of an element is correctly stated in terms of its ability to combine with single words, it will be a clitic; and also that, if the distribution of an element is correctly stated in terms of its ability to combine with (potentially) multi-word phrases, it will be a full word. However, Klavans (1985, §2) uses construction with phrases rather than words as the touchstone for clitics as opposed to affixes; she thus assumes that clitics are word-like in this respect. Certainly, if an item combined syntactically only with single words, we should hesitate to classify it as a word. But since many indubitable clitics do combine with multi-word phrases (if not all, as

Klavans would have it), construction with phrases is not a reliable test for words as opposed to clitics.

2.34. ORDERING. Alternative orders of morphemes within a word are associated with differences in cognitive meaning; by contrast, alternative orders of words within phrases are commonplace (they are 'stylistic', conveying the same cognitive meaning). Consequently, an element that is strictly ordered with respect to adjacent morphemes is almost surely a clitic (or an affix), while an element exhibiting free order with respect to adjacent words is certainly an independent word. Again, some complexity exists, since clitics on occasion exhibit some freedom of order with respect to one another (this is true for Tagalog clitics; see Schachter & Otanes 1972, §6.2), though not normally with respect to their hosts.

2.35. DISTRIBUTION. Affixes typically have a single principle governing their distribution; Eng. *-ness* combines with adjectives, *-ing* with verbs. Words rarely have distributions that can be described in a single principle; the combinatory possibilities for a verb like *watch* are numerous. Clear cases of clitics typically behave like affixes in this respect, having distributions describable by single principles like 'combines with the head verb of a clause', 'combines with the first constituent of a clause', 'combines with the first word of a clause', or 'combines with a NP'. It follows that an element with a simple distribution of this sort is probably a clitic (or an affix), and that an element with a complex distribution is almost surely an independent word.

2.36. COMPLEXITY. Words frequently are morphologically complex, in the sense that they are to be analysed as being composed of two or more morphemes; affixal units rarely are. Clitics again behave like affixes (though Klavans 1979 argues that inflected clitics do occur). Consequently, a morphologically complex item is probably an independent word.

2.4. SYNTACTIC TESTS. A word can serve as a syntactic constituent, and therefore can be subject to syntactic processes; a clitic, however, is only a proper part of a word-like construct, and should be immune to such processes. From this fact we can obtain several tests that differentiate between [word + clitic] and [word + word]. In what follows, I will use the terminology of transformational syntax, though the tests can easily be translated into other frameworks.

2.41. DELETION. Proper parts of words are not subject to deletion under identity; whole words may (in the appropriate circumstances) undergo such deletions. Proper parts of [word + clitic] combinations are equally immune to deletion. It follows that, in an $X + Y$ combination, if either X or Y is deletable under identity, then X and Y are words; neither is a clitic.

Note that I refer here only to 'deletion under identity'. So-called FREE DELETION is quite another matter, and items that are unquestionably clitics can be subject to a type of 'deletion' that does not involve an anaphoric linkage between the victim and some other constituent in its sentence. Zwicky & Pullum 1983b argue that some free deletions are simply examples of zero allomorphy,

not syntactic phenomena at all; and they speculate that ALL such 'deletions' are really morphological. The main case they consider involves, in fact, a set of clitics: Eng. proclitic auxiliaries, which are deletable in casual style in examples like *You seen Jerry?* (cf. *'V you seen Jerry?*)

2.42. REPLACEMENT. Proper parts of words are not subject to replacement by a pro-form under identity; whole words may (in appropriate circumstances) be subject to such replacement. Proper parts of [word + clitic] combinations are equally immune to replacement. It follows that, in an X + Y combination, if either X or Y is replaceable by a pro-form, then X and Y are words; neither is a clitic.

2.43. MOVEMENT. Proper parts of words are not subject to 'movement rules'; i.e., they cannot serve as gaps in gap-filler relations with other constituents in a sentence. Full words may (in appropriate circumstances) participate in such relations. Proper parts of [words + clitic] combinations are equally unavailable for movement. It follows that, in an X + Y combination, if either X or Y can be moved without the other, then X and Y are words; neither of them is a clitic.

2.5. A TEST DERIVED FROM INTERFACE ASSUMPTIONS. Given the proposal that cliticization occurs in a component which is ordered after syntactic rules apply (Zwicky & Pullum 1983a,b), it follows that a clitic group—a combination of a host word with its clitics—should not be available when syntactic rules apply (except when the clitic is simply a reduced form of an independent word that makes a phrase with its host).

As a result, if a syntactic rule must specify that a constituent Z is of the form X + Y, where Y is a 'dependent' item—either because Z is deleted under identity, or replaced, or moved, or even because it must be mentioned as a conditioning factor in a rule affecting other constituents—then we should expect that Y is an independent word, and not a clitic (or an affix). Conversely, if X + Y makes some sort of unit Z, but Z never requires mention in a syntactic rule, we should expect that Y is a clitic.

2.6. A METACONSIDERATION. As a final, somewhat speculative, point in this enumeration of criteria, I suggest the following metacriterion: In the absence of clear evidence classifying an item one way or the other, we should assume that the item is a word (or an affix).

The implied claim here is one about the general human ability for language: that clitics are more marked than either inflectional affixes or independent syntactic units (i.e. words). That is, inflectional morphology is clearly more marked than syntax; there are many 'pretty thoroughly isolating' languages, but no 'almost totally synthetic' languages (despite the evidence of languages like Eskimo). Thus my claim is that, ceteris paribus, an item whose standing is unclear is most likely to be an independent word, next most likely to be an inflectional affix, and least likely to be a clitic.

Though I take this metaconsideration seriously, I will not assume in what follows that it is a reliable guide. Nevertheless, I should point out that the

argumentation of §4, below, would be a good bit shorter for anyone who as-
sumes that cliticization is more marked than either inflectional affixation or
syntactic combination.

3. THE PARTICLE is a ubiquitous notion in syntax. The most common use of
the term is to label items which, in contrast to those in established word classes
of a language, have (a) peculiar semantics and (b) idiosyncratic distributions.
Thus 'particle' is a cover term for items that do not fit easily into syntactic and
semantic generalizations about the language; Longacre's 1976 reference to
'mystery particles' in South American languages is a typical use of the term.

On occasion, as in Bloomfield's 1917 analysis of Tagalog, the word is used
to cover any lexical item not in a major word class—both true clitics, which
Bloomfield calls 'enclitic particles', and a large number of non-clitic words.
Especially in older works (e.g. Whitney 1889 on Sanskrit), the word covers
any indeclinable, or uninflectable, item; this use is particularly common for
languages, like Sanskrit, in which most words have inflected forms. A middle
course is steered by those who follow Crystal (1980:258) in distinguishing as
a particle 'an INVARIABLE ITEM with grammatical FUNCTION, especially one
which does not readily fit into a standard description of PARTS OF SPEECH'.

Ontological parsimony dictates that a particle construct should not be added
to the apparatus of grammatical theory unless good evidence exists that it is
needed to describe phenomena in particular languages, and equally good reason
to think that the construct is significantly different from others already known
to be required, e.g. affix vs. clitic vs. word vs. phrase vs. clause—or (at a
different level of abstraction) the various syntactic categories. I shall argue
here that there is no grammatically significant category of particles; for the
most part, the classes of things so labeled are distinguished entirely negatively,
and never require mention in a grammar (§3.1). There is no reason to insert a
particle level of grammatical units between the clitic and word levels in the
hierarchy of units affix/clitic/word/phrase/clause. Indeed, by the tests of §2,
most 'particles' fall into the word level in this hierarchy (§3.2). There is also
no justification for treating 'particles' as constituting a new syntactic category,
parallel to that of the noun, the adposition, etc. Insofar as classes of 'particles'
play a role in grammars, these classes are simply (subtypes of) familiar syntactic
categories (§3.3).

3.1. PROPERTIES OF 'PARTICLES'. The familiar class 'Prt' of Eng. verbal 'par-
ticles'—the *off* of *send off*, the *up* of *give up*—is a typical set of words which
get this label because no more suitable one is available. They are, first of all,
semantically peculiar: their contribution to the combinations in which they
occur tends to be idiosyncratic, and in any case this contribution is not that of
either of the two closest word classes in English, prepositions and (directional)
adverbs. In addition, Eng. 'particles' are odd on distributional grounds; they
have neither the distribution of prepositions (since they occur postnominally,
as in *Robin gave the theory up*) nor the distribution of adverbs (since they
occur between a verb and its direct object, as in *Robin gave up the theory*).

Elsewhere in English, one might want to label some roughly adverbial words

like *even*, *only*, *ever*, and *not* as particles; similarly, the infinitival *to* is a candidate for this label. In other languages, extraordinary collections of words have been assigned to a particle category: markers of mood and sentence type, honorifics, indicators of topic and focus, case-markers, tense/aspect morphemes, markers of emphasis, subordinators, coördinators, indicators of direct vs. indirect discourse, negators, vocative markers, deictics, definiteness/indefiniteness markers, classifiers, and so on. That is, the range of meanings for the things that have been called 'particles' in one language or another parallels exactly the range of meanings for clitics in the languages of the world, and these in turn parallel exactly the range of meanings for inflectional affixes. Semantically, particles are 'function', rather than 'content', items. The words most likely to be so classified are those with the least content—on the one hand, apparently meaningless concomitants of syntactic constructions like Eng. infinitival *to*; on the other, the little words like Ger. *doch* that are the bane of lexicographers and grammarians alike because it is so hard to specify their meanings or their functions, despite the fact that they clearly contribute something to the sentences in which they occur.

Phonologically, the things labeled as particles tend to be 'dependent', again like clitics and affixes. Some particles, like Eng. infinitival *to*, cannot occur in complete isolation. Most are normally subordinate in accent to elements from other word classes, and so do not usually bear phrasal accent (here the Eng. 'Prt' is atypical, since it is usually stressed).

This is not an impressive list of general properties of the things that have been called particles. The peculiar semantics and idiosyncratic syntax of particles together make an entirely negative characterization of the set; thus the Eng. 'particles' *to*, *off*, and *only* share no interesting syntactic or semantic properties. The list of meanings conveyed by particles merely groups them together with affixes, clitics, and some indubitably independent words (including, in English, prepositions, determiners, and auxiliary verbs), as function rather than content items (see §3.32 for further discussion of the function/ content distinction). Their typical lack of phrasal accent merely groups them again with these other function items. There is no justification here for assuming a particle level of grammatical units lying between the clitic and word levels; nor have I seen a generalization about the grammar of any language which requires reference to such a level. Applying Occam's Razor, I conclude that everything to which the 'particle' label has been attached falls somewhere else on the hierarchy of units.

3.2. 'PARTICLES' AS WORDS. In §4, I will examine a few cases of particles and argue that some are affixes, some clitics, and some words. It should be clear, however, from what I have said about typical particles, that they fall on the word level of grammatical units. In particular, the tests of §2 show that the various Eng. 'particles' already mentioned are words rather than clitics.

First, all of them can combine with phrases rather than words (the construction test, §2.33). Eng. 'Prt' combines with a lexical category, V, and a phrasal category, NP, in examples like *send* [*the astronauts*] *off* and *see* [*the horrid task*] *through*. Infinitival *to* combines with VP's, as in *to* [*boldly go where no*

man has gone before]. The adverbial particles *not, only*, and *even* combine with all sorts of phrasal categories, as in *not* [*because I asked you*], *only* [*with a pick-axe*], and *even* [*the bravest of us*].

Some of these particles also exhibit a certain amount of freedom in word order (the ordering test, §2.34). In particular, *even* and *only* modifying a phrase within a VP can occur either with its phrase, or at the beginning of the VP: *even saw Adeline* shares one of its readings with *saw even Adeline*, and *only took a drop* shares one of its readings with *took only a drop*.

All these Eng. particles, except *to*, can occur as independent words (the binding test, §2.31).

The material with which infinitival *to* combines is subject both to deletion (the deletion test, §2.41)—*I urged him to* (*have the penguin stuffed*)—and to replacement by a pro-form (the replacement test, §2.42)—*I urged him to do so*. Both sets of facts indicate that the combination of *to* with other material does not behave like a word syntactically.

Although most of the Eng. particles which I have been discussing are accentually 'dependent', they all can bear phrasal accent (cf. §2.2), and hence behave like independent words rather than clitics. Note examples like *I don't want tó go*; *I will nót eat that rat tart*; *She sacrificed éven her kangaroo*.

The phonological tests in §2.1, above, are not easy to apply to the current cases. One possibly relevant observation concerns Eng. infinitival *to* and the rules governing the aspiration of voiceless stops. One context for aspiration is the beginning of a (phonological) word. If *to* were a proclitic rather than an independent word, then we would expect no aspiration of the first /p/ in *to perpetuate*, since it would not begin a phonological word. The presence of aspiration there supports other evidence that *to* is not a clitic.

Although my discussion in this section has concerned only English, corresponding evidence can be provided for Ger. *doch*, the Tagalog negator *hindi*, and many other examples of particles. I conclude that though many languages do have clitics, most of the things that have been labeled particles are in fact independent words.

3.3. 'PARTICLES' AND SYNTACTIC CATEGORIES. Granting that there is no particle level in the hierarchy of grammatical units, there might still be a place in grammatical theory for a syntactic category comprising particles. From the discussion in the previous section, such a category would be a word class—parallel to verb, adjective etc. But there is no reason whatever to think that the whole class of particle words in any language constitutes a unified group of items syntactically. And there is certainly no reason to think that the whole class of things that have been labeled particles forms a coherent set cross-linguistically. Once again, the class of 'particles' is distinguished entirely negatively: particles are the words left over when all the others have been assigned to syntactic categories.

3.31. ACATEGORIAL WORDS. One way to capture this fact is to say that particles belong to NO syntactic category: that they are acategorial. This is equiv-

alent to saying that these words are directly introduced by syntactic rules, rather than appearing as instances of lexical categories. An acategorial account of Eng. *only* would introduce it via rules like the following:

(1) NP → (*only*) DET NOM
    VP → (*only*) V (NP) (NP) (PP)
    PP → (*only*) PREP NP

The alternative is to assign *only* (and perhaps a few other particles) to a small subclass of adverbs, call it 'ADVX', introduced by rules like the following:

(2) NP → (ADVX) DET NOM
    NP → (ADVX) V (NP) (NP) (PP)
    PP → (ADVX) PREP NP

As Pullum 1982 points out, acategorial accounts have been proposed for a large number of English words. In Chomsky 1957 and Burt 1971 we find infinitival *to*; the conjunctions *and* and *or*; certain occurrences of the prepositions *of*, *by*, and *for*; the complementizer *that*; the auxiliary verbs *do*, *have*, and *be*; the expletive pronoun *there*; and the degree modifiers *very* and *so*—as well as several affixes (among them, perfect *-en*, progressive *-ing*, and negative *-n't*) and at least one clitic (possessive *-'s*).

Grave problems arise with acategoriality. To begin with, Pullum (182) notes two reasons to object to the availability of acategorial descriptions: 'it introduces irreducibly parochial (language-particular) elements into the syntactic rules of the language instead of assigning them to the natural repository for such parochiality, the lexicon'; and 'it formalizes a distinction between [categorial and acategorial] words in a language for which there is absolutely no warrant in terms of the intuition of the native speaker'.

There are at least two further objections. First, the distinction between categorial and acategorial words seems to lack not only psychological reality, but grammatical reality as well. That is, there seem to be no grammatical generalizations that are correctly stated in terms of this distinction. I noted above that the whole set of 'particles' in a language do not hang together in any grammatically interesting way; this is equivalent to saying that acategorial words form no grammatically interesting class.

Second, lumping acategorial words into a class predicts not only that there should be generalizations over this class (which I have just denied), but also that there should NOT be any generalizations relating individual acategorial words to items in other syntactic categories. Indeed, their scarcity is what causes particular words to be treated acategorially. However, several such generalizations have been found: thus, in Emonds 1972, generalizations connecting the English Prt's to prepositions are used to argue that they should be analysed as (intransitive) prepositions. Again, Pullum uses generalizations connecting infinitival *to* to auxiliary verbs to argue that it should be analysed as an auxiliary verb (admittedly a rather special and defective one). It is a feature of such works that their generalizations are by no means obvious or easy to

discover. But the fact that they have been found in some cases encourages me to think that individual particles can be linked to familiar syntactic categories in other cases.

Rather more generally, particle words should belong to syntactic categories so as to permit the statement of significant generalizations. These should be statable across certain classes of particle words (it should be possible to treat Eng. *even* and *only* as members of a syntactic class), and across classes containing both particle words and words belonging to open word classes (it should be possible to group Eng. *ever* with adverbs like *often* and *usually*), and even across classes comprising occurrences of the 'same' particle word performing different functions (it should be possible to group the *not* that combines with a VP together with the contrastive *not* that combines with other phrasal categories).

Thus I propose that THERE ARE NO ACATEGORIAL WORDS. That is, stated positively: Every word (in every language) belongs to one of the syntactic categories provided by (universal) grammatical theory.

Clitics and affixes are acategorial, on this proposal, but every WORD must be assignable to a syntactic category. Still another way of stating the proposal: languages contain no 'particles', but only words belonging to syntactic categories, clitics, and (inflectional or derivational) affixes.

I should add here that, in proposing a ban against acategorial words I am presuming an elaborated theory of syntactic categories. What is required, as shown by Gazdar & Pullum (1982:1–3, citing earlier works in a variety of theoretical frameworks), is a hierarchical arrangement of subcategories within categories—so that Eng. infinitival *to* can be treated as a singleton subclass of the class of auxiliaries, itself a subclass of the class of verbs, itself a subclass of a class of predicators that includes both verbs and adjectives—as well as the ability to refer to 'natural classes' of categories that crosscut one another (e.g. the ability both to refer to adjectives and verbs together as a class and to adjectives and nouns together as a class). The required theory of syntactic categories is therefore parallel in its form to the theory of distinctive features in phonology. Its most salient feature is that it permits reference to a large number of word classes—of sizes from a single word to thousands, with some classes included within others, and with some classes intersecting with others.

3.32. FUNCTION WORDS AND CONTENT WORDS. On one interpretation, 'particles' are simply function words. Thus Carlson (1983:69) observes that, in language in general, 'there are two distinct types of morphemes ... variously referred to as lexical vs. function morphemes, full words vs. empty words, content words vs. particles'. Carlson takes this distinction to be a fundamental one in linguistic theory, and argues that particle words group with inflectional affixes—indeed, with certain instances of morphological operations like reduplication, with certain clitics, with some suprasegmental marks like intonation contours, with some null elements, and even with instances of altered word order. A telling case is that of yes–no questions across languages: they are marked by particle words, verbal inflections, clitics, intonation or other

suprasegmental means, and word-order changes (e.g. Eng. inversion). Some languages use two or more of these in concert or in alternation.

If the distinction between 'particles' (i.e. function items, whether words or not) and content words is fundamental in linguistic theory, as Carlson suggests, then we should expect grammars to refer to this distinction—contrary to the claims made above about the non-appearance of references to a 'particle' category in grammars. But Carlson's suggestion is that particle words and their ilk are in fact both MEANINGLESS and NOT LEXICAL ITEMS at all. Instead, a particle or one of its kin is a mark of a syntactic combination, a concomitant of a rule that combines lexical or phrasal material; according to Carlson, the meaning apparently associated with some such items is actually a semantic operation associated with the rule.

My proposal is that a particle word must be assigned to a syntactic category; but nothing requires that it be listed in the lexicon, as a content word (or that it have a meaning common to all of its occurrences). Carlson's proposal is that a particle word does not in fact appear in the lexicon, but is instead inserted by rule; the word's assignment to a syntactic category can then be treated as one of its inherent features. The two proposals are compatible, despite first appearances; and neither treats the function/content distinction as something that syntactic theory represents directly. That is, no syntactic category comprises just the 'function items' or 'particle words' of a language (hence, there is no feature to which a rule of the language could refer).

4. 'PARTICLES' AND A TYPOLOGICAL GENERALIZATION. I return now to the issue with which this paper began: the involvement of particles in general hypotheses about language, particularly typological generalizations. I want to treat one hypothesized generalization in particular: Wackernagel's "Law" (1892), as expressed in Kaisse's proposal (p. 4) that 'All languages with S' clitics place those clitics in second position, after the first stressed constituent (or word) of the clause, regardless of the category of that constituent (or word).'

My aim here is not to defend or attack this proposal; I am inclined to believe that the strongest form in which it can be maintained is limited to free word-order languages, and I am not committed even to that version. Rather, I want to point out that most of the problematic cases adduced by Kaisse are irrelevant to the hypothesis, since they do not involve clitics, but rather 'particles' that turn out to be (i) independent words, (ii) affixes, or (iii) SIMPLE CLITIC variants of independent words. 'Simple clitics' are those, like the Eng. auxiliary clitics 's, 'd, and so on, that serve as reduced forms occurring in the same positions as corresponding full forms (Eng. is/has, would/had, etc.)

To elucidate Kaisse's version of Wackernagel's Law, I must first explain that S' clitics are a subtype of SPECIAL CLITICS (clitics not partaking of the distribution of corresponding full forms) which function as constituents of S'— i.e. as modifiers of S. Special clitics marking mood, tense, and aspect are typical S' clitics; and those marking subject pronouns are typical examples of S (rather than S') clitics in Kaisse's scheme.

It follows from Kaisse's generalization that any of the following would be counter-examples to it:

(3) S' clitics in initial position.
    S' clitics in a medial position other than 2P, e.g. in third position.
    S' clitics located with respect to the end of a clause, either in final or penultimate position.

Kaisse herself is careful to bring forward cases that seem to be counter-examples, or at least problematic. These include:

(4) Initial S' clitics in Welsh.
    Third-position S' clitics in German.
    Final S' clitics in Chrau and Kenyang (to which I can add a similar case in Hidatsa); and penultimate S' clitics in Nganhcara.

I cannot consider all these cases here (I lack the information I would need to judge the Kenyang case), but I can consider representative phenomena: independent words rather than clitics (German, Chrau); affixes rather than clitics (Hidatsa); and simple-clitic alternants of independent words rather than special clitics (Welsh). These are examined, in order, in the following subsections.

4.1. INDEPENDENT WORDS RATHER THAN CLITICS. The burden of most of the preceding discussion has been that many items that might be classified as (special) clitics are in fact just independent words.

4.11. GERMAN CONVERSATIONAL PARTICLES. One case to which I have already alluded is that of the Ger. particles *ja* 'indeed', *eben* 'just', *denn* 'for', *doch* 'yet', and *wohl* 'indeed'. As Kaisse (9) observes, most of these particles are capable of receiving stress—a property 'more characteristic of independent grammatical words than of the special clitics'.

Several of the conversational particles can even occur in isolation, or in combination only with other 'little words': *doch* constitutes by itself a positive answer to a negative question (*Verstehst du das nicht? Doch.* 'Don't you understand that? Yes, I do.') *Ja doch* and *nicht doch* serve as emphatic positive and negative answers, respectively. *Wohl* alone is an exclamatory 'Well then!' or a military 'Aye, aye', while *ja wohl* and *nicht wohl* are an emphatic positive and an emphatic negative, respectively. *Eben* alone is an exclamatory 'Exactly! That's right!' If the conversational particle *ja* is to be identified with the answer word *ja*, then it should be added to this list—and it probably should be added in any case, given its exclamatory use in examples like *Ja, ist er gegangen?* 'Why, has he gone?' In any event, the binding test (§2.31) indicates that most of the conversational particles (*denn* is the conspicuous exception) are independent words.

It is also true that the conversational particles are by no means restricted to second position, i.e. to position after the first constituent of a clause. *Ja, wohl,* and *eben*, at least, occur phrase-initially as well; e.g. *Hunderte—ja Tausende* 'Hundreds—{indeed / even / nay} thousands'; *Wohl zehnmal* '{Indeed / easily / at least} ten times', and *Eben an der Stelle* 'Just on that spot'. That is, the

conversational particles (again with the notable exception of *denn*) have the distributional properties (§2.35) of independent words.

The reason that the conversational particles appear to be problematic for Kaisse is that in main clauses, where German requires that verbs take second position, these particles appear in third position:

> (5) *Peter war ja   doch dort.*
>   Peter was indeed yet   there
>   **Peter ja war doch dort.*
>   **Peter ja doch war dort.*
>   Cf. ... *weil Peter ja doch dort war* 'because Peter was indeed there, after all'

There is, of course, no problem if the conversational particles are adverbs of a special type. Then their privileges of occurrence are matters of syntax— interesting, but of no particular significance for generalizations about clitics.

Everything I know about the Ger. conversational particles indicates that they are adverbs with special restrictions on their occurrence—in this respect much like Eng. *not*, though of course with rather different distributional restrictions.

4.12. CHRAU PARTICLES. The Mon-Khmer language Chrau, as described by Thomas 1971, presents a picture of incredible diversity in its particles.

Thomas' analysis of this SVO language distinguishes NUCLEAR slots in a clause, filled by verbs and their nominal arguments, from PERIPHERAL slots, filled primarily by various types of 'particles'. Among the particle types is a category of 'adverbs'; these are, by distributional definition, 'words which usually follow the object, but which can freely precede the object' (81), and have meanings comparable to those of adverbs in familiar languages. But the class of particles also includes a set of 'initial adverbials'—ideophonic adjuncts to specific verbs, though located before the subject; a set of 'movable particles', of idiosyncratic distribution, which combine with a variety of constituent types; and a set of 'final particles', the most common of which is *en* 'already, now, finished' (p. 100). The peripheral slots in a clause include several that are clearly phrasal, in particular a set of 'clause temporals' (time adverbials) and a set of 'location' elements (prepositional phrases of location).

Other particles are located at the beginning of the VP constituent in Chrau. These 'preverbal particles' are adverbial in meaning, marking negation and temporal relations.

Still more types of particles occur only in main clauses. These include a set of 'initial particles', some modal in meaning (*chăc* 'surely, probably'), most functioning as sentence connectives (*ncai* 'then, after that', *te ra* 'so that, as a result'); a set of 'modal particles', intervening between the clause temporal and the subject, or occurring after the subject, and again acting both as modals (*đăng gal* 'truly, indeed') and as connectives (*chěq* 'so as a result, then, in that case'); and a collection of 'final particles' besides those that can occur in both main and embedded clauses. These final particles mark questions and imperatives of various types, emphatic assertion and denial, and bewilderment or surprise. It is these particles, mentioned in Zwicky 1977b, that appear to con-

stitute an exception to Kaisse's version of Wackernagel's Law—IF they are clitics. The initial particles would also constitute straightforward exceptions—again, IF they are clitics. But there is no reason to think the final and initial particles are anything other than words: adverbs, in fact.

Chrau is largely monosyllabic, and the particles all maintain their phonological integrity; there is no evidence that they coalesce with neighboring morphemes. Chrau accent is a matter of high pitch, usually on the final syllable in a sentence, and it is true that final particles like the emphatic negative *nôq* and the mild emphatic *vu de* have inherent low pitch (Thomas, 60–61). However, a number of other morphemes have inherent low pitch (*di* 'in order to, until', and the sentence and NP coördinators), even though they are not final particles—and, in any case, usually neutral or de-emphasized words in a sentence can receive high pitch for special emphasis. Phonologically, then, no compelling reason exists to classify the Chrau particles as clitics.

It is also true that none of the particles seem capable of occurring in isolation. However, from Thomas' exposition it appears that only nouns and verbs can occur in isolation; thus free occurrence is not a good litmus test for words vs. clitics in Chrau.

At least one fact favors the classification of the Chrau particles as independent words: a number of them are clearly morphologically complex. Thus the final particle *vu de* is an idiomatic combination of *vu* 'people' and *de* 'possessive particle' (189). By the complexity criterion (§2.36), we expect these particles to be words.

From this summary of the syntax of the various types of particles, it is clear that most of them are located with reference to phrasal or clausal constructs. The construction criterion (§2.33) would then suggest that these particles are independent words. But the force of the criterion is weak here, since clitics can combine with phrasal or clausal constructs. Chrau has either a rich set of function words (an unsurprising state of affairs) or one of the most highly elaborated sets of clitic types yet attested.

I conclude that nothing about the phonology or syntax of Chrau indicates that the final particles form any sort of unit with the non-particle word preceding them, or the initial particles with that following them.

4.2. AFFIXES RATHER THAN CLITICS.[3] The Siouan language Hidatsa is an SOV language with a set of morphemes, indicating moods, that occur only after V in main clauses. These mood markers are treated differently by Robinett 1955 and by Matthews 1965.

Matthews' description is in the early transformational framework; it has a set of phrase structure rules (introducing eight moods via the rule 'S → P Mood'), a set of transformational rules (irrelevant to the issues under consideration here), and a set of rules introducing boundaries into syntactic structures. Matthews describes this third set of rules (Appendix B.1) as demarcating 'words'; but he also says that the way strings are divided into 'words' can

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[3] The material in this section will appear in somewhat different form in the *International Journal of American Linguistics*.

diverge considerably from the (surface) constituent structure. Thus it is clear that this third set of rules, intervening between the transformational and phonological components, comprises what have come to be known as READJUST-MENT RULES, creating 'phonological words' rather than the words of ordinary morphology. That is, Matthews is proposing that the mood markers are clitics, syntactically positioned at the end of an S, and later readjusted to form phonological words with the V that precedes them. These are special clitics (they have no full forms in any position)—and from their meaning, S' clitics.

Robinett's analysis, in contrast, is framed in terms of position classes of affix morphemes. For her, the mood markers belong uncomplicatedly to a class of inflectional affixes including also such non-mood morphemes as *wa* 'as, when, at' and *hiri* 'because'.

Now Matthews' analysis, in which mood markers like Quotative *wareac*, Report *rahe*, and Emphatic *ski* are S' clitics, located clause-finally, clearly goes against Kaisse's generalization, while Robinett's analysis of Hidatsa is consistent with Kaisse's proposal: the location of inflectional affixes has nothing to do with the placement of S' clitics. But which is the right analysis of Hidatsa?

Consider the criteria that Zwicky & Pullum 1983a provide to distinguish clitics from inflectional affixes, and the criteria they cite from other authors (Carstairs 1981, Muysken 1981). Most of these criteria do not apply to the Hidatsa case—at least, given what I know about the language. But not all are beside the point. Carstairs' third criterion, viz. that inflectional affixes are 'members of a relatively small closed system, one of whose members must always appear at the relevant place in structure' (4), fits the Hidatsa case perfectly, since the mood markers make a closed class of seven or eight members,[4] one of which must appear at a particular point in structure, namely at the end of every main clause. Z&P's first criterion—that 'clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems' (503)—is consistent with an affix analysis, since the mood markers occur only after verbs; but since verbal clitics are common in the languages of the world, not much weight can be placed on this test.

The most striking evidence in favor of the affix analysis comes from Z&P's third criterion: 'Morphophonological idiosyncrasies are more characteristic of affixed words than of clitic groups' (504). Several types of morphophonological irregularities are associated with the Hidatsa mood markers.

First, both the Optative and Imperative markers 'combine with a preceding number morpheme ... into the phonemic shape *aara* ... Otherwise, after a non-high vowel that is not preceded by a non-high vowel, ... [they] have the shapes *h* and *ka*, respectively; elsewhere their shapes are *ah* and *aka*, respectively' (Matthews, 108). These morphophonemic conflations and alternations have no obvious parallel elsewhere in the language. Second, the Report mood marker idiosyncratically fails to undergo a morphophonemic rule raising *e* to *i* in mor-

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[4] Eight, according to Matthews, who counts the homophonous Optative and Imperative separately.

pheme-final position (Matthews, 287). Third, at least one mood marker conditions morphophonemically irregular behavior in the stem to which it is attached: 'Under certain not-yet-understood conditions, a stem will move its stress to the final vowel when it is immediately followed by the Quotative morpheme' (Matthews, 286). Finally, the phonological shape of at least one of the mood markers indicates that it is an affix, rather than a clitic. Most of the mood markers have quite ordinary shapes, like Indefinite *toak* and Period *c*— but one, Question, has a peculiar phonological realization: as a glottal interruption of an immediately preceding vowel (Matthews, 101).

Now morphophonological processes like ablaut, umlaut, consonant changes, reduplication, accent shifts, and tone alterations are fairly common as the phonological exponents of inflectional or derivational formations in morphology. Sometimes the processes co-occur with affixes (e.g. Ger. umlaut with plurals in *-er*, as in *Blätter* from *Blatt* 'leaf'); sometimes they are the sole phonological exponent of a formation (e.g. Ger. umlaut as the sole mark of plurality, as in *Brüder* from *Bruder* 'brother'). Sometimes the processes affect only a subtype of a formation (e.g. Ger. umlaut in general—given that many plurals, like *Frauen* 'women', do not involve umlaut even though their noun stems have umlautable vowels); sometimes they occur across the board (e.g. the Tagalog 'contemplated aspect' form of a verb, marked only and always by reduplication, as in *makikita* 'will see', from *makita* 'see' (Schachter & Otanes, 363)). Parallel phenomena involving clitics or independent words are at least very rare, if not unexampled. Given that the Hidatsa Question morpheme is realized as a morphophonological process, it is most unlikely to be a clitic. (Note that here I am using a test to distinguish clitics from affixes that Z&P do not cite: Morphophonological processes normally function parallel to affixes rather than to clitics—or independent words.)

On balance, every criterion I have mentioned shows that the Hidatsa mood markers are inflectional affixes (after the fashion of Robinett's analysis) rather than clitics (in the spirit of Matthews' analysis).

4.3. SIMPLE CLITICS RATHER THAN SPECIAL CLITICS. The Welsh language presents a situation which, at first glance, seems to involve S' clitics in clause-initial position. The particles at issue in this VSO language include at least the affirmative particles *y(r)*, *fe*, and *mi*; the interrogative particles *a*, *ai*; the relative particle *a*; and the negative particles *ni(d)*, *na(d)*, *nac*. It is clear from their functions that, if these particles are special clitics, they are S' clitics. The question is whether they are special clitics at all.

To explore this question, I must first sketch the syntactic properties of the Welsh particles. The particle *y(r)* will serve as an illustration.[5] It combines with a clause whose main verb is a form of *bod* 'to be':

(6) *Yr oedd Jac yma* 'Jack was here.'
  PRT was Jack here

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[5] The particle *y(r)* is homophonous with, and historically derived from, the definite article *y(r)*. But it should be clear, even from the scanty data I present here, that there is no justification for classifying the particle as a definite article in modern Welsh.

Compare *A oedd Jac yma?* 'Was Jack here?' and *Nid oedd Jac yma* 'Jack wasn't here.'

The other affirmative particles, *fe* and *mi*, combine with clauses having main verbs other than *bod*, and they are optional, whereas *y(r)* is obligatory: **Oedd Jac yma*, but both *Mi ganodd Jac* and *Canodd Jac* 'Jack sang'.

Y(r) does not, however, combine with clauses that have a (fronted) topicalized constituent; it is, in fact, in complementary distribution with such a constituent: *Y bachgen oedd yma* 'It was the boy who was here', *Yma oedd y bachgen* 'It was here that the boy was', but **Yr y bachgen oedd yma* and **Y bachgen yr oedd yma*. The interrogative and negative particles are not so restricted; compare *Ai Jac oedd yma?* 'Was it Jack who was here?' and *Nid Jac oedd yma* 'It wasn't Jack who was here' with *Jac oedd yma* 'It was Jack who was here.' Note also that *y(r)* does not co-occur with *a/ai* or *ni(d)*.

For sentences with main-verb *bod*, then, six things can precede the verb: AFF, Q, NEG, TOP, Q TOP, and NEG TOP (AFF is the affirmative particle, Q is the interrogative particle, NEG is the negative particle, and TOP is a topicalized constituent). A straightforward analysis of these facts would posit a COMP position preceding S, with two constituents in COMP:

$$(7) \quad \left(\left\{ \begin{array}{c} Q \\ NEG \end{array} \right\} \right) \left\{ \begin{array}{c} AFF \\ TOP \end{array} \right\}$$

(A transformational treatment would get the effect of complementary distribution between AFF and TOP by moving a topicalized constituent so as to replace AFF; but the details of how the positions in COMP get filled need not concern us here.) In this analysis, AFF has the allomorphs *y* and *yr* (depending on whether the following verb begins with a consonant or a vowel) when it is S'-initial, and a zero allomorph otherwise.

Such a straightforward analysis of the major Welsh facts is not possible if AFF is a special clitic, and if in addition the cliticization component is to follow all syntactic operations; a clitic element AFF would not be available in the syntactic component. Similar remarks hold for Q and NEG, and indeed for the other particles which I have not discussed in detail here. We must now ask why anyone should suggest that the Welsh particles are clitics.

The first piece of evidence suggesting a clitic analysis is the restricted distribution of the particles; however, I have amply illustrated that items with restricted distributions are not necessarily clitics.

The second piece of evidence is that the particles are usually unaccented. *Ni(d)*, *fe*, and *mi*, however, are easily accented for emphasis. And, in any case, the accentual criterion is one of the least reliable, as pointed out in §2.2.

What looks like the really conclusive piece of evidence comes from the phonological properties of AFF, NEG, and Q in colloquial Welsh speech.[6] Before forms of the verb *bod* (which are always vowel-initial), AFF and NEG are pho-

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[6] The discussion that follows is based in part on my own field work on Welsh; in part on the analyses of 'spoken' vs. 'written' Welsh in Jones & Thomas 1977; and in part on the data in two teaching grammars—the 'bookish' grammar of Bowen & Rhys Jones 1960 and the 'colloquial' grammar of Rhys Jones 1977.

nologically reduced and attached to the verb. *Yr oedd Jac yma* pronounced with an initial shwa is distinctly bookish; the colloquial version is *'R oedd Jac yma*, in which the first phonological word is /royð/. *Nid oedd Jac yma* pronounced with a full-form *nid* is emphatically negative; the unemphatic colloquial version is *'D oedd Jac yma*, in which the first phonological word is /doyð/. In the same context, Q is simply absent. *A oedd Jac yma?* is distinctly bookish; the colloquial version is just *Oedd Jac yma?*, with rising final accent indicating its interrogative character.

Moreover, before verbs other than *bod*, Q and NEG are usually not realized as separate elements at all in colloquial Welsh. Instead, Q is manifested as a morphophonological rule—the 'soft mutation', affecting certain segments at the beginning of a verb following Q—and as a concomitant rising intonation on the sentence as a whole. And NEG may be realized via another set of morphophonological alterations ('soft mutation' of some consonants, 'aspirate mutation' of others) affecting the first segment of the verb following it, in combination with a negative marker *ddim* or *mo* later in the sentence. The colloquial version of *A ganodd ef?* 'Did he sing?' (cf. affirmative *Canodd ef* 'He sang') is *Ganodd ef?*; and the colloquial version of *Ni chanodd ef ddim* 'He didn't sing' is *Chanodd ef ddim*.

The facts about the particles both before forms of *bod* and before other verbs suggest a high degree of integration between the particles and the verb forms that follow them; indeed, the particles seem transparently to be clitics. (For at least some speakers of modern Welsh, one might even want to analyse some of the mutated verb forms as inflectional forms.)

For the many speakers who have full and reduced forms of the particles as formal/bookish and informal/colloquial variants, it is clear that the reduced forms (AFF /r/, NEG /d/) are clitics. But they are SIMPLE clitics, occurring in the same position as the corresponding full forms.

The zero variants of Q and NEG can then be analysed as zero allomorphs of simple clitics—an analysis that is especially attractive in light of the fact that the mutations appearing when there is no overt manifestation of Q or NEG are exactly those that occur when *a* or *ni(d)* is present: *(A) ganodd ef?*, *(Ni) chanodd ef*.

I conclude that the Welsh 'particles' are independent words (adverbs, presumably, though of a small and distributionally restricted class) with simple clitic variants.

5. DISCOURSE MARKERS IN ENGLISH (AND IN GENERAL). Within the great collection of things that have been labeled 'particles', we find at least one grammatically significant class of items, in English and in languages generally. These have been variously termed 'discourse particles' and 'interjections'; here I will call them 'discourse markers'.[7] On the grounds of distribution, prosody, and

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[7] My use of the term 'discourse particles' (following Schourup 1983) in earlier versions of this article—which is, after all, designed to demonstrate that there is no unified class comprising the things that have been called 'particles'—was perhaps infelicitous. I have now opted for terminology that entirely avoids 'particle' as (any part of) a technical expression.

meaning, discourse markers can be seen to form a class. But like the 'particles' discussed in §§3.2 and 4.1, they are independent words rather than clitics, and so are irrrelevant to the framing of hypotheses about clitics of any sort.

The Eng. discourse markers, some of which have been discussed recently by James 1974, Goldberg 1980, and Schourup 1983, include (certain instances of) *well*, *hey*, *okay*, *oh*, *yes*, *like*, *y'know*, *no*, *uh*, *now*, *say*, *why*, *look*, *listen*, and *please*, as in the following examples:

(8) *Kim will want, well/oh/like/uh/say/why, a golden penguin.*
Well/Hey/Okay/Yes/Y'know/Look/Listen, let's go to Pismo Beach.
I'd like a pomegranate popsicle, please.

On distributional grounds, the traditional class of exclamatory 'interjections' in English—items like *ouch*, *boy*, *gosh*, *holy cow*, *wow*, *my goodness*, *dear me*, and *hell*—should also be grouped with these markers.

The special characteristics of discourse markers have long been recognized. Traditional grammars of many languages distinguish a class of interjections, and detailed grammars based on distributional analysis (like Fries 1952 for English) must separate discourse markers from other function words. Thus Fries' analysis has 15 classes of function words. Among them, Group K words—*well*, *oh*, *now*, and *why*—frequently occur at the beginning of 'response utterance units', and more generally at the beginning of sentences continuing conversations (101). Group L words, *yes*, and *no*, are distributed much like the items in Group K, but occur as whole 'response utterances' and have a clearer meaning than the Group K words (102). Group M comprises *look*, *say*, and *listen* as 'attention-getting signals' (103); and Group N consists of *please* occurring with request sentences, most frequently at the beginning. These four classes of function words stand out clearly against all the others—primarily because their distribution, in this very distributional grammar, is described in discourse terms, not in terms of their co-occurrence possibilities with other syntactic constituents.

Though these items are in some sense 'little words', they are not at all like clitics. Their kinship is, instead, with such parenthetical constructs as vocatives, appositive relatives, and interruptive adverbials like *I think*, or *as you might have heard*, or *so they say*.

Unlike clitics, which are prosodically dependent, discourse markers and their parenthetical kin are prosodically independent. Typically, they are both accented and prosodically separated from their surrounding context, by pauses or intonation breaks or both.

Though discourse markers are usually monomorphemic, they can be morphologically complex (*y'know* is probably still complex for most current speakers of English); and certainly their parenthetical kin are complex, often having considerable internal structure—as in the parenthetical *as I ought to have realized you probably heard from Robin*, or in the vocative *all you people with both apples and oranges in your knapsacks*.

Unlike clitics, which form word-like units in combination with neighboring words, discourse markers and their kin are syntactically insulated from the rest

of the sentences in which they occur. Beyond the fact that they are located within a constituent, they form no sort of unit with adjacent words.

Finally, a point about semantics. Clitics express a variety of meanings; in addition to clitics indicating particular arguments of a verb, modality, sentence type, negation etc., some serve to indicate speakers' state of mind with respect to the content or form of what is said, their estimate of the speaker/addressee relationship, or their estimate of the role of the current utterance within a larger discourse. Discourse markers ALL have the latter, pragmatic, functions rather than the former, narrowly semantic, ones.

There is much more to be said about discourse markers, their subtypes, and their affinities with other syntactic categories (in particular, with sentence adverbials). Here it suffices to observe that—like the 'particles' of Eng. verb–particle constructions and the adverbial 'particles' of German and Chrau—these 'particles' are independent words, not clitics.

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