

Modern Greek Clitics: Placement, Order, and Function

Author(s): Dieter Wanner

*Proceedings of the 4th Annual Meeting of the Berkeley Linguistics Society* (1978), pp. 268-282

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via <http://linguistics.berkeley.edu/bls/>.

---

*The Annual Proceedings of the Berkeley Linguistics Society* is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.



- (5) pión íðan? -- \*tin 'Who did they see?' --Her.'  
 (6) pión íðan? -- aftín 'id' (strong pronoun)  
 (7) fisiká ípe tis aðelfís-tu to místiko  
 'Naturally he told his sister the secret.'  
 (8) \*físká ípe tis aðelfís-tu to  
 (9) fisiká to ípe tis aðelfís-tu  
 (10) \*físká to místiko ípe tis aðelfís-tu

The type of clitic described by properties A,B, and C (so-called special clitics) must be distinguished from the so-called simple ones which exhibit surface effects only corresponding to the parameters A and B (stresslessness and attachment), but not C (placement). Such pronominal reduction clitics are e.g. known for English (cf. 11), and similar pronominal or non-pronominal reduction phenomena seem to be typical for language in general (frequently so with articles, prepositions etc.). Such forms shall be of no further concern here.

- (11) They gave her a wrong address  
 [geyv he<sup>h</sup>]  
 [geyv e<sup>h</sup>]  
 [geyv ↑ ]

2.1. The Greek referential clitics can be grouped into the two following sets of forms: The first one in 12 comprises all clitic elements which function as (a) possessive markers in conjunction with a NP, (b) comparative terms in conjunction with an AdjP or AdvP, and (c) IO pronouns in conjunction with a verb. The second set in 13 consists of clitics which are DO forms in conjunction with a verb, representing thus a complementary set to the third function (IO on a verb) of set 12.

- (12) sg. mu I su II tu (m,n) tis (f) III  
 pl. mas I sas II tus III  
 (13) sg. me I se II to(n) (m), ti(n) (f), to (n) III  
 pl. mas I sas II tus (m), tis/tes (f), ta (n) III

The functional differentiation of the first set of forms into three types is directly correlated with the syntactic frame in which a clitic occurs in a given instance. With regard to the first function of possessive marker, the clitic is attached enclitically to any nominal element of the NP (an adjective or the noun); but an article or other determiner (as a non-lexical element) may not be the host. Thus in 14 the noun patéras or any of its inflected forms is the host of the clitic su; but the articles o, tu in 15 cannot act in this way since they do not provide a stressed support base required according to property B. If the NP contains an adjective the possessive may encliticize alternatively to this element; cf. the various collocations in 16-21 which all convey the same logical content of 'a brown dress belonging to me'.

- (14) a. o patéras-su (nom.) 'your father'  
 b. tu patéra-su (gen.)  
 (15) a. \*o-su patéras  
 b. \*tu-su patéra  
 (16) to fóremā-mu to kafé the/dress-my/the/brown 'my brown dress'  
 (17) to fórema to kafé-mu  
 (18) to kafé-mu fórema

- (19) to kafé-mu to fôrema  
 (20) to kafé fôremâ-mu  
 (21) to kafé to fôremâ-mu

The difference between the various versions lies in the focus arrangement, first with regard to the N-A vs. A-N opposition, and second with regard to the possessive itself: The 'normal' linearization is A-N where either the A or the N may be the focus depending on the specific context (and to a minor degree on the stress/intonation rendition, A-N vs. A-N). For heavier emphasis on the adjective the extraposition to N-A takes place where the article repetition before the adjective is obligatory; article repetition in the basic A-N pattern is judged as overprecise and strange. A structural differentiation between the two arrangements may be assumed so that the basic order in 22 is related to the more complex 23 by extraposition (or adjective extraction) plus article copying.

- (22) [art [Adj - N]<sub>NP</sub>]<sub>NP</sub>  
 (23) [ [art - N]<sub>NP</sub> [art - Adj]<sub>A(P)</sub> ]<sub>NP</sub>

Within this pattern the enclitic possessive will be attached to the first stressed element of the NP, i.e. the Adj in 22; in this position the focus of the possessive is 'neutral', i.e. encompassing the whole NP. The attachment to a second element in 22 allows for a double interpretation either as a modifier specifically of this second element, or again as a phrase modifier; in 23 the possessive attached to the second extraposed element can only have word focus (i.e. on the Adj) while its positioning with the N in 23 remains ambiguous. Finally the overprecise and insistent versions 19, 21 arise through a further inversion of the internal NP and AP for the purpose of shifting the AP to the first position of even stronger emphasis. The focus on the possessive remains restricted to the adjective in 19 while it is ambiguous in enclisis to the noun. Cf. the contrasts in 24 vs. 25.

- (24) o trágos fobáte to kafé fôremâ-mu, óxi to kafé(-mu) kapélo  
 'The goat is afraid of my brown dress, not my brown hat.'  
 (25) o trágos fobáte to kafé fôremâ-mu, óxi to kókindò-mu (fôrema)  
 'The goat is afraid of my brown dress, not the red one.'

It is the position of the major elements of the NP, and not the place of the possessive clitic, which determines the emphasis structure. While the phonetic attachment in each case is a phenomenon of amalgamation of two contiguous items (i.e. the host word plus the enclitic), the placement of the clitic (i.e. the syntactic aspect of attachment) may be determined with respect to the smaller unit on the word level, or with respect to the higher level unit of the constituent: In 20 the clitic mu may be placed with respect to the N or the whole NP (resulting in N focus for N-mu vs. NP focus NP-mu), but in both cases the phonetic surface form is [fôremâ-mu]. The possessive clitic cannot be placed to any element or structure which stands outside its NP of origin: Whatever the correct derivation of a possessive expression, its corresponding subtree necessarily is a portion of the configuration yielding the possessed surface NP. The variable placement within this structure is fully predetermined by





schematic characterizations.

- (44) i efimerídes to-ixan grápsi stin próti séliáa  
the/newspapers/it/had/written/on the/first/page
- (45) kanénas den su-ixe áosi ádia na fívis apo to domátvo  
nobody/not/to you/had/given/permission/that/you leave/from/  
the/room
- (46) éxondas áosi-tus to ček, perímena oti  $\Theta$ a to eksaryirósun  
having/given-them/the/check/I expected/that/fut./it/they cash
- (47) \*éxondas tus áosi to ček ...
- (48) \*éxondas tus-áosi to ček ...
- (49) [ X [clitic] o [ ... ] Y ]  
S V V S (X, Y may not contain  
[ , ] nor [ ... ]  
S S V V)
- (50) [ X [ ... ] [clitic] Y ]  
S V V S

The class of encliticizing contexts does however not correspond to any manifest syntactic, semantic, or morphological generalization: If the motivation for the encliticization in the affirmative imperative and gerund possibly is the same, the renewed procliticization in the negative imperative vs. the persistent encliticization with a negative gerund (cf. 52) shows that the two cases respond to different conditioning factors. As in the comparable Romance systems of predominant proclisis and marked enclisis (cf. Wanner 1978 for Italian, Spanish, and French) the class of encliticizing verb forms is morphologically enumerable, but it does not contain any further common aspects.

- (51) a. affirmative imperative: pés-mu-to  
b. affirmative gerund: áinondás-mu-to
- (52) a. negative imperative: mí mu-to-pís  
b. negative gerund: mí áinondás-mu-to  
c. \*mí mu-to-áinondas

2.4. The placement principles for the three situations considered in the preceding section are clearly distinct: Each one selects a different host structure (N(P) vs. A(P) vs. V(P)), and each one operates in connection with different linearization principles of enclisis vs. proclisis. But the elements affected in these different manners are the same with respect to their morphological shape and general referential function; even the fact that the various functions comprise the possessive, the comparative and the IO is not accidental: Formally the IO pronouns are genitive pronouns, i.e. they represent oblique complement functions otherwise expressed by a small number of prepositional paraphrases with se 'to (IO)', va 'for (benefactive)', apo 'from (separative)' variably found in the strong counterparts of the oblique clitic functions. Nevertheless the discrepancy between the morphological and the syntactic categorizations makes it necessary to recognize three different classes of clitics. While the correlation between expressed function and host selection in the placement process seems to be natural, the particular circumstances of attachment cannot be predicted automatically and they require a statement to this effect.





(73) [+ person] [- person]

In this way both the wrong clusters of 64, the opposite orderings of 63, and the more-than-two clitic clusters are eliminated without a SSC; the only aspect which requires such a device according to Warburton 1977 is the exclusion of a [+person]-[+person] clitic sequence (i.e. the combinations of I and II, and any of the combinations in 65). This filter 73 will accommodate the existing clitic sequences while the incorrect ones are eliminated. In conclusion, this account allows<sup>us</sup> to describe the ordering restrictions on clitic clusters as a consequence of structural properties of the represented constituent functions, but the cooccurrence restrictions still need to refer to a surface structure constraint.<sup>2</sup>

3.2. Even with all the corrections and implications presented in Warburton 1977 the Greek ordering and cooccurrence restrictions are not fully described since they hold at best only for proclitic position. In enclisis (in particular with the imperative, but to the extent that the semantic/pragmatic conditions can be provided also with the gerund) not only the syntactically motivated IO - DO cluster is found, but also its inverse, DO - IO which in proclisis is unacceptable; cf. 74, 75 vs. 76.

(74) pés - mu - to

(75) pés - to - mu

(76) \*mí to-mu-pís but mí mu-to-pís

\*o yánis to-mu-ípe but o yánis mu-to-ípe

The variable order in enclitic clusters does not imply that all restrictions are eliminated and that everything is acceptable. The double person constraint 73 remains in effect in 77 (in so far as it has validity for the proclitic position (cf. note 2)); in the same way two genitive clitics cannot be combined into one cluster (78), nor is it possible to find any I - II clusters (as in 79) (only relevant for the gerund since the imperative rejects any clitics of II due to **the** reflexivity which requires the passive form).

(77) \*proskálesê-mu-tin! } 'Invite her for me!'

\*proskálesê-tin-mu! }

(78) \*grápse-mu-tu } 'Write to him for me!'

\*grápse-tu-mu }

(79) \*proskálondàs-mu-se } o filóso-mu ékane ena megálo láθος

\*proskálondàs-se-mu }

'By inviting you for me, my friend made a grave error'

Besides these macroscopic constraints, also in effect remains the prohibition against the contiguous repetition of a clitic shape regardless of its potential functional ambiguity (contrary to the discussion above in 55 the present concern refers exclusively to homogeneous clitics). The functionally ambiguous pronominal clitics are mas, sas, tus, and tis (cf. 12, 13). mas, sas cannot stand in sequence since their cooccurrence is already prevented by the double person constraint 73; only tus tus and tis tis might qualify as representations of the functions tus [IO 3 pl] - tus [DO, 3 pl m] (cf. 80, 81), and tis [IO 3 sg f] - tis [DO 3 pl f] (cf. 82, 83). But both are ungrammatical (or at least highly questionable) in proclisis (80, 82) as well as in enclisis (81, 83).

- (80) \*tus-tus-prósfera 'I offered them to them'  
 (81) prósferè-tus-tus! 'Offer them to them!'  
 (82) \*tis-tis-prósfera 'I offered them to her'  
 (83) \*prósferè-tis-tis! 'Offer them to her!'  
 (84) prósferè-tis-tes! 'Offer them to her!'

The ungrammatical 83 finds a minimally different correct surface expression given that an enclitic tis representing 'DO, 3 pl. f' becomes phonologically differentiated to tes; the resulting non-identity in the morphological expression of the clitic sequence is sufficient to make this cluster fully acceptable (84).

The situation of the enclitic sequences is strange since enclisis does not obey the one ordering property which (according to Warburton 1977) depends not on arbitrary determination but on a structural difference, namely the more intimate connection of the DO than of the IO. Instead of an expected mirror image situation (cf. 85a) between proclisis and enclisis, enclisis shows both orders (one typical for enclisis and the other for proclisis (85b)).

- (85) a. [IO [DO - V]] vs. [[V - DO] IO]  
 b. V - DO - IO V - IO - DO

The structural account for clitic order in proclisis cannot be maintained as essential since it can not only not explain, but actually prohibits, the duality of orderings found in enclisis. Thus the proclitic ordering constraints are rather due to a variety of superficial constraints (double person prohibition, genitive > accusative ordering) and more deeply embedded properties (only one case-marked genitive constituent/clitic per clause, thus impossibility of three-clitic sequences which would necessarily include a genitive and a genitive of interest). The enclitic position is subject to the same constraints minus the gen. > acc. ordering principle.

3.3. The situation of the enclitic occurrences of clitic pronouns becomes even less clear when examples such as 86 are considered with three enclitics of which two are identical (to); this cluster seems to be heavily restricted since it can not only not appear in proclisis (87), but it may not follow a plural imperative (88), nor can it be attached to an imperative form which is not shortened (89). In turn, the shortening of the imperative is only acceptable with a phonologically defined class of forms which must begin with t (cf. 90a vs. b); the elision of e between s and t in imperative forms extends also from the inter-word context of host plus clitic to the internal string in the plural imperative form (91) which produces a surface variant to the regular uncontracted form (92).

- (86) áós-to-mù-to! 'Give it to me!'  
 (87) \*o yánis to-mu-to-éáose 'Yannis gave it to me'  
 (88) a. \*áósetè-to-mù-to!  
 b. \*áóste-tò-mu-to!  
 (89) \*áóse-tò-mu-to!  
 (90) a. áyábas-tò-mu! 'Read it to me!'  
 b. \*áyábas-mù-to! 'id.' (cf. áyábasè-mu-to! 'id.')  
 (91) a. áyabáste-tò-mu!  
 b. áyabáste-mù-to!  
 (92) a. áyabásetè-to-mu!  
 b. áyabásetè-mu-to!

The three-clitic sequences are marginal in all their occurrences; what they convey is an (afterthought) insistence on the DO along the lines of a non-pronominal version 93 (if it is at all different from a simple occurrence of the DO clitic in 94).

(93) pés-mu-tin, tin istoría! 'Tell it to me, the story!'

(94) áos-to-mu' or áose-mù-to!

(95) áoste-mù-to  $\cong$  áos-to-mù-to (cf. áoste-tò-mu)

The phonetic conditions on this type of clitic sequence are prominent; first, they have the effect of avoiding contiguous repetitions of (near) identical syllables (te, to); and secondly, the tendency to reduce an unstressed syllable set to st leads to the incorporation of the first to in 86 into the verb form as if it were the verbal ending (cf. the plural form in 95). This isolated type of a three-clitic sequence is interesting since it does not seem to have any primary syntactic and/or semantic function; rather it is made possible through phonological means. The phonological nature of its existence explains the restriction to the enclitic position given that the crucial phonological string s(e)t can only appear here in word internal position. On the other hand, the semantically functional three-clitic sequences of the type IO + DO + genitive of interest (in whatever sequence in enclisis) is still not acceptable. It is likely that further investigation will produce a fuller picture of such deviations from the expected norm; at the moment it represents an indication of the relative anarchy in enclitic pronoun clusters.

The particular stress behavior of Greek enclitics is well known: In the appropriate configuration such clitics may acquire a phonetic stress (of secondary, rarely equal to primary strength) which contradicts on the surface the postulated characteristic stresslessness of clitics (cf. property A). The Greek conditions are as follows: Word level stress falls on one of the three last syllables; any enclitic will count as part of the syllable string of its host word; given that such enclitics add one or more syllables to the end of the word, the word level generalization of a restriction to two posttonic unstressed syllables may turn out to be violated. As a result secondary stress is added to the second syllable from the main stress location provided this secondary stress does not fall on the word-final syllable. It is easy to see how under these circumstances clitic elements can appear under stress: 96-98 show the situation with a single clitic attached to words illustrating the three different stress locations; this pattern is valid for the pronominal clitics as well as for the possessive and comparative instances (cf. 99, 100, parallel to 96). 101-103 repeat the same pattern for the addition of two clitic syllables (this holds only for the pronominal enclisis due to the impossibility of clusters with possessives and comparatives).

(96) prósferè-tu ena komáti túrta 'Offer him a piece of cake!'  
 $\acute{x}$  x  $\grave{x}$  # x

(97) áose-mu ton kenúryo taxiárómo!  
 'Give me the latest "Tachidromos"  $\acute{x}$  x # x

(98) pés-mu tin alíθia!  $\acute{x}$  # x

(99) to aftokínitò-mu 'my car'

- (100) ine megalíteròs-mu 'he is older than I'  
 (101) áósetè-mu-to!            x̂ x x̂ # x x  
 (102) áóse-mù-to               x̂ x # x̂ x x  
 (103) pés-mu-to                 x̂ # x x

The one case of interest is 102: The stress on mù is due to an automatic assignment which does not take into account the internal composition or function of the element it might strike. (Cf. statements of this situation in Warburton 1970, 1977; Thumb 1912:29; Moser-Philtsou 1958:13.) The automatic character of this stress designates it as a surface principle; the contradiction of definitional clitic stresslessness should not weigh too much in view of the fact that the added stress is frequently only secondary while the clitic independent stress of the host item is preserved in its location and primacy. Nevertheless these enclitics exhibit in some cases expressive functions which are properly attributable to stressed/stressable elements only: They can express focusing or insistence through their respective ordering, cf. 104, 105; more rarely they are even found under emphatic stress with the appropriate semantic effect; cf. 106, 107. The necessary restriction is that the insistence focus coincide with a syllable that can actually be stressed through the posttonic stress assignment (cf. 96-103), with the addition that now even the final syllable is able to receive such a stress (still in alternation with the requisite unstressed ones).

- (104) áóste-mù-to! 'Give it to me! I want to have it.'  
 (105) áóste-tò-mu! 'Give it to me! I need that thing.'  
 (106) áós-to-mú 'Give it to mé! (contrast)'  
 (107) áóste-tò-mu! 'Give me that thing! (angry insistence)'

These devices of exploiting stress and alternative positioning are not the only, nor even the regular methods of conveying insistence or contrast for pronominal or other cases. The normal marker of emphasis is a strong pronoun, used alone or in a redundant construction with the corresponding clitic; cf. 108, 109.

- (108) égrapse ena gráma se ména, óxi stin ksadelfí-su  
 'She wrote a letter to me, not to your cousin.'  
 (109) mu-égrapse ena gráma eména, óxi stin ksadelfí-su 'id.'

The same optional contrastiveness as with the pronominal clitics appears also with the possessive markers. Already the differences in its NP internal positioning affect the focus structure without any special insistence on the clitic, as discussed above (cf. 20-25); this is the weakest form of emphasis on the possessor, repeated here in 110. A stronger emphasis on the possessor can be conveyed by actually stressing the clitic marker; notice that the stress alternation condition on the post-tonic syllables does not exist (111, 112). The central position of the possessive marker in 113 leads to ungrammaticality with the insistence stress on it while the twice shifted construction of 114 (indicated by the repeated article before the noun) is acceptable in this form since the superficially central position of the possessive is structurally peripheral (cf. above 22, 23). However, the regular means of expressing emphasis on the possessor is either parallel to the pronominal case with a preposed or postposed strong IO pronoun plus

the redundant enclitic marker (115), or with the empty noun ðikós-(clitic) 'possession of x' which acts like another nominal element in the NP appearing in different positions (116, 117); again, for signaling a contrast it should not occupy the weak central position (118).

- (110) to kafé-mu fórema  
 to fóremà-mu to kafé  
 to fórema to kafé-mu  
 ?to kafé to fóremà-mu
- (111) to fórema to kafé-mú  
 (112) to fóremà-mú to kafé  
 (113) \*to kafé-mú fórema  
 (114) to kafé-mú to fórema  
 (115) eména to kafé fóremà-mu  
eména to fórema to kafé-mu
- (116) to kafé fórema to ðikó-mu  
 to fórema to kafé to ðikó-mu
- (117) to ðikó-mu fórema to kafé  
 to ðikó-mu kafé fórema
- (118) ??to kafé ðikó-mu fórema  
 (119) \*o yánis ðen ine megalíteròs-mú, ine megalíteròs-sú

increasing insistence on -mu

↓

In contrast to the possessive, which is very free in the insistence use of the clitics, the comparative does not seem to allow this kind of emphasis. While it might be speculated that the reason for this unavailability of contrastiveness in (119) must be pragmatic and/or semantic, I do not have any clear indication of what is causing this lack of parallelism.

3.5. The pronominal clitics show two markedly different complexes of behavior depending on whether they are proclitic to the verb or enclitic: In the former case they serve anaphorically predictable functions within the limits of occurrence and cooccurrence set by other grammatical principles and by some superficial constraints typical of clitics. In enclisis however these same elements become much more independent of typical clitic behavior by acquiring potential focus differentiations according to their relative order in a cluster; they even exhibit emphatic potential. Some otherwise typical clitic and general grammar constraints on cooccurrence can be violated on the basis of phonological conditions. The clue to this aberrant behavior of enclitics (in pronominal and possessive function, with the unexplained exception of the comparative) is the fact that they may receive stress which is independent of any signaling function in its origin. But the stress defined nature of clitics (their necessary lack of stress) brings it about that the independent assignment of stress to a syllable which happens to be a clitic changes the status of such an element in the direction of an item which can also express functions normally associated with stress. On the one hand the clitics in proclisis (unaffected by special stress rules) reflect the applicable grammatical principles directly, while the enclitics show crucial interaction between these principles and their potential stress. The variability in placement property C, demonstrated in the threefold function of pronouns, possessives, and comparatives, is paralleled by a variable gradated

distinction along the axis of property A, stresslessness (with the ensuing functional consequences.) Only property B, attachment, has not yet been investigated in any detail; there are indications that it offers similar complications (cf. the st cluster in Greek). Instead of a holistic concept of well-defined and narrowly constrained surface particles the picture of clitics emerging from Greek, and more broadly on a cross-linguistic basis, is an unpredictable variety of functions and manifestations dependent on language specific phonological and syntactic/semantic conditions. Clitics are united as surface shells with minimal content (e.g. referential properties as in Greek) which find their functional meaning within the limits of the applicable idiosyncratic conditions on placement, cooccurrence, and surface form.

### Notes

<sup>1</sup>I would like to thank Eugenia Petridis for her most valuable assistance in coming to terms with Greek clitics as a consultant, as an expert on Modern Greek stylistics, and as a researcher of the grammars written in Greek. The research reported in this paper has been supported by funds from the Research Board of the University of Illinois. Relevant clitics and other features under discussion are underlined in the examples. The accent marking with ˘ (primary stress), ˘˘ (secondary stress), and ˘˘˘ (emphatic stress) is based on surface phonetic conditions, not on Greek orthographic accentuation.

<sup>2</sup>According to my own investigations this constraint 73 against double personal reference for clitic clusters is variable among different speakers; I found (i) - (iii) to be acceptable:  
 (i) proskálesè-mu-ton! 'invite him for me'  
 (ii) proskálesè-ton-mu! 'id.'  
 (iii) mu ton proskálese 'She invited him for me'  
 Such idiolectal variation appears to be characteristic of clitic surface limitations which are not otherwise embedded in the grammar.

### References

- Aissen, J. and D. Perlmutter. 1976. Clause reduction in Spanish. BLS 2.1-30
- Browne W. 1967. On the problem of enclitic placement in Serbo-Croatian. mimeo. [Published in: Slavic Transformational Syntax, ed. by R.D. Brecht and C.V. Chvany; Ann Arbor: Dept. of Slavic Languages and Literatures, University of Michigan]
- Dinnsen, D.A. 1972. Additional constraints on clitic order in Spanish. In Generative Studies in Romance Languages, ed. by J. Casagrande and B. Saciuk; Rowley, Mass.: Newbury House, 175-83
- Moser-Philtsou, M. 1958. Lehrbuch der neugriechischen Volkssprache. Munich: Hueber

- Perlmutter, D. 1971. Deep and Surface Structure Constraints in Syntax. New York: Holt
- Tegey, H. 1977. The grammar of clitics. Evidence from Pashto and other languages. Unpublished PhD dissertation, Univ. of Illinois
- Thumb, A. 1912. Handbook of the Modern Greek Vernacular  
Edinburgh: Clark (2nd ed.)
- Wanner, D. 1974. The evolution of Romance clitic order. in Linguistic Studies in Romance Languages, ed. by R.O. Campbell et al.; Washington, D.C.: Georgetown Univ. Press, 158-77
- Wanner, D. 1977. The development of clitics. mimeo. LSA Meeting Handbook, December 1976
- Wanner, D. 1978. The place of clitics. Studies in the Linguistic Sciences (to appear)
- Warburton, I.P. 1970. Rules of accentuation in Classical and Modern Greek. Glotta 48.107-21
- Warburton, I.P. 1977. Modern Greek clitic pronouns and the 'surface structure constraints' hypothesis. Journal of Linguistics 13.259-81
- Zwicky, A.M. 1977. On clitics. mimeo. Indiana University Linguistics Club