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## When are negative imperatives banned?

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### 1. Ban on negative imperatives and different types of negation

It is well-known that languages differ regarding their treatment of sentential negation. Some languages, for example, Spanish and Russian, have  $X^0$  negation, where the negation heads a NegP,<sup>1</sup> while other languages, e.g. Icelandic, have adverbial adjunct negation, where negation is adjoined to an independent phrase (e.g. VP). I will refer to this distinction as head vs adjunct negation (see Zeijlstra 2004 for a more extensive language survey and relevant references)

Languages also differ regarding the ban on negative imperatives. Some languages disallow negative imperatives, switching to a different verbal form in the context in question, while other languages allow negative imperatives. Among the languages with independent imperative forms, the ban on negative imperatives, illustrated by Greek (1), holds for Greek, Romanian, Spanish, Italian, Portuguese, Catalan, Sardinian, Hungarian, Hebrew, and Latin. On the other hand, Serbo-Croatian, Slovenian, Bulgarian, Macedonian, Russian, Polish, Czech, Albanian, German, Swedish, Norwegian, Yiddish, Berber, and Basque allow negative imperatives.

- (1) a. *Diavase!*  
read.Imp  
b. \**Den/mi diavase!*  
Neg read.Imp  
'Don't read!'

Instead of an imperative verb form, Greek uses a subjunctive in a negative imperative context, i.e. as a surrogate imperative.<sup>2</sup>

- (2) *Na mi diavazis!*  
Subj.Mark Neg read.Subj  
'Don't read!'

Zeijlstra (2004:165) makes a very interesting observation that correlates the two cross-linguistic differences noted above. In particular, Zeijlstra establishes the following generalization.

- (3) Only a subset of the set of languages with a negative marker  $X^0$  bans true negative imperatives.

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<sup>1</sup>In some language of this type negation may undergo head movement outside of NegP, which I ignore here.

<sup>2</sup>Languages differ with respect to which verbal forms they use as surrogate imperatives. The options are subjunctive, infinitive, indicative, and gerund. For relevant discussion, see especially Zanuttini (1997).

In other words, what Zeijlstra observes is that the ban on negative imperatives is found only in  $X^0$  negation languages. Indeed, all the ban-on-negative-imperatives languages noted above are head negation languages. Note, however, that we are dealing here with a one-way correlation: not all head negation languages have negative imperatives. In this paper I will show that one particular analysis of the ban on negative imperatives provides a principled explanation why the ban in question is found only in head negation languages. In the next section I discuss the analysis in question, summarizing a couple of arguments for it (since the analysis does not appear to be widely-known). In section 3 I show how the analysis in question captures Zeijlstra's generalization.

## 2. The affix hopping analysis of the ban on negative imperatives

There are a number of accounts of the ban on negative imperatives in the literature, see, e.g., Bošković (2004), Han (1999), Isac and Jakab (2001), Laka (1994), Miyoshi (2002), Rivero (1994), Rivero and Terzi (1995), Tomić (2001), and Zanuttini (1994, 1997).

Interestingly, a similar phenomenon is found in English. Just like the languages in question, English has a verbal form that cannot co-occur with negation. Whereas the languages in question disallow negative imperative verbs (I will use Greek as a representative of these languages), English disallows negative finite verbs, more precisely, finite main verbs. (I will refer to them as indicatives.) Like Greek, English switches to another verbal form in the context in question, namely, infinitive.

- (4) a. \*John not laughed.  
b. John did not laugh.

Abstractly, we have the same pattern in both Greek and English. Both languages disallow a particular verbal form to co-occur with negation. In the relevant negative context, they switch to another verbal form. The parallelism between Greek and English is generally not noted in the existing accounts of the ban on negative imperatives, which appear to have nothing to say about it. (That is, they are not readily extendable to the ban on negative indicatives in English.) One exception is Miyoshi (2002), further developed in Bošković (2004), where a uniform account is provided for the ban on negative imperatives in Greek and the ban on negative indicatives in English. This is implemented by extending a particular account of the ban on negative indicatives in English to the ban on negative imperatives in Greek, more precisely, Chomsky's (1957) affix hopping analysis, which was revived recently in Hale and Marantz (1993), Bobaljik (1994, 1995), and Lasnik (1995), and extended to several other phenomena in Bošković (2001a,b). In the recent instantiations, affix hopping, often referred to as PF/morphological merger (I will use the terms interchangeably), is treated as a morphophonological rule that involves merger between an affix and its host in PF under adjacency. Merger/affix hopping is blocked by intervening phonologically realized elements, but not by phonologically null elements such as traces and *pro*. To illustrate the mechanism, consider (5a-c), whose pre-PF merger and *Do*-Support structures are given in (6).

- (5) a. John laughed.  
 b. \*John not laughed.  
 c. John did not laugh.
- (6) a. [IP John<sub>i</sub> I (ed) [VP t<sub>i</sub> laugh]]  
 b. [IP John<sub>i</sub> I (ed) [NegP not [VP t<sub>i</sub> laugh]]]

English I is a verbal affix, which must merge with a verbal element in PF under adjacency. The adjacency requirement is not met in (6b) due to the intervening negative head, which blocks PF merger. *Do*-Support, a last resort operation, then takes place to save the stranded affix, deriving (5c). In (6a), the merger is not blocked since no phonologically realized element intervenes between I and the verb. I then merges with the verb, deriving (5a). The crux of the analysis is that indicatives cannot co-occur with negation in English because the co-occurrence results in a violation of the Stranded Affix Filter, which rules out constructions with stranded affixes.

Miyoshi (2002) extends this analysis to the ban on negative imperatives. He proposes that imperatives in languages like Greek contain a functional head, the precise identity of which is not important for our purposes (for Miyoshi, it is an imperative C), which is a PF affix that must merge with a verb under adjacency. Affix hopping can proceed without any problems in (1a), where the verb and the functional head in question, referred to as F, are adjacent. However, in (1b) the negation disrupts the adjacency relation between F and the verb. Affix hopping is then blocked and the example is ruled out due to the presence of a stranded affix, just like (6b).

- (7) F        *den/mi diavase*.  
 [+affix]

Greek does not have the language specific rule of *Do*-Support, which English employs in (5c) to save the stranded affix. Instead, Greek uses a different verbal form, namely subjunctive. We can assume either that the affix head F is not present in subjunctive imperatives or that it is supported by the subjunctive marker *na*.<sup>3</sup>

Regarding languages that allow negative imperatives, they either do not have F or, perhaps more plausibly, F is not an affix in such languages. The difference between languages with and those without a ban on negative imperatives is then treated in terms of a rather straightforward lexical difference regarding the PF status of the imperative head.

Miyoshi provides evidence for the affix hopping analysis of (1) by showing that it also accounts for the often observed difference in clitic placement in imperative and non-imperative contexts. It is well-known that Greek clitics generally precede the verb in indicatives, but follow it in imperatives.

- (8) a. *To diavasa*.  
 it read.Ind

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<sup>3</sup> Notice, however, that the subjunctive marker is optional in constructions like (2).

- ‘I read it.’
- b. \**Diavasa to.*
- (9) a. *Diavase to!*  
 read.Imp it  
 ‘Read it!’
- b. \**To diavase!*

Miyoshi proposes a uniform account of (1) and (9) based on Franks’s (1998, 2000) (see also Abels 2001, Bobaljik 1994, 1995, 2002, Bošković 2001a, 2002, Bošković and Franks 2002, Bošković and Nunes 2007, Hiramatsu 2000, Lambova 2001, Landau 2003, Nunes 2004, Pesetsky 1998a,b, Reglero 2004, and Stjepanović 2003, among others) proposal that a lower copy of a non-trivial chain can be pronounced instead of the head of the chain iff this is necessary to avoid a PF violation. I will illustrate how the proposal works with respect to the analysis of the basic cliticization pattern in Bulgarian (B) and Macedonian (Mac) from Bošković (2001a). Consider (10).<sup>4</sup>

- |      |    |  |       |         |
|------|----|--|-------|---------|
| (10) | a. | <i>Petko mi go dade.</i><br>Petko me.Dat it.Acc gave<br>‘Petko gave it to me.’ | B: OK | Mac: OK |
|      | b. | <i>Mi go dade.</i>   | B:*   | Mac: OK |
|      | c. | <i>Dade mi go.</i>   | B: OK | Mac: *  |

The contrast between Bulgarian and Macedonian (10b) indicates Bulgarian clitics must encliticize, while Macedonian clitics procliticize. Macedonian clitics always precede the verb in the context in question. Bulgarian clitics precede the verb unless preceding it would result in a violation of their enclitic requirement. In that case they follow the verb. This state of affairs can be accounted for under Franks’s (1998) proposal that a lower copy of a non-trivial chain can be pronounced instead of the head of the chain iff this is necessary to avoid a PF violation, given that a copy of pronominal clitics is present both above and below the verb (see Bošković 2001a for discussion of the precise position of these copies). This approach straightforwardly captures the generalization that the verb can precede a clitic in Bulgarian only when no other lexical material is located in front of the clitic. Only in this situation will we be able to pronounce the lower copy of the clitic, which is located below the verb. (Pronunciation of the head of the clitic chain in (11b) would lead to a PF violation since the clitic, which must encliticize, cannot be properly prosodically supported.) If there is lexical material preceding the clitic in its raised position, the head of the chain of clitic movement can be, hence must be pronounced.

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<sup>4</sup> I ignore here certain non-finite clauses in Macedonian, which raise additional questions. For relevant discussion, see Bošković (2001a), Caink (1998), Franks (1998, 2000), Franks and King (2000), Legendre (1999), and Tomić (1996, 1997), among others. The works in question also contain a more general discussion of clausal cliticization in Bulgarian and Macedonian.

- (11) a. X clitic V ~~clitic~~  
 b. ~~clitic~~ V clitic

Since in Macedonian nothing goes wrong in PF if the head of the clitic chain is pronounced, the head of the clitic chain, located above the verb, has to be pronounced. As a result, the V-clitic order is underivable in Macedonian.

- (12) (X) clitic V ~~clitic~~

The contrast in the acceptability of (10b-c) in Bulgarian and Macedonian, as well as the role of phonology in the possibility of the V-cl order in Bulgarian, is thus straightforwardly captured.

Returning to (8)-(9), Miyoshi (2002) observes that given that a lower member of a non-trivial chain can be pronounced if this is necessary to avoid a PF violation, the affix hopping analysis provides a straightforward account of the V-clitic switch in (9). Assume that imperatives and indicatives in Greek do not differ regarding clitic placement in the syntax. They both have the clitic-V order, with a lower copy of the pronominal clitic following the verb. In indicatives, the higher copy of the clitic can be, hence must be pronounced. On the other hand, in imperatives pronunciation of the higher copy of the clitic would lead to a Stranded Affix Filter violation, i.e. a PF violation, since the clitic disrupts the adjacency between F and V, necessary for F to hop onto the verb. The violation can be avoided if we pronounce a lower copy of the clitic, which follows the verb.

- (13) F ~~to~~ *diavase to*.

Since the verb and F are adjacent in (13), affix hopping can take place. Lower pronunciation of the clitic is licensed in (13), just as in Bulgarian (10c), because it is necessary to avoid a PF violation.<sup>5</sup> The affix hopping analysis thus provides us with a principled account of the clitic-V switch in languages that have a ban on negative imperatives. In fact, the clitic-V switch and the ban on negative imperatives are accounted for in the same way.<sup>6</sup>

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<sup>5</sup> Bobaljik (1995) and Bošković (2001a) also propose analyses in which a lower copy of X is pronounced in order to prevent X from blocking affix hopping.

<sup>6</sup> The analysis does not posit a two-way correlation between the clitic-V switch and the ban on negative imperatives. Thus, Miyoshi argues that in some Italian surrogate imperatives, which do not contain the F affix, the V-clitic order arises as a result of V-movement. (The same seems to hold for Cypriot Greek indicatives that have V-clitic order, as discussed in Terzi 1999. Note that the accusative-dative clitic switch, discussed directly below, is not expected to occur in constructions in which the V-clitic order arises as a result of V-movement since in such constructions the clitics are pronounced in the highest position (see the discussion below). As shown in Terzi 1999, it indeed does not occur in Cypriot Greek indicatives.) It is also

In Bošković (2004) I provide an additional argument in favor of the affix hopping analysis. In particular, I show that the affix hopping analysis provides us with a principled account of a peculiar clitic switch in Greek imperatives, noted in Joseph and Philippaki-Warburton (1987), Terzi (1999), and Warburton (1977); more precisely, the fact that the accusative-dative clitic order is available in the postverbal clitic position in imperatives, in contrast to the preverbal clitic position in indicatives, where only the dative-accusative clitic order is possible. I argue that the clitic switch is a PF phenomenon that arises through lower copy pronunciation. More precisely, while the highest position of the clitics, which is pronounced in indicatives, yields the dat-acc order, lower copy pronunciation in imperatives yields the acc-dat order. Here is the gist of the analysis: I argue that, with respect to clitic placement, imperatives are derived just like indicatives in that in the highest syntactic position, the order of clitics in a double object clitic construction is dative-accusative. Under the affix hopping analysis, all we need in order to accomplish clitic switch is that in a lower position the order can be accusative-dative. Since in indicatives the highest copy of the pronominal clitics must be pronounced, we still get only the dative-accusative order in indicatives. On the other hand, since in imperatives lower copies of the pronominal clitics are pronounced for reasons discussed above, we can get the accusative-dative order.<sup>7</sup>

- (14) a. dat acc V ~~acc dat~~... (indicatives)  
 b. ~~dat acc~~ V acc dat... (imperatives)

### 3. Deducing Zeijstra's generalization

I now return to Zeijstra's generalization, demonstrating that it can be straightforwardly captured under the affix hopping analysis of the ban on imperatives. We have already seen how the ban on negative imperatives in head negation languages can be captured under this analysis. Furthermore, we have seen that the analysis does not force the ban on all languages of this type; i.e. it leaves room for languages with head negation to differ regarding the ban on negative imperatives. What we need to do now is prevent the ban on negative imperatives from ever applying in adverbial negation languages. This is actually straightforward.

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worth noting that in Bošković (2001a) I argue that the affix hopping analysis also leaves room for an F-affix language that has the clitic-V switch but no ban on negative imperatives. (The language in question is Macedonian. See Bošković 2001a for explanation why the presence of the F affix does not make negative imperatives impossible in Macedonian; see also Miyoshi 2002 for an alternative analysis of Macedonian that does not involve affix hopping.)

<sup>7</sup> See Bošković (2004) for details of the analysis; as discussed in this work, the lower copy pronunciation analysis in fact allows for both the acc dat and the dat acc order in imperatives, depending on which lower copies of the clitics are activated in PF. Note that the clitic switch is not possible in all languages where clitics are pronounced in a lower position in imperatives. E.g., it is not possible in Spanish. The reader is referred to Bošković (2004) for an account of this difference between Spanish and Greek, where the difference is tied to another independently motivated difference between the two languages, namely the height of verb movement.

Bobaljik (1994, 1995) gives a number of arguments that adjuncts (i.e. adjoined elements) do not interfere with affix hopping even when they intervene between the elements involved in the merger. To give just one illustration of this, the adjunct *never* in (15)-(16) differs from the negative head in (4)-(6) in that it does not block affix hopping. As a result, *Do*-Support does not take place in (15), in contrast to (4).<sup>8</sup>

(15) John never laughed

(16) [<sub>IP</sub> John<sub>i</sub> I (ed) [<sub>VP</sub> never [<sub>VP</sub> t<sub>i</sub> laugh]]]

Since in adjunct negation languages the negative marker is an adjunct, just like *never* in English, it then follows that languages of this type will not show the ban on negative imperatives. I therefore conclude that the affix hopping analysis deduces Zeijlstra's generalization in its entirety: it allows, but does not force the ban on negative imperatives in head negation languages, and prevents the ban from applying in adjunct negation languages. To the extent that the analysis is successful, it also provides additional evidence for the mechanism of affix hopping.

## References

- Abels, K. 2001. "The predicate cleft construction in Russian." In S. Franks, T. King, and M. Yadroff eds. *Formal Approaches to Slavic Linguistics: The Indiana Meeting 2000*. Ann Arbor: Michigan Slavic Publications, Ann Arbor. 1-19.
- Bobaljik, J. 1994. "What does adjacency do?" In *MIT Working Papers in Linguistics 22*. Department of Linguistics and Philosophy, MIT, Cambridge, Mass. 1-32.
- Bobaljik, J. 1995. "Morphosyntax: The Syntax of Verbal Inflection." Doctoral dissertation. MIT, Cambridge, Mass.
- Bobaljik, J. 2002. A-chains at the PF interface: Copies and "covert" movement. *Natural Language and Linguistic Theory* 20. 197-267.
- Bošković, Ž. 2001a. *On the Nature of the Syntax-Phonology Interface: Cliticization and Related Phenomena*. Amsterdam: Elsevier Science.
- Bošković, Ž. 2001b. "PF Merger in Scandinavian: Stylistic Fronting and Object Shift." *Working Papers in Scandinavian Syntax* 68. 75-115.
- Bošković, Ž. 2002. "On multiple wh-fronting." *Linguistic Inquiry* 33. 351-383.
- Bošković, Ž. 2004. "On the clitic switch in Greek imperatives." In O. M. Tomić ed., *Balkan syntax and semantics*. Amsterdam: John Benjamins. 269-291.

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<sup>8</sup> While Bobaljik (1994, 1995) simply stipulates the "invisibility" of adjuncts with respect to affix hopping, Bobaljik (2002) and Ochi (1999) offer a deduction of the different behavior of adjoined and non-adjoined elements in this respect. Thus, assuming Lebeaux's (1988) acyclic adjunct insertion and multiple spell-out, Ochi argues that the reason why adjuncts do not interfere with affix hopping is that they can be acyclically inserted into the structure after the structure, with the elements involved in affix hopping adjacent to each other, has already been sent to PF. Affix hopping/morphological merger is then licensed derivationally, at the point when the relevant elements are adjacent (and before the adjunct is acyclically inserted into the structure). I refer the reader to Ochi (1999) for independent evidence for this analysis.

- Bošković, Ž. and S. Franks. 2002. "Phonology-syntax interactions in South Slavic." *Balkanistica* 15. 49-74.
- Bošković, Ž. and J. Nunes. 2007. "The copy theory of movement: A view from PF." In N. Corver and J. Nunes eds *The copy theory of movement on the PF side*. Amsterdam: John Benjamins. 13-74.
- Caink, A. 1998. "The Lexical Interface: Closed Class Items in South Slavic and English." Doctoral dissertation. University of Durham.
- Chomsky, N. 1957. *Syntactic Structures*. The Hague: Mouton.
- Franks, S. 1998. "Clitics in Slavic." Paper presented at the Comparative Slavic Morphosyntax Workshop, Spencer, Indiana.
- Franks, S. 2000. "Clitics at the interface: An introduction to *Clitic Phenomena in European Languages*." In F. Beukema, and M. den Dikken eds. *Clitic Phenomena in European Languages*. Amsterdam: John Benjamins. 1-46.
- Franks, S. and T. King. 2000. *A handbook of Slavic Clitics*. Oxford: Oxford University Press.
- Halle, M., and A. Marantz. 1993. "Distributed morphology and the pieces of inflection." In K. Hale and S. J. Keyser eds. *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, Mass.: MIT Press. 111-176.
- Han, C.-H. 1999. "Cross-linguistic variation in the compatibility of negation and imperatives." *Proceedings of the West Coast Conference on Formal Linguistics* 17. Stanford University, Stanford, Calif.: CSLI Publications. 1-17.
- Hiramatsu, K. 2000. "Assessing Linguistic Competence: Evidence from Children's and Adults' Acceptability Judgments." Doctoral dissertation. University of Connecticut, Storrs.
- Isac, D. and E. Jakab. 2001. "A unified syntactic analysis of Balkan imperatives with distinctive morphology." Paper presented at the Acme Balkanica Conference, Concordia University, Montreal.
- Joseph, B. and I. Philippaki-Warbuton. 1987. *Modern Greek*. London: Croom Helm.
- Laka, I. 1994. *On the Syntax of Negation*. New York: Garland.
- Lambova, M. 2001. "On A'-movements in Bulgarian and their interaction." *The Linguistic Review* 18. 327-374.
- Landau, I. 2003. "Modular recoverability: Chain resolution in Hebrew V(P)-fronting." Ms., Beer-Sheva, Israel.
- Lasnik, H. 1995. "Verbal morphology: *Syntactic Structures* meets the Minimalist Program." In H. Campos and P. Kempchinsky eds. *Evolution and Revolution in Linguistic Theory: Essays in Honor of Carlos Otero*. Washington, D. C.: Georgetown University Press. 251-275.
- Lebeaux, D. 1988. *Language acquisition and the form of the grammar*. Doctoral dissertation, University of Massachusetts, Amherst.
- Legendre, G. 1999. "Morphological and prosodic alignment at work: The case of South-Slavic clitics." *Proceedings of the West Coast Conference on Formal Linguistics* 17. Stanford, Calif.: CSLI Publications. 436-450.
- Nunes, J. 2004. *Linearization of chains and sideward movement*. Cambridge, Mass.: MIT Press.
- Miyoshi, N. 2002. "Negative imperatives and PF merger." Ms., University of Connecticut, Storrs.

- Ochi, M. 1999. "Multiple spell-out and PF adjacency." *Proceedings of NELS 29*. GLSA, University of Massachusetts, Amherst. 293-306.
- Pesetsky, D. 1998a. "Optimality theory and syntax: Movement and pronunciation." In D. Archangeli and T. Langendoen eds. *Optimality Theory: An Overview*. Malden: Blackwell. 134-170.
- Pesetsky, D. 1998b. "Some optimality principles of sentence pronunciation." In P. Barbosa, D. Fox, P. Hagstrom, M. McGinnis, and D. Pesetsky eds. *Is the Best Good Enough?* Cambridge, Mass.: MIT Press and MIT WPL, Department of Linguistics and Philosophy, MIT, Cambridge, Mass. 337-383.
- Reglero, L. 2004. On A' dependencies in Spanish and Basque. Doctoral dissertation, University of Connecticut, Storrs.
- Rivero, M. L. 1994. "Negation, imperatives, and Wackernagel effects." *Rivista di Linguistica* 6. 39-66.
- Rivero, M. L. and A. Terzi. 1995. "Imperatives, verb movement, and logical mood." *Journal of Linguistics* 31. 301-332.
- Stjepanović, S. 2003. "A word-order paradox resolved by copy deletion at PF." *Linguistic Variation Yearbook* 3. 139-177.
- Terzi, A. 1999. "Clitic combinations, their hosts, and their ordering." *Natural Language and Linguistic Theory* 17. 85-121.
- Tomić, O. Mišeska. 1996. "The Balkan Slavic clausal clitics." *Natural Language and Linguistic Theory* 14. 811-872.
- Tomić, O. Mišeska. 1997. "Non-first as a default clitic position." *Journal of Slavic Linguistics* 5. 1-23.
- Tomić, O. Mišeska. 2001. Negation and imperatives. In G. Zybatow, U. Junghanns, G. Mehlhorn, and L. Szucsich eds. *Current issues in formal Slavic linguistics*. Frankfurt am Main: Peter Lang. 159-168.
- Warburton, I. 1977. "Modern Greek clitic pronouns and the "Surface Structure Constraint" hypothesis." *Journal of Linguistics* 13. 259-181.
- Zanuttini, R. 1994. "Speculations on negative imperatives." *Rivista di Linguistica* 6. 119-142.
- Zanuttini, R. 1997. *Negation and Clausal Structure: A Comparative Study of Romance Languages*. Oxford: Oxford University Press.
- Zeijlstra, H. 2004. Sentential negation and negative concord. Doctoral dissertation, University of Amsterdam.