On second position clitics crosslinguistically[*]
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Abstract: This paper examines factors that are responsible for the availability of second position clitic systems crosslinguistically based on a variety of unrelated languages (altogether fifty-two languages with second position clitics), including (but not limited to) Pama-Nyungan, Uto-Aztecan, Slavic, and Romance languages. The proposed account has consequences for a variety of phenomena, including the Lobeck (1990)/Saito and Murasugi (1990) generalization that functional heads can license ellipsis of their complement only when they undergo Spec-Head agreement, preposition-stranding, and the licensing of *pro*.

1. Introduction

The paper examines the availability of second position clitics systems crosslinguistically. Its main goal is to establish the generalization in (1) based on a variety of unrelated languages (altogether fifty-two languages with second position clitics, but a number of related languages that do not have second position clitics will also be important in establishing (1)). These languages include, but are not limited to, Pama-Nyungan languages, Slavic languages, Romance languages, and Uto-Aztecan languages. The paper will also provide an account of the generalization in question. The account will be shown to have broader consequences that go beyond (1), for example it provides a deduction of the Lobeck (1990)/Saito and Murasugi (1990) generalization that a functional head can license ellipsis of its complement only when it undergoes Spec-Head agreement; it also has consequences for the licensing of *pro* and functional categories more generally.

(1) Second position clitic systems are found only in languages without articles.

The paper is organized as follows. Section 1 gives the relevant background for understanding the relevance of articles for the generalization in (1). Section 2 establishes the generalization in question, and section 3 deals with the deduction of the generalization. Section 4 is the conclusion.

2. On the relevance of articles

While it is more or less standardly assumed that languages that lack overt articles like Serbo-Croatian (SC) have null articles, which means that the difference between English (1) and SC (2) with respect to articles is strictly phonological, Bošković (2008, 2012a) argues that there is a structural difference in the traditional Noun Phrase (TNP)[1] of languages with articles like English and languages without articles like SC which can only be captured if there is no DP in the TNPs in (3) (see also Fukui 1988, Corver 1992, Zlatić 1997, Chierchia 1998, Cheng and Sybesma 1999, Lyons 1999, Willim 2000, Baker 2003, Trenkić 2004, Despić 2011, Marelj 2011, Takahashi 2011, Jiang 2012, Talić 2013, in press a, Cheng 2013, Runić 2014, in press, Kang 2014, Bošković and Şener 2014, Zanon 2015, Bošković and Hsieh in press, among others for no-DP analyses of at least some languages without articles).

[1] The term TNP is used neutrally without commitment to any functional structure that may be present above NP, merely to indicate NP and its extended domain, if any.

(2)   The cats broke the window.
(3)   Mačke   razbiše   prozor.
       stone   broke   window   (SC)

The main (though not the only) argument given in Bošković (2008, 2012a) is based on a number of crosslinguistic generalizations where languages differ with respect to a number of syntactic and semantic phenomena depending on whether or not they have articles, which means that the presence or absence of articles cannot simply be a phonological (i.e. PF) effect. A selection of these generalizations is given in (4).[2] Furthermore, Bošković (2008, 2012a) shows that the generalizations given below can all be deduced in a uniform manner if languages with articles have DP and languages without articles lack it.[3]

(4)   **Generalizations** (see Bošković 2008, 2012a and references therein)
         a. Only languages without articles may allow left-branch extraction out of TNPs.
         b. Only languages without articles may allow adjunct extraction from TNPs.
         c. Only languages without articles may allow scrambling.
         d. Multiple-wh fronting languages without articles do not show superiority effects.
         e. Only languages with articles may allow clitic doubling.
         f. Head-internal relatives display island sensitivity in languages without articles, but not in languages with articles.
         g. Polysynthetic languages do not have articles.
         h. Only languages with articles allow the majority reading of MOST.
         i. Languages without articles disallow negative raising (i.e. strict clause-mate NPI licensing under negative raising from finite clauses).
         j. Radical pro-drop may be possible only in languages without articles.
         k. Elements undergoing focus movement are subject to a verb adjacency requirement only in languages with articles.
         l. Possessors may induce an exhaustivity presupposition only in languages with articles.
         m. The sequence of Tense phenomenon is found only in languages with articles.
         n. Second position clitic systems are found only in languages without articles.
         o. Obligatory numeral classifier systems are found only in languages without articles.

As an illustration of the above generalizations, consider the left-branch extraction (LBE) generalization in (4)a (see here Bošković 2012a, Corver 1992, Uriagereka 1988), repeated here as (7), which refers to extraction of adjectives (and adjective-like elements), i.e. examples like (5)-(6).[4]

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[2] See Bošković (2008, 2012a) for data and the precise definitions of the phenomena in (4) (see also Baker 1996 for (4)g, Cheng 2013 for (4)o, Corver 1992 and Uriagereka 1988 for (4)a, Stjepanović 1998c for (4)b and Živanovič 2008 for (4)h)). For example, (4)c refers to Japanese-style long-distance scrambling out of finite clauses (not to what is referred to as "scrambling" in German, which is a very different operation with very different semantic effects from Japanese scrambling (and cannot take place long-distance out of finite clauses)). See also Bošković (2008, 2012a, in press) and references therein for additional generalizations and other arguments (for example, as discussed in Bošković 2012a, in press), word order in the TNP is freer in languages without articles than in languages with articles, which also follows from the NP/DP analysis.

[3] (4)n was actually not deduced in Bošković (2012a), which will be done here. Also, a number of languages not discussed in Bošković (2012a) will be discussed here regarding (4)n.

[4] (4)a is a one-way correlation: it states that DP languages cannot have this kind of LBE, but it does not really say anything about NP languages. There are NP languages that disallow it, like Japanese, Korean, and Chinese. This indicates that lacking DP is not the only prerequisite for LBE. Bošković (2009a, 2013a) argues that agreement between the split parts is

(5) *Expensive he saw [t$_i$ cars]
(6) Doroguju on videl [t$_i$ mašinu]   (Russian)
     expensive he saw   car
(7) Only languages without articles may allow LBE examples like (6).

To illustrate (7), Bošković (2012a) shows that Bulgarian and Macedonian, the only two Slavic languages with articles, differ from most other Slavic languages (e.g. SC, Russian, Polish, Czech, Ukrainian, Slovenian) in disallowing LBE. Within Romance, Latin, which did not have articles, differs from the Modern Romance languages, which have articles, in that it had LBE. Mohawk, Southern Tiwa, and Gunwinjguan languages (see Baker 1996) as well as Hindi, Angika, and Magahi also allow LBE and lack articles.

   A particularly strong confirmation of (7) is provided by Finnish. Colloquial Finnish has developed a definite article. Significantly, as observed in Franks (2007), LBE is disallowed in Colloquial Finnish, though it is still allowed in literary Finnish, which does not have articles. Language change can often take a good amount of time. What we are witnessing in Finnish is rather fascinating from this perspective: the emergence of the article has led to a pretty much instantaneous loss of LBE.

(8) a.   Punaisen   ostin   auton.   [literary Finnish, poetic style]
          red-acc   buy-pst-1sg car-acc
    b.   ?*Punaisen   ostin   (sen)   auton.   [spoken Finnish]
           red-acc   buy-pst-1sg the   car-acc

Another argument regarding language change comes from the history of Greek. Ancient Greek underwent a change from an article-less language to a language with articles. Thus, while Homeric Greek was an article-less language, Koine Greek was a full-blown article language. Significantly, while Homeric Greek productively allowed left-branch extraction, Koine Greek did not (see Bošković 2012a, based on Taylor's 1990 data).[5]

   At this point it needs to be clarified what is meant by "NP languages" in Bošković (2012a). First, what is important for the generalizations in (4) is the presence of a definite article in a language. Thus, as discussed in Bošković (2009b), Slovenian, which has indefinite but not definite article, in all respects behaves like NP languages. Second, the article has to be unique, in the sense that it has a form distinct from demonstratives and that it occurs only once per TNP. The latter makes irrelevant constructions involving long-form adjectives in SC, where the relevant elements have also been argued to arise through agreement. (Even more to the point, Talić in press a shows that the adjectival endings in question are part of the extended domain of AP, not NP). Finally, there is a semantic requirement. What is considered definite article for the purpose of the generalizations in (4) needs to roughly have the meaning of a iota-operator, yielding an element of type e (see here Bošković and Hsieh in press). In other words, given Chierchia's (1998) proposal that type shift from type <e,t> to type e is possible in a language only in the absence a definite article, which means that bare NPs can have definite interpretation only in NP languages, what is considered to be a definite article must be present for definite interpretation in a DP language (and yield such interpretation). Notice in this respect that bare NPs "cats" and "window" can have e-type interpretation in SC (3), which in English requires the presence of *the* (cf. (2)).

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also needed. In fact, while in Japanese, Chinese, and Korean adjectives and nouns do not agree, in typical LBE languages like Russian and SC, they do agree (actually, non-agreeing adjectives in SC cannot extract, see Bošković 2013a).
[5] See also Bošković (2012a) on Modern Greek and Bošković (2007) on Bulgarian.

Given the above background, I note that two of the generalizations in (4), which are repeated below in (9)-(10), involve clitics.[6]

(9)   Only languages with articles may allow clitic doubling.
(10)   Second position clitic systems are found only in languages without articles.

Together, they in fact lead to another generalization, which is given in (11). In other words, (11) follows from (9) and (10) (see also Halpern and Fontana 1994).

(11)   There is no clitic doubling with second position clitics.

This paper focuses on the generalization in (10). In particular, it will strengthen it through an examination of a number of additional languages, and it will provide an account of the generalization, which was not done in Bošković (2012a).

3. Second position clitics

Languages typically have either verbal (i.e. V-adjacent) clitics or so-called second position clitics.[7] The latter are illustrated below with examples from SC ((12) gives the only possible placement of clitics, which are given in boldface, in these examples).

(12) a. Mi **smo mu**   **je**   predstavili juče.
        we are   him.dat her.acc introduced   yesterday
      'We introduced her to him yesterday.'
    b. Zašto **smo mu**   **je**   predstavili juče?
       why   are him.dat her.acc introduced yesterday
        'Why did we introduce her to him yesterday?'
    c. Ona tvrdi   da   **smo mu**   **je**   mi predstavili juče.
       she claims that are him.dat her.acc we introduced yesterday
        'She claims that we introduced her to him yesterday.'
    d. Predstavili **smo mu**   **je**   juče.
       introduced are   him.dat her.acc yesterday
        'We introduced her to him yesterday.'   (SC)

As noted in Bošković (2012a), languages that are standardly assumed to have second position clitics include a number of Slavic languages (SC, Czech, Slovak, Slovenian, Hucul Ukrainian, and Sorbian), Latin, Ancient Greek, Pashto, Tagalog, Ngiyambaa, and Warlpiri, to which I add here Ossetic, Northern Talysh, Southern Tati, Comanche, Old English, Hittite, and Sanskrit.[8] A number of Pama-

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[6] Regarding (9), what matters here is doubling with full NPs in situ (i.e. which are not left/right-dislocated) which is also obligatorily accompanied with a definiteness/specificity effect. Bošković (2012a) observes that such clitic doubling is found in Albanian, Bulgarian, Macedonian, (note that Bulgarian and Macedonian are the only Slavic languages with clitic doubling), Greek, Somali, Spanish, French (some dialects), Catalan, Romanian, Hebrew, and Dutch (some dialects), all of which have articles. Bošković (2012b) discusses some potential counterexamples to (9) (namely, Warlpiri and Persian) and shows that they are in fact not counterexamples (and Runić 2014 does the same for Prizen-Timok Serbian and Gorica Slovenian).

[7] I am simplifying here the actual state of affairs (these are not the only options). Note that true second position clitics are not simply enclitics (i.e. not all enclitics are second position clitics). I refer the reader to Bošković (2001) and references therein for discussion.

[8] Regarding less known cases, for Comanche see Steele (1977), Charney (1993), McDaniels (2008); for Ossetic see Abaev (1964) and Erschler (2012); for Northern Talysh, see Cysouw (2003, 2005), and Paul (2011); for Southern Tati, see Yar-

Nyungan and more generally Australian languages as well as Uto-Aztecan languages will also be discussed below in this respect. What this rather diverse group of languages have in common is that they all lack articles.[9] This leads us to the generalization in (10), restated in (13), taking into consideration the DP/NP typology.[10]

Shater (1969: 155-157). The classification of Southern Tati is somewhat tentative since the discussion in Yar-Shater (1969) is not comprehensive enough and the glosses are not given for the examples. A couple of relevant examples from Southern Tati, with the glosses provided, are given below ((i)-(iii) are from the Chāli dialect, (iv) is from the Xoznini dialect, (v) is from the Xiāraji dialect, and (vi) is from the Eshtehārdi dialect. The clitics are given in bold.)

(i) azir-**öm**   ãš   bepat
   yesterday-1sg ãš   cooked
   'Yesterday I cooked ãš'

(ii) ay-**im**   bind
   him-1sg   saw
   'I saw him.'

(iii) Em amberãzz-**öm**   sanduq-u andās.
    this dress-1sg   trunk-in   found
    'I found this dress in the trunk'

(iv) dö berā-**š**   da.
    two brother-3sg had
    'he had two brothers'

(v) deraxt-**i** bāši
   tree-2sg fell
   'You(sg.) felled the tree.'

(vi) cemen-**i**   orosiehā bad   beduta
    me.GEN-2sg shoes   poorly   sewed
    'You have sewed my shoes poorly'

[9] While –*ang* in Tagalog is sometimes glossed as definite article, the discussion and the treatments of –*ang* in the literature quite clearly show that it is not a definite article (see, e.g., Schachter 1976, Kroeger 1993, Rackowski 2002, Aldridge 2004, Rackowski and Richards 2005, Wurmbrand 2013, among others; for Kroeger 1993, Rackowski 2002, and Rackowski and Richards 2005 –*ang* signals subjecthood, for Schachter 1976 and Aldridge 2004 it is a case marker (nominative and absolutive respectively), and for Wurmbrand 2013 it is a promotion to trigger nominal marker). It is also not obligatory for definite interpretation; notice in fact the ambiguity of the object in (i) which is typical of languages without articles.
(i) Sino ang   b-um-ili   ng damit?
    who ANG Nom.asp.-buy CS dress
    'Who is the one who bought a/the dress?'   (Nakamura 1996:56)

[10] It is certainly possible that (10)/(13) will turn out to be strong tendencies (i.e. not exceptionless), which would still call for an explanation. In fact, the deduction of (10)/(13) proposed below does leave room for such a scenario (i.e. it leaves room for some exceptions).
     The only potential counterexample to (10)/(13) I have encountered so far is Chamorro, which Chung (2003) considers to have second position clitics. However, the clitics in question in Chamorro are quite different from second position clitics in SC, occurring quite frequently further into the clause than what would be expected from second position clitics, as illustrated by the following examples (such examples are unacceptable in SC; the following observation from Chung 2003:551-552 may also be relevant here: "Nonetheless, when presented with isolated Chamorro examples in which a weak pronoun has been placed in a "nonpronominal" position [meaning non-special clitic position], speakers are interestingly reluctant to judge the result to be completely ungrammatical."
(i) a. Maolek-ña   yänggin [s*um*aga] *yu*' manu   nai   [gaigi] *yu*' pa'gu.
        AGR.good-COMPAR if   AGR.stay I   where? COMP AGR.be I   now
        'It's better if I continue doing what I'm doing now.' (Saipan Tribune 1/16/01)   (Chung 2003:553)
    b. Taimänu [man-hatsa   *hao* guma']?
        how?   AGR.AP-build you house
        'How do you build houses?'   (Chung 2003:585)
The clitics in question could then simply be enclitics (possibly with some additional prosodic constraints, but not of the kind that SC second position clitics are subject to; it should also be noted that while Chamorro is considered to be a DP language this is actually not completely clear; the question is whether elements like *gi* and *ni* in examples like those given in Chung 1990:562(3) can be treated as involving a definite article). Also relevant (especially from the perspective of the discussion in section 3) is that in all the examples in Chung (2003) where a non-clitic verb is present in the sentence, the clitics in question are verb adjacent (there is potentially only one counterexample, which is exceptional in other respects

(13) Second position clitic systems are found only in NP languages.

Slavic and Romance are particularly informative in this respect: while a number of Slavic languages have second position clitic systems, Bulgarian and Macedonian, the only Slavic languages with articles, are glaring exceptions.

As for Romance, Latin, which lacked articles, had second position clitics, while Modern Romance languages, which have articles, lack them.[11]

The history of Greek provides a rather strong confirmation of (13). Thus, Taylor (1990) shows that 90% of enclitics in the Homeric period, when Greek did not have articles, were in the second position; this simple second position cliticization system broke down in the later stages (i.e. article stages), like Koine Greek.

Another strong confirmation of (13) is provided by Ossetic. Ossetic is a Northeast Iranian language with two distinct main dialects (which are actually mutually barely intelligible, see Thordarson 1989), the majority variety Iron or East Ossetic (also known as Tagauric) and Digor or West Ossetic. Abaev (1964) notes that the two actually differ with respect to articles: Digor has definite article but Iron does not. In this context Erschler (2012) makes a particularly important observation which confirms the importance of articles to second position cliticization: "Both language varieties possess a large number of pronominal and adverbial enclitics. In Iron, they are obligatorily placed in the (appropriately defined) second position, whereas in Digor their placement is less constrained." As an illustration of second position cliticization in Iron, both Iron and Digor are multiple wh-fronting languages, where non-D-linked wh-phrases cluster together in front of the verb. Importantly, clitics intervene even between fronted wh-phrases in Iron (but not in Digor) due to the second position requirement.

(14) či=ma=šən   sə   žonə   asə   fešivad-ɐn?
     who=also=DAT.3PL   what know.PRS.3SG this youth-DAT
      'Who knows what about them, about this youth?'   (Ajlarty 2002:13, apud Erschler 2012:678)

Bošković (2012a) notes only two Pama-Nyungan languages, Ngiyamba and Warlpiri. A number of Pama-Nyungan languages actually have second position clitics (the sources in the following were Cysouw 2003, Dench 1998, Meakins and Nordlinger 2013, Mushin 2005a,b; 2006, McConvell 1996, Alpher 1991).[12] The following Pama-Nguyan languages have second position clitic systems (either strict second position clitic systems, or second position clitic systems with some exceptions): Yingkarta, Wajarri, Ngiyamba, Warlpiri, Warumungu, Bilinara, Warnman, Nhanda (only subject clitics), Pitjantjatjara, Yir-Yoront, Gurindji, Djaru, Ngarinyman, Mudburra (undergoing a change), Wembawemba, Wergaia, Madimadi, Wathawurrung, and Woiwurrung. Yukulta, Garrwa, and Wambaya, non-Pama-Nyungan Australian languages, also have second position clitics. As far as I have been able to check, all these languages lack definite articles, and allow NPs without demonstratives (or obviously articles) to receive e-type interpretation (the sources relied on here are Dixon 2002, Dench 1998, Douglas 1981, Nordlinger 1990, 1993, McConvell, 1983, 1996, Meakins and Nordlinger in press, Mushin 2005b, Keen 1983, Blevins 2001, Terrill 1993, 1998, Norman 1973, Smith and Johnson 2000, Nichols 1992, Hercus 1986, Blake 1991, Matthews 1904, Tsunoda 1981, forthcoming, Honeyman 2005, Schultze-Berndt 2002, Hudson 1978, Schweiger 2007, Mushin and

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too), they either immediately precede or immediately follow the verb (cf. Bulgarian in this respect). While a more detailed investigation is still needed, the elements in question in Chamorro seem to be quite different from the kind of second position clitics that a language like SC has.

[11] While Old Spanish is sometimes cited as having second position clitics (see the discussion in Fontana 1993), it is not an exception to (10), see Wanner (2001).

[12] But see here Legate (2008).

Simpson 2008, Alpher 1991). As an illustration, I give below examples from some of these languages where bare NPs receive e-type reading.

(15) mayu   njinanja   parnangka
     child-ABS sit-PST   ground-LOC
     'The child sat on the ground'   (Wajarri, Douglas 1981:230)
(16) Alaji   buguwa-nguji   darranggu-nguji.
      boy:I(NOM)   stick:IV:Abs-PROP:I(NOM) stick-PROP:I(NOM)
      'The boy has a big stick.'   (Wambaya, Nordlinger 1993:138)
(17) birrkalijba=ngayu   waliji-nyi, winjawa nayi nganyi wulukanja waliji-yudi
     hungry=1sg   meat-DAT, where here your   father   meat-PROP
     'I'm hungry for meat. Where's your father with the meat?"   (Garrwa, Mushin 2005b:263)
(18) rtangka-ya=<u>ka-rri</u>   ngawu   pala-tha
      man-ERG=TR=PRES(R)   dog(ABS)   hit-IND
      'The man is hitting the dog.'   (Yukulta, Keen 1983:206)
(19) nyarlu-nggu   yawarda   nha-'i
      woman-ERG   kangaroo.ABS   see-PAST
      'The woman saw the kangaroo.'   (Nhanda, Blevins 2001:48)
(20) Billy-lu tjitji nya-ngu
      Billy-erg child see-past
      'Billy saw the child.'   (Pitjantjatjara, Aissen 2003:452)
(21) Kuyi-φ   ma-rna- φ-rla- φ   yinya parri- φ.
     meat-NOM   MR1-1S-3O-sgO-sgS   gave boy-NOM
     'I gave meat to the boy.'   (Walmajarri, Hudson 1978:222)

I am aware of only one case where a language from the above group was claimed to have a definite article. WALS classifies Yingkarta as a language with a definite affix, based on Dench (1998), the relevant element being the "definite" clitic *–ja*. However, this classification seems to be quite clearly incorrect. Thus, Austin (1995, 2006) treats Mantharta *–thu*, which Dench (1998) says is a cognate of *–ja*, as a topic marker (i.e. as indicating old information). In fact, *-ja* is not obligatory for definite interpretation, as shown by (22), where *–ja* is not present. Furthermore, examples in (23)-(30) (where the original glosses are kept) show that *–ja* can be used with pronouns (23)-(25), adverbs (26), adverbial wh-phrases (27), and verbs (28)-(30), which quite clearly shows that it is not a definite article.

(22) Thuthu-ngku jarti-lanyi mantu.
     dog-erg   eat-pres   meat
     'The dog is eating the meat.'   (Dench 1998:22)
(23) Kurra-rtu mangu nyina-angkulpa nganhu-**ja**.
      not-1plS   good   sit-IMPF   1plNOM-DEF
      'We're not good (well, happy), staying here.'   (Dench 1998:40)
(24) Thuthi-lkarangu milyura, wirntirina-warangu, pika-piya-warangu nyinta-**ja**.
      tread.on-APPR   snake   bite-APPR   sick-INCH-APPR   2sgNOM-DEF
      'You might tread on a snake, (it) might bite (you), you would get sick.'   (Dench 1998:76)
(25) Kurra ngaka-ka   ngathangu …, ngathangu-**ja**!
      not   touch-IMP 1sgGEN   1sgGEN-DEF
      'Don't touch my…, that's mine!'   (Dench 1998:48)
(26) Wanthapara-rtu nyina-angku, mangu-**ja**?
      how-1plS   sit-IMPF   good-DEF

‘How will we be (after this wind stops), good?’ (Dench 1998:44)

(27) Nhalaparta-**ja**? Warlamayi-**ja**, kurra kuwarti-**ja**.
  when-DEF   later-DEF   not   now-DEF
  ‘When (are you going)? Later, not now.’ (Dench 1998:70)

(28) Ngurlupiya-nyi-**ja**   maru-ngka yana-wara.
  fear-PRES-DEF   night-LOC go-PURP
  ‘(They’re) frightened to go at night.’ (JD) (Dench 1998:30)

(29) Kartanha-**ja** kulyirri-nyi-**ja** pukata-la   pilipinya-tha, mayu.
  that-DEF   swim-PRES-DEF (river)-LOC run-RELds   child
  ‘The children are swimming in the river which (while it) is flowing.’ (Dench 1998:72)

(30) Wanthawu yana-npa-**ja**? Marlu   yana-npa nhanya-nhuru ngatha-rna.
  where   go-IMPF-DEF kangaroo go-IMPF see-RELss   1sgNOM-1sgS
  ‘Where are (you) going? I’m going out looking for kangaroos.’ (Dench 1998:72)

Second position clitics are also found in a number of Uto-Aztecan languages, which were not discussed in Bošković (2012a). A breakdown of Uto-Aztecan languages with second position clitics and relevant references is provided below.

(31) **Northern Uto-Aztecan languages**
Numic languages
Comanche (second position subject clitics, Steele 1977, Charney 1993, McDaniels 2008), Chemehuevi (second position subject clitics, some second position sentential markers, Steele 1977, Press 1979), Southern Paiute/Ute (second position subject clitics, Steele 1977, Givón 1983, 2011; not clear about auxiliary clitics, cf. Sapir 1930 vs Hill 2005),
Takic languages
Cupeño (second position subject clitics, second position auxiliary clitics, Steele 1977, Hill 2005), Luiseño (second position subject clitics, auxiliary clitics, negative and question markers, Steele 1977, 1995), Serrano (second position subject clitics, second position auxiliary clitics, Steele 1977, Hill 2005), Gabrielino (second position subject clitics, Munro 2000)
Tubatulabal (second position subject clitics, second position auxiliary clitics, Steele 1977, Hill 2005)
Southern Uto-Aztecan languages
Taracahitic languages
Mayo **(**second position subject clitics, Collard and Scott 1974), Tarahumara (second position subject clitics, Steele 1977), Yaqui (second position subject clitics, Steele 1977, Dedrick and Casad 1999)
Tepiman languages
Pima (second position subject clitics, Munro 2000), Tepehuan (Willet 1991), Tohono O’odham/Papago (second position subject clitics, second position auxiliary clitics, Steele 1977, Hill 2005)
Corachol languages
Cora (second position subject clitics, Steele 1977, Haugen 2007, Langacker 1984)

As an illustration, I will briefly discuss Comanche, which has second position subject clitics.[13] Steele (1977) argues that there is a diachronic process regarding independent pronouns and subject clitics, the latter being derived from the former. When this happens they (the subject clitics) occur in the second position. This is illustrated by the following data (DM is a discourse marker (for topicalization)).[14]

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[13] Since I will cite the data and glosses as they were in the original works, there is some inconsistency in this respect between the examples.

[14] Note that (i) involves a topicalized strong pronoun, as indicated by the presence of the discourse marker –*se*.

(i) **nɨ-**se tɨhka
  I-DM eat

(32) a. tɨasi-se   **nɨ**   tɨhka
     again-DM I   eat
     'Again I ate.'
   b. * **nɨ**   tiɨka
      I   eat
      'I ate.'
   c. tɨhka **nɨ**
     eat   I
     'I ate.'   (McDaniels 2008)

These examples show that the subject is a clitic located in the second position, the verb can either precede it or follow it. In fact, the clitic does not have to be adjacent to the verb, as in the examples in (33), and either one word or a full phrase (VP in (34)b) can precede it, as shown by (34).[15]

(33) a. i-*H/pu*=**u**   tɨhɨya katɨ-miʔa-tɨ=
      here-pu=he   horse   sit(SG SUBJ)-go-GEN:ASP
      'He's riding along on a horse, going this way. Or he's going this way, riding along on a horse.'
   b. nah   **utɨɨ**=hi=pe-H/tu=nɨ-wiHtuʔi-ka=-tuʔi
     just   they when=H/tu=my-wait=for=someone-??-UR:ASP
     'They doubt if I will be ready.'   (Charney 1993:83)
(34) a. tɨhka **nɨ**
      eat   I
      'I ate.'   (McDaniels 2008)
   b. tahi-taʔo-ʔai-kɨ=-i   **nɨɨ**
     us=DU=INCL-pound=meat=make-BEN-CMPL:ASP I
     'I made pound of meat for the two of us.'
   c. ke   **nɨɨ**   toHtin-kaHtu=miʔa-wai-tɬ
     NEG   I   name-toward go-wai-GEN:ASP
     'I will not go to Lawton.'   (Charney 1993:147)

Turning now to the DP/NP status of the Uto-Aztecan languages discussed above, most of them are quite clearly classified as NP languages in Bošković's (2012a) system and in fact do not have definite article. Comanche, for example, clearly does not have it. The literature, however, does occasionally cite some of these languages (in particular, Southern Paiute, Cupeño, Tohono O'odham, Yaqui, and Cora) as having articles. However, there is no form that only functions as definite article in Southern Paiute. The form that is sometimes considered to be a definite article in Southern Paiute, -*u'*, is in fact a demonstrative (see Givón 2011). This form is also not obligatory for definite interpretation (see Givón 2011, Shopen 2007). The same holds for Cupeño *pe'* (see Hill 2005). It also holds for Yaqui *u*,

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  'I ate.'   (McDaniels 2008)
[15] Comanche does have objects clitics. However, they appear in the first position of the verbal complex, and do not cluster with subject clitics, as the following examples show. ((ii) is repeated from (34)b).)
(i)   nihi-tɨɨtuʔa
         us=DU=EXCL help
         'Help us!'
(ii)   tahi-taʔo-ʔai-kɨ=-i   **nɨɨ**
         us=DU-INCL-pound=meat=make-BEN-CMPL:ASP I
         'I made pound of meat for the two of us.'   (Charney 1993:101)

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which is not needed for definite interpretation and is also a demonstrative (see the discussion and especially examples in Guerrero 2004 (for example p. 20), Guerrero and Belloro 2010 (for example p. 118 and 121), Dedrick and Casad 1999 (for example p. 68 and 193). As for Tohono O'odham, the form that is sometimes claimed to be a definite article, *g*, can be apparently used either as definite or indefinite "article", it can be used without a noun, and is not required for definite interpretation (see Zepeda 1983). It is also not distinct from a demonstrative (see Mason 1950). The same holds for Cora, which I will use to illustrate the issues in question.

While WALS reports Cora as having definite articles, forms that are sometimes translated as definite articles (see Casad 1984), like the element translated as ART below, are in fact demonstratives. They also do not obligatorily result in definite interpretation (compare the first and the second ART in (35)), and are in fact not required for definite interpretation, as shown by (36).

(35) an-ká-cu'u-ta'i-ri-'i ɨ itʸa'ɨh ɨ táih kɨme'e
    on.top-down-break-burn-make-STAT   ART   spoon   ART   fire   with
    'The edge of the head of the spoon is burned off by a fire.'   (Casad 1984:191)
(36)   ka-nú=r-áh-ča'ɨ   sápun
    NEG-I=DISTR:SG-(?)-have   soap
    'I don't have the soap.'   (Casad 1984: 188)

None of the languages in question would then be classified as DP languages in Bošković's (2012a) system. Uto-Aztecan languages thus do not provide any counter examples to (13), they in fact quite strongly confirm it.

I conclude then that among the following fifty-two languages with second position clitics there are no counterexamples to (10)/(13): Serbo-Croatian, Czech, Slovak, Slovenian, Hucul Ukrainian, Sorbian, Latin, Ancient Greek, Old English, Hittite, Sanskrit, Ossetic, Northern Talysh, Southern Tati, Pashto, Tagalog, Yingkarta, Wajarri, Ngiyamba, Warlpiri, Warumungu, Pitjantjatjara, Yir-Yoront, Nhanda, Gurindji, Djaru, Ngarinyman, Mudburra, Wembawemba, Wergaia, Madimadi, Wathawurrung, Woiwurrung, Bilinarra, Warnman, Wambaya, Garrwa, Yukulta, Comanche, Chemehuevi, Southern Paiute/Ute, Cupeño, Luiseño, Serrano, Gabrielino, Tubatulabal, Mayo, Yakui, Pima, Tepehuan, Tohono O'odham/Papago, and Cora.

4. Deducing the second position clitic generalization

I now turn to the account of the generalization in (10)/(13) (for an alternative account relying on Bošković's 2012a claim that article-less languages also lack TP, see Migdalski 2015). I will explore here several ways of deducing (10)/(13), which all also have consequences for other phenomena.

4.1. The bare D account

I will refer to the account proposed in this section as the bare D account. As argued by a number of authors, I will assume that the DP/NP distinction extends beyond nouns—it also holds for pronouns. More precisely, I assume that strong pronouns are Ds taking NP complements in DP languages, while they are NPs in NP languages (for arguments for a difference in the categorial status of pronouns in DP and NP languages, see Bošković 2008, 2012a, Despić 2011, 2013, Fukui 1988, Runić 2014, in press; note that Runić shows that clitic pronouns manifest the same categorial difference.)

I will also follow Chomsky's (1995) proposal, argued for in Bošković (2002), that clitics are ambiguous phrases/heads, which means that they are non-branching elements. Applying this to the NP/DP classification of clitics, clitics are bare NPs (non-branching Ns) in NP languages, and DPs, i.e.

non-branching Ds (ambiguous D/DP in the bare phrase structure framework) in DP languages (see also Runić 2014 for independent evidence for this categorial difference).

The last ingredient of the account concerns the structural position of clitics. Bošković (2001) shows that while Bulgarian/Macedonian clitics are adjoined to the V+T complex (this is what makes them verbal clitics, which will be deduced below), they are located in separate projections in SC, each pronominal clitic being located in the Spec of a separate AgrP.

(37) Aux-clitic IO-clitic DO-clitic

What is important here is that, as shown in Bošković (2001), Stjepanović (1998a,b), and Franks (2010), clitic sequences can be split in SC. Thus, the clitic sequence in SC (37) can be split by a variety of operations: ellipsis can split them as in (38) (see Stjepanović 1998a,b); it is possible to climb only one pronominal clitic as illustrated by (39) (see Stjepanović 1998a,b); even clause-mate clitics can be separated as long as the intervening material is a full intonational phrase so that each clitic ends up being second in its own intonational phrase as in (40) (see Bošković 2001).[16] Adverb placement is also relevant (see Bošković 2001): (41) shows that the auxiliary and the ethical dative clitic can occur above sentential adverbs, which is not possible with argumental dative (and accusative) clitics, indicating that they do not all occur in the same position.

(38) a. Mi **smo mu ga** dali, a i vi **ste (?mu)** (takodje).
    we are him.dat it.acc given and also you are him.dat too
    'We gave it to him, and you did too.'
  b. *Mi **smo mu ga** dali, a i vi **ste ga** (takodje).
(39) a. Marija želi da **mu ga** predstavi.
    Marija wants that him.dat him.acc introduces
    'Marija wants to introduce him to him.'
  b. ?Marija **mu ga** želi da predstavi.
  c. ?Marija **mu** želi da **ga** predstavi.
  d. *Marija **ga** želi da **mu** predstavi.
(40) a. Ti **si me**, kao što *sam* već rekla, lišio **ih** juče.
    you are me as am already said deprive them yesterday
    '?You, as I already said, deprived me of them.'
    '*You, as I already said, deprived them of me.'
(41) a. Oni **su ti** pravilno odgovorili Mileni. (ti=ethical dative)
    they are you.dat correctly answered Milena.dat
    'They did the right thing in answering Milena.'
    'They gave Milena a correct answer.'
  b. Oni **su joj** pravilno odgovorili.
    they are her.dat correctly answered
    '*They did the right thing in answering her.'
    'They gave her a correct answer.'

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[16] The clitic climbing contrast between (39)c-d is a result of a relativized-minimality effect: since the dative clitic is higher than the accusative clitic before climbing, if only one clitic climbs it must be the dative clitic (see Stjepanović 1998a,b). As noted by Stjepanović, a similar consideration is relevant to the contrast between (38)a and (38)b with respect to the ability of a pronominal clitic to survive ellipsis: the reason for the contrast is that the dative clitic is in a higher projection than the accusative clitic, hence it is not possible to elide the dative clitic while leaving the accusative clitic unelided. This is confirmed by the lack of ambiguity in (40) (only here we are dealing with accusative/genitive clitics, the *of*-argument corresponding to the genitive clitic, see Franks 2010).

None of the operations that can split a clitic cluster are possible in Bulgarian/Macedonian (see Bošković 2001), where the clitic cluster is inseparable (it also cannot be separated from the verb by non-clitics). Some illustrations are provided in (42) (see Bošković 2001 for additional data).

(42) a. *Nie **sme mu**   **go**   dali, i   vie **ste** ~~**mu**~~   ~~**go**~~   ~~dali~~ (sŭšto).
        we are him.dat it.acc given and you are him.dat it.acc   given too
        'We gave it to him, and you did too.'
  b. *Nie **sme mu go** dali, i vie **ste mu** ~~**go** dali~~ (sŭšto).
   c. *Te   **sa**, kakto **ti**   kazax, predstavili **se**   na Petŭr.
      they are as   you.dat told   introduced self.acc to Peter
      'They have, as I told you, introduced themselves to Peter.'

Bošković (2001) takes this difference between SC and Bulgarian to indicate that SC clitics are located in separate projections, i.e. they do not all cluster in the same head position, while Bulgarian clitics do cluster in the same head position. As a result, SC clitics can be split, while Bulgarian clitics cannot be.

Turning now to the account of the generalization in (10), I propose the condition in (43), which basically bans a free-standing D.

(43) *Stranded D

I take this to mean that D requires a Spec or a complement. If it does not have any, it cannot be free-standing; it has to be part of a head-adjunction configuration.

Being D-elements, clitics in DP/article languages are subject to (43). Bošković (2001) argues that pronominal clitics in SC license their case by moving to the Specs of separate, case-licensing projections (a movement which must be overt with clitics[17]), as a result of which they can be separated. This is not an option for DP languages, since that would result in a violation of (43). However, as discussed in Baker (1988), case can also be licensed through incorporation. The suggestion is then that because of (43), D-clitics check Case by incorporation (to the V/T complex). If there are auxiliary clitics in the language, as is the case in Bulgarian, I suggest that there is a preference to treat them like pronominal clitics for uniformity, as a result of which they also incorporate into the V/T complex (but see the discussion of (44) below, where the assumption is not needed[18]).

The condition in (43) can actually be generalized to hold for all functional categories, as in (44), which is conceptually more appealing.

(44) *Stranded functional heads.

(44) generalizes the requirement proposed in (43) for D. Under (44), a functional head requires a Spec or a complement (or a head-adjunction configuration, but see footnote 20). The ban in (44) is preferable since it is more general. Furthermore, since it is not D-specific, Case does not have to be the only way to get around it. This actually allows for a more straightforward treatment of auxiliary clitics, since there is independent feature-checking motivation for aux to move to V/T, hence there is no need to appeal to adjunction for the sake of uniformity, which was suggested above. What is important here is that being non-branching (see the discussion below), auxiliary clitics do not satisfy (44) in their base position, hence must undergo head adjunction (i.e. while (43) by itself does not force their adjunction, (44) does).

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[17] On why clitics must undergo overt movement (even when their non-clitic counterparts do not have to), see Abels (2003), Bošković (2001), Cardinaletti and Starke (1999), Migdalski (2015), and Stjepanović (1999), among others.
[18] It may be needed for the account in section 4.2. Note, however, that this is a preference since not all languages discussed here treat all these clitics uniformly.

Consider in this respect the account of cliticization in Bulgarian given in Bošković (2002): Given that clitics are by definition non-branching, auxiliary clitics (and negative clitics) must be base-generated as Specs; they cannot be generated as heads taking complements since then they would not be non-branching (see Bošković 2002 for a more detailed discussion; note that under the Spec-of-a-null-head analysis the Bulgarian clitics in question are non-branching). However, this means that they are stranded for the purpose of (44) in their base positions, hence they must undergo incorporation into the verb.

It is worth noting here that Bošković (2002) also shows that the clitics-as-Specs analysis is required if the order of clitics in Bulgarian is to be derived with leftward, not rightward adjunction, in accordance with Kayne's (1994) LCA; instead of the verb right-adjoining to the clitics, as standardly assumed, each clitic then left-adjoins to the verb as soon as the verb moves above it (this way the length of the movement is minimized, see Bošković 2002). This is illustrated below. The clitics are generated in accordance with the clitics-as-non-branching-elements analysis. As soon as the verb moves to a position c-commanding a clitic, the clitic left adjoins to it. (Thus, the accusative clitic adjoins to the verb in the base position, the dative clitic adjoins as soon as the verb moves to a position c-commanding it, and so on.) This gives us the correct word order for the clitics, and satisfies (44), each clitic adjoining to the verb to meet the condition in question.[19]

(45) a. Neg-clitic-Aux-clitic+IO-clitic+DO-clitic+V
    b. Ti **ne si mu gi** dal.
      you neg are him.dat them.acc given
      'You have not given them to him.'
    c. $[_{NegP}$ *ne* $[_{Neg'} [_{VP}$ *si* $[_{V'} [_{AGRioP}[_{AGRdoP} [_{VP}$ mu $[_{V'}$ dal gi$]]]]]]$
    d. $[ne_o+[si_m+[mu_k+[gi_i+dal]_j]_l]_n]$ $[_{NegP}$ t$_o$ $[_{Neg'}$ t$_n$ $[_{VP}$ t$_m$ $[_{V'}$ t$_l$ $[_{AGRioP}$ $[_{AGRio'}$ t$_l$ $[_{AGRdoP}$ $[_{AGRdo'}$ t$_l$ $[_{VP}$ t$_k$ t$_j$ t$_i$

The analysis based on (44) has additional consequences. First, it may provide a new perspective on the crosslinguistic variation with respect to preposition stranding. While it is standardly assumed that prepositions are lexical elements, Baker (2003) argues that they are functional. Suppose, however, that both of these positions are correct and that we are dealing here with a point of crosslinguistic variation. If prepositions are functional elements in languages that disallow P-stranding, and lexical elements in languages that allow it, the ban on P-stranding in languages where it holds, and the crosslinguistic variation in this respect, could in fact follow from (44) (which would then apply to the final representation).[20]

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[19] Bošković (2002) also discusses an alternative where pronominal clitics in Bulgarian are base-generated as Specs of AgrPs (SC clitics remaning in those Specs in the final syntactic representation). This analysis, given below, has the same result as the one given in the text in the relevant respect.
(i) b. Ti **ne si mu gi** dal.
    you neg are him.dat them.acc given
    'You have not given them to him.'
  c. $[_{NegP}$ *ne* $[_{Neg'} [_{VP}$ *si* $[_{V'} [_{AGRioP}$ mu $[_{AGRio'} [_{AGRdoP}$ gi $[_{AGRdo'}$ $[_{VP}$ dal$]]]]]]]]]]$
  d. $[ne_p+[si_n+[mu_l+[gi_j+dal]_k]_m]_o]$ $[_{NegP}$ t$_p$ $[_{Neg'}$ t$_o$ $[_{VP}$ t$_n$ $[_{V'}$ t$_m$ $[_{AGRioP}$ t$_l$ $[_{AGRio'}$ t$_k$ $[_{AGRdoP}$ t$_j$ $[_{AGRdo'}$ t$_i$ $[_{VP}$ t$_i$ …

[20] In this respect it is worth noting that Bošković (2005, 2013b) and Talić (2013, in press b) show that SC prepositions adjoin to the element that follows them (more precisely, the element in question first moves to a position that c-commands the preposition, after which the preposition adjoins to it). As a result of that, the element in question must carry the preposition if it undergoes further movement, as shown by (i) with respect to left-branch extraction of the adjective (see Bošković 2005, 2013b, and Talić 2013, in press b for syntactic and prosodic evidence that examples like (ia) involve subextraction of the AP).
(i) a. U veliku on uđe sobu.
    in big he entered room
    'He entered the big room.'
  b. *Veliku on u uđe sobu.

(44) may also be responsible for the powerful but ill-understood Lobeck (1990)/Saito and Murasugi (1990) generalization given in (46) (more precisely, it may deduce it; see also Saito 2015 in this respect).

(46) Functional heads can license ellipsis of their complement only when they undergo Spec-Head agreement (SHA).

(22) illustrates the generalization in question. It shows that tensed INFL, *'s*, and +*wh*-C, which according to Fukui and Speas (1986) undergo SHA, license ellipsis, whereas the non-agreeing functional categories *the* and *that* do not.

(22) a. John liked Mary and [$_{IP}$ Peter$_i$ [$_{I'}$ did t_i ~~like Mary~~]] too.
    b. John's talk about the economy was interesting but [$_{DP}$ Bill[$_{D'}$'s ~~talk about the economy~~]] was boring
    c. *A single student came to the class because [$_{DP}$ [$_{D'}$ the ~~student~~]] thought that it was important.
    d. John met someone but I don't know [$_{CP}$ who$_i$ [$_{C'}$ C ~~John met t_i~~]].
    e.*John remarked C/that Peter met someone but I didn't remark [$_{CP}$[$_{C'}$C/that ~~Peter met someone~~]]

Given that functional elements are subject to (44), ellipsis of the complement of a functional head will leave the functional head stranded, unless the head has a Specifier. (44) then deduces the Lobeck/Saito and Murasugi generalization in (46).

One question still remains to be addressed: while (44) forces clitics to undergo adjunction, in principle head-adjoined clitics could still be parsed in phonology as second position clitics, or more generally enclitics, without forming a prosodic constituent with the verbal element they are left-adjoined to. I suggest here that there is a preference for a straightforward syntax-prosody mapping, where a head adjunction configuration is parsed as one prosodic word (in other words, there is a preference for a prosodic word to correspond to a syntactic constituent)[21]. A clitic adjoined to a verb is then parsed as a prosodic constituent with the verb, not the preceding element; in other words, we get a verbal clitic this way.[22]

4.2. The *pro*-identification account

It is plausible that the adjunction requirement on prepositions in SC developed in relation to (44), if the adjunction configuration is taken as a preferred way of satisfying (44). In fact, it is not out of question that adjunction is the only way of satisfying (44), especially given that the adjunction is not always obvious since it does not always change word order, the SC case in question being particularly revealing in this respect since the preposition adjoins to the element that follows it in the base-generated position (though not at the point of adjunction; see also Talić 2013, in press b for evidence that prepositions in SC can adjoin to NPs that are base-generated as their complements). In this respect, it is worth noting that many authors have proposed adjunction treatments for other functional elements; even for example for complementizers (see Pesetsky 1992 and Richards 1999 for accounts where complementizers adjoin to elements that precede them in the base position and Shlonsky 1988 for an account where a complementizer adjoins to an element that follows it in the base position; such accounts are particularly common for D-elements like articles; articles (especially affixal articles) are often assumed to adjoin to the following element; Uriagereka (1988, 1996) and Bošković (2013b) also discuss cases where articles in Galician incorporate into the head that precedes them.
[21]For relevant discussion, see also Migdalski (2015).
[22]I suggest that this is only a preference, not an inviolable requirement. Thus, in Bulgarian, clitics are verbal in the sense that they cannot be separated from the verb. However, they are still prosodically parsed as enclitics, i.e. hosted by the element that precedes them (they are, however, not second position clitics prosodically either, see Bošković 2001). We have here a syntax-phonology "mismatch": clitics are V-adjacent because they undergo V-adjunction for reasons discussed above, but they are still prosodically parsed with the preceding word. This is a rare situation that goes against the tendency suggested above. This also makes it unstable. In fact, it appears that Bulgarian clitics are starting to undergo a change to being proclitics on the following verb (see Bošković 2001), which is in fact what happened in Macedonian.

I now turn to an alternative account of (44), which I will refer to as the *pro*-identification account. Under this account, as before, pronouns in DP languages are D+NP complexes while in NP languages they are just NPs. However, I now assume a slightly different treatment of clitics in the former language type.[23] In particular, following a number of authors who assume the presence of a null *pro* in clitic constructions, I assume that clitics in DP languages involve a D, which is the clitic itself, that takes a *pro* complement (for various analyses of clitics assuming *pro*, see Jaeggli 1986, Uriagereka 1995a,b, Sportiche 1996, Franco 2000, among others)[24]. As before, clitics in NP languages are NPs.

Pro of course needs to be licensed. Essentially following standard assumptions, I assume that such licensing is done by V/T through verbal morphology (as with subject *pro* in e.g. Spanish). In other words, the presence of *pro* requires the presence of appropriate morphology on the verb. I therefore suggest that D(clitic) in D+*pro* (or the whole complex) must move to V+T for *pro*-licensing purposes, i.e. for *pro*-identification. The alternative is that the clitic is base-generated adjoined in that position. Either way, the clitic provides the verbal morphology that is necessary for *pro*-licensing. As before, I assume the preference to prosodically parse a clitic together with the element it is adjoined to in the syntax. We then deduce the generalization in (13), banning second position clitic systems for DP languages.

This is all happening because in DP languages the clitic cannot be an NP. It also cannot take an NP complement, which is what non-clitic pronouns do; it has to co-occur with a *pro* (cf. (43)), and *pro* must be licensed by verbal morphology in DP languages. In this respect, it is worth noting that some languages have the so-called radical *pro*-drop, which is *pro*-drop in the absence of rich verbal agreement. However, this is not relevant for our purposes here since, as shown in Bošković 2012a (cf. (4)j), radical *pro*-drop occurs only in NP languages (e.g. Japanese, Chinese, Korean, Kokota, Turkish, Hindi, Wichita, Malayalam, Thai, Burmese, Mongolian, Javanese, and Indonesian; in Bošković 2012a this is in fact taken as another argument that pronouns are NPs in NP languages and DPs in DP languages).

4. Conclusion

In conclusion, the paper has examined some of the factors that are responsible for the availability of second position clitic systems crosslinguistically, arguing that second position clitic systems can only be found in languages without articles, which means that they are disallowed in DP languages. I have also proposed two alternative accounts of this generalization, which may have consequences for other phenomena, like the Lobeck (1990)/Saito and Murasugi (1990) generalization that functional heads can license ellipsis of their complement only when they undergo Spec-Head agreement, preposition-stranding, and the licensing of *pro* (and more generally functional categories).

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[23]Note that the analysis about to be proposed does not adopt Chomsky's (1995) assumption, discussed in the previous section, that clitics are non-branching elements (for a different approach to pronouns/clitics, see Déchaine and Wiltschko 2002).

[24] Note that I do not assume D+*pro* only for clitic doubling languages.

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