



Failed clitic doubling of plural indirect objects in Greek

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1 Introduction

- Greek allows Clitic Doubling (CD) of both direct objects (DOs) and indirect objects (IOs):¹

(1) (Tis) (ta) edhos-a tis Marias ta ghlika.
CL.F.SG.GEN CL.N.PL.ACC give.PFV-PST.1SG D.F.SG.GEN M.GEN D.N.PL.ACC sweets.ACC
'I gave Maria the sweets.'

- CD in Greek is usually optional and is associated with semantic effects: familiarity/topicality for DOs, with the conditions less clear for IOs (e.g., [Anagnostopoulou, 1994, 2003, 2017](#)).
- Even though CD in Greek has received a lot of attention in the literature (see [Anagnostopoulou 2017](#) and [Angelopoulos 2019](#) for recent overviews), the following puzzle has generally gone unnoticed:
- ☞ CD of indirect objects is significantly degraded (strongly ungrammatical for many speakers, mildly ungrammatical for some) in the third person plural ([Anagnostopoulou, 2017](#), fn.18, 46):

(2) a. (Tu) edhik-s-a tu pedhiu mia
CL.N.SG.GEN show-PFV-PST.1SG D.N.SG.GEN child.N.SG.GEN INDF.F.SG.ACC
ikona.
picture.F.SG.ACC
'I showed the child a picture.'

b. (*??Tus) edhik-s-a ton pedhion mia
CL.N.PL.GEN show-PFV-PST.1SG D.N.PL.GEN child.N.PL.GEN INDF.F.SG.ACC
ikona.
picture.F.SG.ACC
'I showed the children a picture.'

- Without the clitic, a plural indirect object in the genitive(=dative) is grammatical.

¹ We are grateful to Elena Anagnostopoulou, Gereon Müller, and the audience at the Syntax-Morphology Colloquium of the University of Leipzig for feedback. All errors are our own.
Abbreviations follow the Leipzig Glossing rules with the following additions: CL = clitic, D = determiner, NACT = non-active.

- A 3rd-person plural clitic alone without a full DP object is also grammatical:

- (3) **Tus** to edhos-a.
 CL.PL.GEN CL.N.ACC give.PFV-PST.1SG
 ‘I gave it to them.’

Main claims:

- We show that the ungrammaticality of CD of 3rd-person plural IOs is due to a morphological mismatch between the clitic *tus* and the determiner *ton* of the doubled DP, and we provide a tentative analysis.
- We argue that the data provide support for movement-based theories of CD in Greek, and in particular those which treat the clitic and doubled DP (or D) as part of a chain.
- The data indicate a new diagnostic for distinguishing between object agreement and clitic doubling: if morphological mismatches of the Greek type lead to ungrammaticality, then the phenomenon must be an instance of CD, and not object agreement.

Roadmap:

- §2 CD of IOs is ungrammatical due to a morphological mismatch
- §3 An argument for movement-based approaches to CD
- §4 Towards a formal analysis
- §5 Exceptions in Greek
- §6 Conclusion

2 CD of IOs is ungrammatical due to a morphological mismatch

- Greek DPs morphologically distinguish between 3 grammatical cases: nominative, genitive, and accusative. The Ancient Greek dative has been lost, and genitive is used in dative contexts instead.
- The inflectional paradigm of clitics is generally identical to that of the definite article, with the only exception found in the genitive plural.

	M.Cl	M.Det	N.Cl	N.Det	F.Cl	F.Det
Sg.Gen	tu	tu	tu	tu	tis	tis
Sg.Acc	ton	ton	to	to	tin	tin
Pl.Gen	tus	ton	tus	ton	tus	ton
Pl.Acc	tus	tus	ta	ta	tis	tis

- Due to the partially disjoint nature of the contexts that the form /tus/ appears in (masculine accusative and genitive of all genders), it may be assumed to be the elsewhere form in the plural:

- (4) /tus/ ↔ [+pl +obj]

- Adopting a Distributed Morphology ([Halle & Marantz, 1993](#)) approach to morphology, we assume that the clitic bears oblique case features in the syntax (just like genitive nouns), which are deleted in plural contexts via an Impoverishment rule:

$$(5) \quad [+obl] \rightarrow \emptyset / \text{ ___ } [+pl]^2$$

- After the Impoverishment rule has applied, the more specific genitive form *ton* [+pl +obj +obl] cannot be inserted.

! The intuition is that, due to the nature of the connection between the clitic and the object DP, **the featural mismatch resulting from the application of the Impoverishment rule leads to ungrammaticality.**

- There are (at least) 2 arguments in favor of a morphological explanation (and not an explanation appealing to the syntax of plural IOs, for example).
 1. Ungrammaticality persists in all cases of genitive plural doubling (with some possible exceptions coming later), and is not restricted to ditransitives. Monotransitive verbs that assign genitive also show the restriction:

(6) ***Tus** telefonis-a **ton** **pedhion.**
 CL.PL.GEN/ACC telephone.PFV-PST.1SG D.N.GEN.PL children.N.GEN
 ‘I called the children.’

2. The strongest piece of evidence comes from Northern Greek dialects.

- While the syntax of double object constructions (including the case assignment mechanism) is the same in Standard and Northern Greek ([Anagnostopoulou & Sevdali 2020](#), but see [Anagnostopoulou 2018](#) for some differences), dative is syncretic with accusative in the latter.
- CD of plural IOs is grammatical in this case:

(7) **Ta** edhos-a **ta** **pedhia** tis tsantes.
 CL.N.PL.ACC give.PFV-PST.1SG D.N.PL.ACC children.N.ACC D.FEM.PL.ACC bags.F.ACC
 ‘I gave the children the bags.’
 ([Souganidis, 2017](#))

- Side remark: there seems to exist inter- and intra-speaker variation regarding the “degree” of ungrammaticality of plural IO CD. Similar judgments are often reported for cases in which syncretism ameliorates ill-formed syntactic structures (e.g., [Sigurðsson & Holmberg, 2008](#), fn. 27).
 - The Greek pattern is, to our knowledge, the first documented case of syncretism causing an otherwise grammatical structure to crash.
- Note, however, that there is no requirement for phonological identity of the determiner and the clitic.

² Gender and infl. class features are always deleted in oblique plural contexts (the ending is always /-on/ for all genders), with the respective rule applying before the one in question.

- (8) Tha to etrogh-a ena sokolataki.
 FUT CL.N.SG.ACC eat-PST.1SG INDF.N.SG.ACC chocolate.N.ACC
 'I would eat a chocolate.'

- This indicates ungrammaticality is due to a mismatch in the *features* spelled out by the exponents, and not the form *per se*.

3 An argument for movement-based approaches to CD

3.1 Previous theories of Clitic Doubling

Movement-based analyses: Clitic + DP form a chain

1. **Movement + M-Merger:** A-movement of the object DP to Spec ν P with subsequent M-merger (Matushansky 2006 a.o.) of the raised DP and the functional head (e.g., Harizanov, 2014; Kramer, 2014). This analysis can also work if instead of M-Merger, one adopts a theory of chain reduction along the lines of van Urk (2018).
2. **'Big DP':** the clitic and the DP are base-generated as a big DP in object position (the clitic is similar to a floating quantifier), with the clitic subsequently moving out (e.g., Uriagereka, 1995; Nevins, 2011).
3. **Long head movement:** the D head of a DP in object position undergoes long head movement to T (Preminger 2019 a.o.).
4. **Feature movement:** the features of the DP object move to T (e.g., Anagnostopoulou, 2003).

Agreement-based/hybrid accounts: Clitic + DP do not form a chain

1. **Object agreement:** the clitic is an object agreement marker (e.g., spells out features on ν , via Agree with the DP object).
2. **CliticP:** there is a Clitic Phrase in the middle field (above the thematic subject position)
 - the DP object moves to the specifier of that Clitic Phrase where it agrees with the clitic (Sportiche, 1996)
 - the DP moves to the edge of the ν P and agrees with CliticP from there (Angelopoulos, 2019)
 - the clitic may spell out either the copy of the DP in the specifier position or the head of the Clitic Phrase via Spec-Head Agree (Angelopoulos & Sportiche, 2021)

CD of IOs

- The above theories have been (mostly) developed for CD of DOs, with less attention given to CD of IOs.
- For Spanish, there is a consensus in the literature that CD of IOs differs from CD of DOs, with the former usually analyzed as an agreement marker or an Appl head (e.g., Bleam, 1999; Cuervo, 2003, 2010).
- Anagnostopoulou (2003, 2017) argues that CD of IOs in Greek differs from Spanish, and should be analyzed in terms of movement.

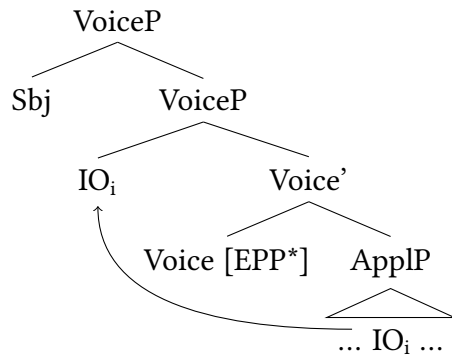
3.2 An argument for movement

- ☞ We argue that the ungrammaticality of CD of plural IOs in Greek provides further support for movement-based approaches to CD.
- Syncretism is widespread in agreement and, to our knowledge, never leads to a crash:
 - in fact, syncretism has been reported to ameliorate feature mismatches created by the syntax ([Bjorkman 2021](#) and references therein).
 - if the clitic is an agreement marker and is not involved in a movement chain, syntax does not even create a feature mismatch - why would syncretism ruin it?
 - If the clitic and the DP form a movement chain, we have a morphological case mismatch in the plural between the underspecified clitic and the full DP with the feature [+oblique].
 - cross-linguistically, phenomena that involve pronominal copies may allow person mismatches, but never tolerate case and number mismatches ([van Urk, 2018](#)).
 - The crash caused by syncretism in the plural thus provides one more argument in favor of movement-based approaches, but only those that assume that the clitic and the DP (or its D head) form a movement chain.
 - for Greek, this is added to evidence for movement from reconstruction and intervention effects (e.g., [Anagnostopoulou, 2003](#); [Angelopoulos & Sportiche, 2021](#)).
 - The Greek data also provide a new diagnostic to distinguish between object agreement and clitic doubling ([Preminger 2009](#); [Nevins 2011](#); [Yuan 2021](#) a.o.).
 - If a case mismatch between the clitic and the doubled DP leads to ungrammaticality of the Greek type, then the phenomenon must be an instance of CD and not object agreement.
 - The implication is not bidirectional: *grammatical* mismatches do not help distinguish between CD and object agreement.
 - Morphological case mismatches for phenomena analyzed as CD/in terms of movement have been reported for at least Choctaw, Yimas ([Tyler & Yuan, 2019](#)) and some dialects of Basque ([Arregi & Nevins, 2012](#)).

4 Towards a formal analysis

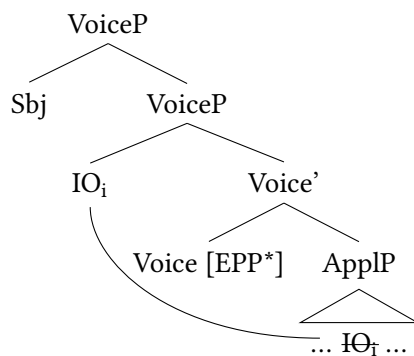
- [Angelopoulos \(2019\)](#) has recently argued that only some variants of big-DP analyses and Harizanov's theory are compatible with reconstruction data from Greek, and so we will be using the latter from now on.
 - It should be noted though that our analysis for the ungrammaticality of the mismatch is compatible with all syntactic theories of CD in which the clitic and the doubled DP (or D) form a movement chain.
- Following [Harizanov \(2014\)](#), we assume the following structure for a ditransitive clause in Greek in which CD of the IO takes place:

(9) Object movement to Spec-Voice



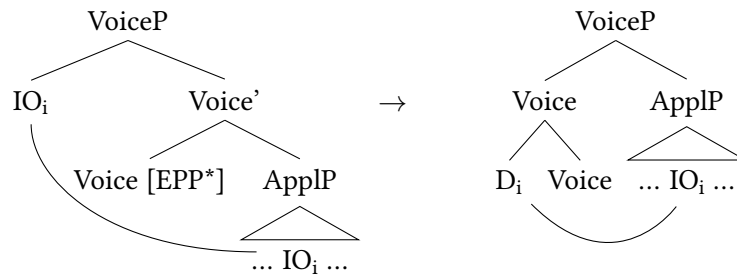
- The functional head - Voice - has an EPP feature that attracts the object to its Spec-position for interpretive reasons.
- In (9), the two copies of the indirect object constitute a movement Chain. That is, the two instances of the DP are identical (copies of each other), with a link between them.
- At the Syntax-PF interface, one of the copies is normally deleted. This process is called Chain Reduction. **Chain Reduction** applies iff:
 - a. the two linked phrases are identical;
 - b. there is no phase boundary between them;
 - c. neither member of the chain is marked for PF-overtness (van Urk, 2018).
- Under normal circumstances, the lower copy of the object would be deleted:

(10) Chain Reduction



- A DP may, however, escape Chain Reduction. This can be attained in several different ways. Van Urk (2018) proposes a special [PF+] features, available on the functional head, that protects the DP in its specifier from being deleted.
- An alternative idea is presented in Harizanov (2014), where the higher copy of the DP undergoes M-merger with the functional head, whereupon the DP is reduced to its highest projection label (including its features) and merged with the functional head:

(11) M-Merger (before Chain Reduction):



! **Crucially, we assume that the link between the reduced version of the object and the full DP in situ remains intact until Linearization applies.**

- During **Linearization**, the major syntactic dependencies are deleted, and the structure is flattened and prepared for Vocabulary Insertion (Halle & Marantz, 1993; Fox & Pesetsky, 2005).
- Unlike Embick & Noyer (2001), we assume that Linearization and Vocabulary Insertion do not constitute one step in the derivation.
- In Greek, the operation of **Impoverishment** is performed on the syntactic terminals before Linearization takes place.
- Recall the Impoverishment rule mentioned above:

(12) Impoverishment rule for Greek clitics:
 [+obl] → Ø / [.Voice D [____ +pl -part] Voice]

☞ This rule applies only to D under sisterhood with a Voice head.

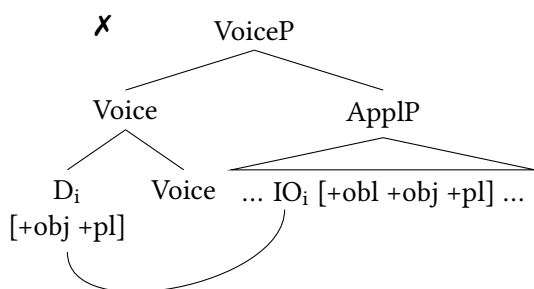
- After the application of Impoverishment, the two linked elements display a featural mismatch:

(13) a. D [+obj +pl] → the higher D-element lacking gender features and [+obl];
 b. DP [+obl +obj +pl] → the lower DP lacking only gender but not case.

! **We propose that Linearization can only apply if two non-silent elements linked as a movement chain in syntax have identical featural content.**

- This means, effectively, that the derivation crashes at the stage of Linearization if the clitic has an impoverished featural content compared to the full DP down below.

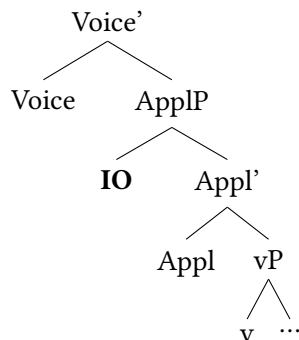
(14) A movement chain with a feature mismatch:



- A possible alternative is to say that that the Impoverishment rule removing the [+obl] feature must apply to the entire chain. That is, both the higher and the lower copy are affected by it.
- Since the rule is contextually specific, the context for its application is not present at the lower end of the chain, which leads to a crash since the rule cannot apply simultaneously at both ends.

(15) Impoverishment rule for Greek clitics:
 [+obl] → Ø / [.Voice D [____ +pl -part] Voice]

(16) Lower end of the chain:



5 Exceptions in Greek

5.1 Clitic Left Dislocation

- Clitic Left Dislocation (CLLD) of plural IOs is grammatical, especially when there is an intonational break present:

(17) **Ton pedhion,** *(tus) edhos-a ena vivlio.
 D.PL.GEN children.N.GEN CL.PL.ACC give.PFV-PST.1SG INDF.N.SG.ACC book.N.ACC
 'The children, I gave them a book.'

- CLLD differs from CD in a number of ways (e.g., [Anagnostopoulou, 2003, 2017](#)).
- There are many alternative analyses (see [Angelopoulos & Sportiche 2021](#) for a recent overview), but all of them can (potentially) account for the grammaticality of plural IOs:
 - Base-generation analyses (e.g., [Anagnostopoulou, 1994](#)): the clitic and the DP do not form a movement chain and thus no problem should arise from the feature mismatch between the clitic and the DP.
 - Movement analyses (e.g., [Angelopoulos & Sportiche, 2021](#)): The DP moves to the left periphery (e.g., SpecCP). There are two ways in which this might make the mismatch possible:
 - * there are now three copies involved, and the clitic is the lower one; assuming that C is a phase head, the clitic and DP are also spelled out in a different phase.
 - * CLLD involves A'-, and not A-movement; perhaps case feature mismatches are tolerated in the former, but not the latter type of movement.

5.2 First and second person pronouns

- In the plural, both 1st- and 2nd-person full pronouns and the corresponding clitics have syncretic genitive/accusative forms, and so there is no morphological case mismatch. CD is grammatical (and in fact strongly preferred or obligatory for some speakers).

- (18) a. **?(Mas) edhos-e emas ena vivlio.*
 CL.1PL.GEN/ACC give.PFV-PST.3SG 1PL.GEN/ACC INDF.N.ACC book.ACC
 ‘(S)he gave us a book.’
 b. *?(Mas) idh-e emas.*
 CL.1PL.GEN/ACC see.PFV-PST.3SG 1PL.GEN/ACC
 ‘(S)he saw us.’

- What is unexpected is the grammaticality of CD in the singular: the full pronoun is syncretic for genitive and accusative, but the clitic is not.

- (19) a. **(Mu) to edhos-e emena.*
 CL.1SG.GEN CL.N.SG.ACC give.PFV-PST.3SG 1SG.GEN/ACC
 ‘(S)he gave it to me.’
 b. *?(Me) idh-e emena.*
 CL.1SG.ACC see.PFV-PST.3SG 1SG.GEN/ACC
 ‘(S)he saw me.’

- Why is the morphological mismatch tolerated in this case?
 - [Tsakali \(2006\)](#) shows that singular local person pronouns are the only pronouns in Greek where CD is obligatory.
 - The obligatoriness of CD in these cases together with the grammaticality of the morphological mismatch may indicate that CD of these pronouns is different from CD of other DPs in the language (e.g., it may be best analyzed in terms of agreement and not movement).
 - CD of local person pronouns has received less attention in the literature on Greek, and these data suggest a clear avenue for further research.

5.3 Psych verbs

- One type of psych-verbs in Greek belong to Belletti & Rizzi’s (1988) *piacere*-class predicates. For these predicates, the experiencer appears in the genitive and CD is obligatory ([Anagnostopoulou, 1999, 2003](#)):

- (20) To dhiavasma **(tu) ares-i tu Jani.*
 D.N.SG.NOM reading.N.NOM CL.M.SG.GEN please-3SG D.M.SG.GEN Janis.M.GEN
 ‘Janis likes reading’

- CD of plural genitive experiencers is judged grammatical (or at least, significantly improved) by most speakers that we consulted. So, there seems to be an asymmetry between CD of genitive IOs and genitive experiencers.

(21) dhen **tus** ark-i **ton** **afentikon** na nik-un.
 not CL.PL.GEN/ACC suffice-3SG D.PL.GEN bosses.M.GEN SBJV win-3PL
 ‘The bosses are not content with just winning.’
<https://lefterisp.wordpress.com/author/lefterisp/page/4/> (accessed March 5th)

- CD of experiencers differs from CD of IOs for a number of additional diagnostics:
 - While CD of IOs is optional, CD of experiencers is obligatory ([Anagnostopoulou 2003](#) a.o.).

(22) dhen ***(tus)** ark-i **ton** **afentikon** na nik-un.
 not CL.PL.GEN/ACC suffice-3SG D.PL.GEN bosses.M.GEN SBJV win-3PL
 ‘The bosses are not content with just winning.’

- While CD comes with semantic effects (i.e., subject to Heim’s 1982 Prominence Condition and incompatible with focus), no such effects arise with CD of experiencer arguments (e.g., [Anagnostopoulou, 1999](#); [Alexiadou & Anagnostopoulou, 2019](#); [Angelopoulos, 2019](#)).³

(23) Tha **tu** ares-e akoma ke **tu** **Jani** afto to
 FUT CL.M.SG.GEN please-3SG even D.M.SG.GEN Jani.M.GEN this.N.NOM D.N.NOM
 arthro.
 article.N.NOM
 ‘Even John would like this paper.’
 ([Angelopoulos, 2019, 19](#))

- Fronted experiencers of *piacere*-type psych verbs behave like quirky subjects for binding, unlike fronted objects. ([Anagnostopoulou 2003](#) argues that fronted experiencers are in an A-position, unlike fronted objects, which are in an A’-position.)
- Genitive - nominative alternations are possible for (some) experiencers ([Anagnostopoulou & Sevdali, 2020](#)), but not for goals.

(24) a. Tu Jani tu ares-un i kolakies.
 D.M.SG.GEN Janis.M.GEN CL.M.SG.GEN please-3PL D.F.PL.NOM flatterings.F.PL.NOM
 ‘Janis likes flatterings.’
 b. O Janis ares-k-ete se kolakies.
 D.M.SG.NOM Janis.M.NOM please-NACT-3SG to flatterings.F.ACC
 ‘Janis is pleased with flattering words.’
 ([Anagnostopoulou & Sevdali, 2020, 1001](#))

(25) a. Estil-a tis Marias ena vivlio.
 send.PFV-PST.1SG D.F.SG.GEN Maria.F.GEN INDF.N.SG.ACC book.N.ACC
 ‘I sent Maria a book.’
 b. *I Maria stalth-ik-e ena vivlio.
 D.F.N.NOM Maria.F.NOM send-NACT-3SG INDF.N.SG.ACC book.N.ACC
 ‘Maria was sent a book.’

- While these differences between experiencers and goals do not provide an answer to the puzzle (i.e., why the morphological mismatch in the plural is tolerated in the former, but not the latter), we

³ However, it has to be noted that this has been better investigated for accusative objects/experiencers, and less so for their genitive counterparts.

believe that they at least indicate the possibility that the syntax of CD is different for experiencers.

- Interestingly, [Baker & Kramer \(2018\)](#) discuss similar effects in Amharic: CD of experiencers is special in not displaying pronominal properties. They argue that the underlying syntax of experiencers is the same as that of goals, with the following difference:
 - * While goal IOs stay at the edge of Voice, experiencers further move to T.
 - * There is evidence that fronted experiencers are in an A position in Greek ([Anagnostopoulou, 2003](#)), but it is not clear to us yet how this further movement step makes the morphological mismatch possible.

6 Conclusion

- We have argued that the ungrammaticality of CD of 3rd-person plural IOs in Greek is due to a morphological mismatch between the form of the clitic and the doubled DP.
- The data provide support for movement-based approaches to CD and give a new diagnostic for distinguishing between CD and object agreement.
 - Even though CD in Greek has often been analyzed in terms of movement ([Anagnostopoulou 2003](#) a.o.), recent analyses either use pure Agree ([Paparounas & Salzmänn, 2021](#)) or propose a hybrid analysis, where the doubled DP moves, but does not necessarily form a chain with the clitic ([Angelopoulos, 2019](#)).
- Some open questions:
 - What do the data tell us about the syntax of experiencers and local person IOs in Greek?
 - How do morphological mismatches of the Greek type behave in other languages with CD?
 - Why are the morphological mismatches tolerated in some languages, but not others?

References

- Alexiadou, Artemis & Elena Anagnostopoulou. 2019. Novel Experiencer-Object Verbs and Clitic Doubling. *Syntax* 22. 116–145.
- Anagnostopoulou, Elena. 1994. *Clitic dependencies in Modern Greek*: University of Salzburg dissertation.
- Anagnostopoulou, Elena. 1999. On experiencers. In Artemis Alexiadou, Geoffrey Horrocks & Melita Stavrou (eds.), *Studies in Greek Syntax*, 67–93. Kluwer.
- Anagnostopoulou, Elena. 2003. *The syntax of ditransitives: Evidence from clitics*, vol. 54. Berlin: Walter de Gruyter.
- Anagnostopoulou, Elena. 2017. Clitic Doubling. In Martin Everaert & Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax, 2nd edition*, Blackwell Publishing. <https://doi.org/10.1002/9781118358733.wbsyncom071>.
- Anagnostopoulou, Elena. 2018. Defective intervention effects in two Greek varieties and their implications for ϕ -incorporation as Agree. In Michelle Sheehan & Laura R. Bailey (eds.), *Order and structure in syntax II*, Berlin: Language Science Press.
- Anagnostopoulou, Elena & Christina Sevdali. 2020. Two modes of dative and genitive case assignment: Evidence from two stages of Greek. *Natural Language & Linguistic Theory* 1–65.
- Angelopoulos, Nikos. 2019. Reconstructing Clitic Doubling. *Glossa: a journal of general linguistics* 4.
- Angelopoulos, Nikos & Dominique Sportiche. 2021. Clitic dislocations and clitics in French and Greek: From interpretation to structure. *Natural Language & Linguistic Theory*.
- Arregi, Karlos & Andrew Nevins. 2012. *Morphotactics: Basque auxiliaries and the structure of spellout*. Heidelberg: Springer.
- Baker, Mark & Ruth Kramer. 2018. Doubled clitics are pronouns. *Natural Language & Linguistic Theory* 36(4). 1035–1088.
- Belletti, Adriana & Luigi Rizzi. 1988. Psych-verbs and θ -theory. *Natural Language & Linguistic Theory* 8(3). 291–352.
- Bjorkman, Bronwyn. 2021. When syncretism can (and can't) fix feature mismatches. Talk at Princeton Symposium on Syntactic Theory (PSST). (Princeton, NJ - online).
- Bleam, Tonia. 1999. *Leísta Spanish and the syntax of clitic doubling*: University of Delaware dissertation.
- Cuervo, María Cristina. 2003. *Datives at large*: Massachusetts Institute of Technology dissertation.
- Cuervo, María Cristina. 2010. Some dative subjects are born, some are made. In *Selected proceedings of the 12th Hispanic linguistics symposium*, 26–37. Somerville, MA: Cascadilla Proceedings Project.
- Embick, David & Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32. 555–595.
- Fox, Danny & David Pesetsky. 2005. Cyclic linearization of syntactic structure. *Theoretical Linguistics* 35. 1–45.
- Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the Pieces of Inflection. In Kenneth Hale & S. Jay Keyser (eds.), *The view from building 20*, 111–176. Cambridge, MA: MIT Press.

- Harizanov, Boris. 2014. Clitic doubling at the syntax-morphophonology interface. A-movement and morphological merger in Bulgarian. *Natural Language & Linguistic Theory* 32. 937–990.
- Heim, Irene. 1982. *The semantics of definite and indefinite noun phrases*. Amherst: University of Massachusetts dissertation.
- Kramer, Ruth. 2014. Clitic doubling or object agreement: The view from Amharic. *Natural Language & Linguistic Theory* 32. 593–634.
- Matushansky, Ora. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37. 69–109.
- Nevins, Andrew. 2011. Multiple agree with clitics: Person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* 29. 939–971.
- Paparounas, Lefteris & Martin Salzmann. 2021. First Conjunct Clitic Doubling: Evidence for Agree-based Approaches. To appear in *Proceedings of WCCFL* 39.
- Preminger, Omer. 2009. Breaking agreements: Distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry* 40. 619–666.
- Preminger, Omer. 2019. What the PCC tells us about “abstract” agreement, head movement, and locality. *Glossa: A Journal of General Linguistics* 4. DOI: <http://doi.org/10.5334/gjgl.315>.
- Sigurðsson, Halldor Armann & Anders Holmberg. 2008. Icelandic Dative Intervention. In Roberta D’Alessandro, Susann Fischer & Gunnar Hrafn Hrafnbjargarson (eds.), *Agreement Restrictions*, 251–279. Mouton de Gruyter.
- Souganidis, Christoforos. 2017. Κλιτικός διπλασιασμός και Αριστερή Μετατόπιση Κλιτικού στα Διμετάβαρα Ρήματα των Βορείων Ιδιωμάτων της Νέας Ελληνικής: Μια Πειραματική Μελέτη. MA thesis, Aristotle University of Thessaloniki.
- Sportiche, Dominique. 1996. Clitic constructions. In *Phrase structure and the lexicon*, 213–276. Dordrecht: Springer.
- Tsakali, Paraskevi. 2006. *The Syntax and Acquisition of Pronominal Clitics: a Crosslinguistic Study with Special Reference to Modern Greek*: University College London dissertation.
- Tyler, Matthew & Michelle Yuan. 2019. Nominal-Clitic Case Mismatches. In Richard Stockwell, Maura O’Leary, Zhongshi Xu & Z. L. Zhou (eds.), *Proceedings of the 36th West Coast Conference on Formal Linguistics (WCCFL 36)*, 333–343. Somerville, MA: Cascadia Proceedings Project.
- Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in western romance. *Linguistic Inquiry* 26. 79–123.
- van Urk, Coppe. 2018. Pronoun copying in Dinka Bor and the Copy Theory of Movement. *Natural Language & Linguistic Theory* 36. 1033–1088.
- Yuan, Michelle. 2021. Diagnosing object agreement vs. clitic doubling: An Inuit case study. *Linguistic Inquiry* 52(1). 153–179.