

Discourse and Sentential Topics are Getting Closer: The Case of CLLD in Modern Greek

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Abstract. The purpose of this paper is to illustrate the role of Clitic Left Dislocation (CLLD) in Modern Greek for establishing topic continuity in discourse. Segmented Discourse Representation Theory [SDRT] (Asher (1993), Asher and Lascarides (2003)), is used as a vehicle to explain the semantic difference between CLLD and Left Dislocation without a clitic in *elaborating* discourse structures. After a crash introduction to the basics of Information Structure and Word Order in Modern Greek, I will present evidence for the close but not isomorphic relation between CLLD and the *Elaboration* relation. Next, I present Büring's elegant theory on sentential partial topics to account for sentences with CLLD within elaborating discourses and its inability to differentiate between Topicalization and CLLD in MG. Finally, I illustrate why CLLD and Topicalization in Modern Greek differ with respect to these contexts.

Keywords: Information Structure, SDRT, Clitic Left Dislocation, Modern Greek

1 Word Order and Information Structure in Modern Greek

Modern Greek (MG) is a language that uses both intonation and word order as its strategies to regulate the partitioning of a sentence into focus/background and topic/theme. All sentences in (1) have the same truth-conditional content but different word order and follow different intonation patterns. Additionally, MG is one of few languages that deploys both Topicalization without a clitic and CLLD.¹ In both (1a) and (1b), the NP *the performance* takes the role of a topic and in an out of the blue context, these two sentences are interchangeable. *Karolos Koun* is the focus of the sentences and the capitalized KOUN in both examples marks the falling pitch contour, H-L*, of a typical focalized XP. (1c) is an example of a focused constituent dislocated from its initial postverbal position. Focus movement and use of clitics are mutually exclusive. In other words, a dislocated XP in fronted position cannot be followed by a clitic if it is the focus of the sentence.

¹ In the rest of the paper, I use the term Topicalization for sentences with a left dislocated XPs but without a clitic.

- (1) a. [Την παράσταση]_T σκηνοθέτησε ο [Κάρολος ΚΟΥΝ]_F. (Topicalization)
 The performance-ACC directed-3SG the Karolod-NOM KOUN
 b. [Την παράσταση]_T τη σκηνοθέτησε ο [Κάρολος ΚΟΥΝ]_F. (CLLD)
 The performance-ACC it-CL directed-3SG the Karolod-NOM KOUN
 c. [Την ΠΑΡΑΣΤΑΣΗ]_F σκηνοθέτησε ο Κάρολος Κουν. (Focus Movement)
 The PERFORMance-ACC directed-3SG the Karolod-NOM Koun

The majority of literature on Greek data comes from syntax and seeks to answer the question whether MG is a configurational or non-configurational language. The dominant view is the discourse configurational paradigm (cf. Anagnostopoulou 1994, Iatridou 1995, Tsimpli 1990, 1995) that employs topic and focus as syntactic features with their own projections. Therefore, it acknowledges an isomorphic view between syntax and discourse functions and it, additionally, associates Topicalization, CLLD and Focus Movement with three distinct syntactic operations for each of these constructions respectively: A-bar quantificational, A-anaphoric and base generation.²

2 Felicity Conditions for CLLD in Discourse

2.1 CLLD and Elaboration in Discourse

Although syntactic theories have been attempting to reveal the structural conditions under which topics and foci realize in MG, they do not provide any insight as to their semantic and pragmatic contribution in broader contexts. There is no prediction made about the reason why in some contexts only CLLD can be used and not Topicalization despite their identical truth-conditions. For instance, (2c) sounds odd and almost infelicitous in the context of (2a), while (2b) is entirely fine.

Furthermore, Topicalization in (2c) cannot stand without an overt subject in any context, even though MG allows null subjects. The reason why this happens might be syntactic in nature, but it is at least noticeable for theories of discourse anaphora that although the sole candidate for resolving the subject anaphor *αυτός=he* of (2c) is *Giannis* in (2a), it is unacceptable to resolve it in this way. The pronoun is contrastively focused and identified with a new referent, other than *Giannis*, that pops up and is accommodated for the purposes of the current state of discourse. Notice, that in MG the contrastive interpretation of focus in this case is always related to resolution of the pronoun with an entity other than *Giannis* and not just a contrast against a set of contextually salient referents.

One might argue that this could be related to the choice of pronoun form in MG, overt vs. null, but the only effect of this difference one could ever trace in MG in terms of anaphora resolution focuses in cases of competing antecedents

² However, as Alexopoulou (1999) and Alexopoulou (2002) and Tzanidaki (1996) show, although configurational theories successfully capture some of the Greek data, the range of their predictions is unable to include the behavior of these constructions with respect to weak crossover effects and parasitic gaps.

in subject and object position in the preceding sentence.³ The two-sentence discourse (1a)-(1c), is partially coherent and only if the later sentence is interpreted as a loose *continuation* of the former.⁴

- (2) a. π_1 [Ο Γιάννης_i ετοίμασε το γεύμα].
The Giannis-NOM prepare-3SG-PAST the lunch-NOM
Giannis_i prepared the meal.
- b. [Το κρέας]_T *(το) [έψησε]_F.
the meat-ACC it-CL roast-3SG-PAST
As for the meat he roasted it.
- c. [Το κρέας]_T έψησε [αυτός_{#i/j}]_F.
the meat-ACC roast-3SG-PAST he
As for the meat he_{#i/j} roasted it.
- d. π_2 [[Το κρέας]_T *(το) [έψησε]_F] και π_3 [[τις πατάτες]_T *(τις) [τηγάνισε]_F].
the meat-ACC it-CL roast-3SG-PAST and the potatoes-ACC them-CL
fried-3SG-PAST
As for the meat he roasted it and, as for the potatoes, he fried them.
- e. π_2 '[[Το κρέας]_T έψησε αυτός_{#i/j}] και π_3 '[[τις πατάτες]_T τηγάνισε εκείνος_{#i/#j/k}].
the meat-ACC roast-3SG-PAST he_{#i/j} and the potatoes-ACC fried-
3SG-PAST that-one_{#i/#j/k}
As for the meat he_{#i/j} roasted it and, as for the potatoes, that one_{#i/#j/k}
fried them.

Additionally, (2a) can be very naturally followed by a sequence of sentences with CLLD, as in (2d), while the loose coherence of (2a)-(2c), in which (2c) has a non-cliticized topic XP and a focused subject pronoun is not improved in (2a)-(2e). The puzzling data cannot find a reasonable explanation without recourse to discourse structure. In figure (1), the discourse graph of (2a)-(2d), π_1 sets the explicit topic of the following segments whose role is to elaborate on it.⁵ Therefore, the presence of the clitic is necessary in order to establish the

³ As Tsimpli and Papadopoulou's (XXX) experimental study on two-sentence discourses shows, there is a slight preference in picking objects rather than subjects when one uses overt pronouns in case of competing antecedents.

⁴

- f. [Το κρέας]_F έκαψε.
the meat-ACC burn-3SG-PAST
THE MEat he burned.

(f) is also grammatical, but only with a contrastive focus reading on *the meat* as a response to the question *What did he burn?*, thus picking an entity out of a set of contextually salient entities. However, in the context of (2a), (f) demotes severely discourse coherence and if interpretable at all, it can only be as *parallel* to (2a) if 1) *the meal* is focused in (2a) and 2) *the meat* is contrasted with *the meal* and not with parts of it, namely Giannis prepared the meal, *but* he burned the meat. The set of contextually salient entities would be {*the meal, the meat*}.

⁵ Here, I adopt SDRT's well-defined graph theory that helps visualize the structural dependencies between the segments.

elaboration relation between the first and the following segments, since the other choices in word order and intonation lead to different interpretations.

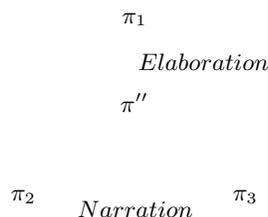


Fig. 1. The discourse structure of (2a-2) à la SDRT.

2.2 CLLD is not Isomorphically Mapped to Elaboration

The establishment of elaboration structures in MG is not exhausted to the use of CLLD. Sentences with the *canonical* word order in MG, VSO, elaborate an explicit topic, as that of (3a). The two segments, π_2 and π_3 in (3b), separately present a partial picture of *the preparation of the meal* and seem to adhere to the requirements of the *elaboration* structure.⁶

- (3) a. π_1 [Ο Γιάννης ετοίμασε το γεύμα].
 The Giannis-NOM prepare-3SG-PAST the lunch-NOM
 Giannis prepared the meal.
- b. π_2 [[Ήψησε [Το κρέας]Τ]F] και π_3 [[τηΓΑνισε [τις πατάτες]Τ]F].
 ROAst-3SG-PAST the meat-ACC and fRY-3SG-PAST the potato-PL-ACC
 He ROAsted the meat and fRIEd the potatoes.

On the other hand, sentences with CLLD are not uttered solely within elaboration structures. In (4b), the adverbial *then* enforces a narrative interpretation of the sequence π_1 - π_2 - π_3 , while one obtains a part-whole relation between *the meal* and *the meat* and *the fish*.

- (4) a. π_1 [Ο Γιάννης έφερε το γεύμα στο καθιστικό].
 The Giannis-NOM bring-3SG-PAST the lunch-NOM to-PREP the living room-ACC
 Giannis brought the meal to the living room.

⁶ However, note that coherence is disordered if a single sentence with focus on the verb, as (c), follows (3a). This is an issue of further study and out of the limits of the current paper.

- c. # [Ήψησε [Το κρέας]Τ]F.
 ROAst-3SG-PAST the meat-ACC

- b. π_2 [Έπειτα [Το κρέας]_T το στόλισε με σημαϊάκια] και π_3 [[το ψάρι]_T το άφησε σκέτο].
 the meat-ACC it-CL decorate-3SG-PAST with small-flags-ACC and the fish-ACC it-CL left-3SG-PAST bare-ADJ
 Then, as for the meat, he decorated it with small flags, and, as for the fish, he left it bare.”

Although this evidence does not conclude an one to one mapping between CLLD and *elaboration*, there is a strong correlation between the presence of a clitic and these discourse structures, as one can see from the appropriateness of (2a-2b and 2a-2d) compared to Topicalization. All the data and questions raised for MG above are reminiscent of Büring’s (1995) data. Büring (1995) provides an elegant and well articulated account on *partial* topics for left dislocated XPs in English and German. Next section presents its predictions with respect to CLLD and Topicalization.

2.3 Büring’s Partial Topics

Büring (1995) introduces the term D(iscourse)-Topic as a set of propositions within Common Ground that covers the range of possibilities in which the conversation continues. D-Topics are established by asking a question. The *wh*-part of the question induces a set of possible alternatives for the new information that the current discourse asks for and the rest of the question is the background part that the person who asks takes for granted. For instance, the D-Topic for (2b) would be *What did Giannis do with the meat?*. In order for the sentence to be uttered appropriately, its Focus value, which expresses the alternatives to the focused XP, should be identified with the D-Topic.⁷ Any discrepancy between them leads to an infelicitous utterance with respect to the current state of discourse.

Following Büring (1995), partial topics are a special kind of sentential topics that induce a set of alternative topics, one of which should already be mentioned within the background part of the question imposed by D-Topic. For instance, (2b) induces the set of possible topic alternatives to *meat*, in this context the other parts of the *meal*, while the focus alternatives should remain stable for each topic. As discourse proceeds, the discourse topic is incrementally resolved: for π_2 in (2d) *What did Giannis do with the meat?* and the residual topic for π_3 *What did Giannis do with the potatoes?*

As one can see in the Büring’s set theoretic representation of (5), the focus alternatives vary, depending on the topic, namely the part of *the meal* relevant each time. Büring’s account, based on the question-answer pairs and a way of filtering typed-up focus values based on world knowledge, seems to be able to capture this interaction between different topic and focus alternatives.

⁷ Actually, it is the *Trinialivation* of the two sets, the focus-induced set and the D-Topic, namely the union of the elements of each set on a single disjunctive proposition, that makes the comparison between their values possible (cf. Büring (1995)).

- (5) {Giannis roasted the meat, Giannis fried the meat, Giannis boiled the meat}, {Giannis washed the salad, put the salad on the plates}, ... }

Although Büring’s alternative theory seems to capture successfully the effects of CLLD in terms of set membership, it is not easy to explain why Topicalization differs from CLLD in different contexts. Moreover, in π_2 and π_3 of (2a-e) both pronouns necessarily denote distinct entities to Giannis. Demonstrating the difference using Büring’s account for (2a-[b/c]), the sentential contrastive topic and focus, *the meat* and the pronoun *he* respectively, trigger a different question-answer pair to sentences with CLLD, although both are instances of left-dislocated XPs.

- (6) a. **Topicalization:** *Who else from a contextually salient group of people (apart from Giannis) did what to the meal?*
 b. **CLLD:** *What did Giannis do to the meal?*

However, it is not possible to predict how such question-answer pairs are constructed in order to encode the exclusiveness in (6a) without recourse to a dynamic semantic theory. Depending on the topic setting of the previous context, CLLD and Topicalization imply different topic-related questions and different degree of relatedness to current discourse topic. Therefore, Topicalization affects and is affected by discourse structure, since it excludes *Elaboration* in (3a-e) and coherence is restored only via a loose *Continuation* relation.

3 CLLD and Topicalization in Discourse Reloaded

The inference of *Elaboration* with elaborating statements in Topicalization is possible, however, as in π_2 and π_3 of (7b), when the explicit topic in (7a) describes an event with multiple agents. The subjects, *Giannis* and *Giorgos*, are contrastive foci, since each person of the contextually salient group of people did something distinct to the meal; for instance, *Giannis* and the part of the preparation of *meal* that he undertakes are contrasted to the parts that the rest of the other guys undertake. The necessary part-whole relation between an event and subparts of it is ensured and *Elaboration* is inferred. Therefore, the distribution of subparts of the event to different agents is feasible through Topicalization.

- (7) a. π_1 [Τα παιδιά ετοίμασαν το γεύμα].
 The guys-NOM prepare-3PL-PAST the lunch-NOM
 The guys prepared the meal.
 b. π_2 [[Το κρέας]Τ έψησε ο Γιάννης] και π_3 [[τις πατάτες]Τ τηγάνισε ο Γιώργος].
 the meat-ACC roast-3SG-PAST Giannis-NOM and the potatoes-ACC
 fried-3SG-PAST Giorgos-NOM
 As for the meat Giannis roasted it and, as for the potatoes, Giorgos fried them.

On the other hand, the existence of a clitic signals the distribution of different subparts of an event undertaken by a single agent. In the context of (7), *the meal* is conceptually a coherent entity interpreted as incremental theme of a single event with an agent. The clitic picks parts of the event and contrasts them with others prepared by the same agent. Its presence not only improves the quality of the contrast but is also required.

Therefore, MG establishes topic continuity for *elaborating* statements of an event with a single agent by marking these statements with CLLD. Discourse update and sentential semantic composition and interpretation go hand in hand:

- (8) – **The absence of a clitic in an utterance with left-dislocated XP leads to the inference of an *Elaboration* relation with another utterance that contains the explicit topic**
- a. **only if the event denoted by that utterance is undertaken by a plural entity.**
 - b. **However, if the event is undertaken by a single agent, the entity denoted by the subject of the CLLD sentence cannot be anaphorically identified with it, even if this agent is the only referent available so far. In order to restore discourse coherence, *Continuation* is inferred.**
- **The inference of *Elaboration* between an utterance that describes an event with an agent of type *e* requires the presence of CLLD in the elaborating statements.**

Discourse topic in MG depends then, on the semantic type of the agent (plural/single entity) of the event to be elaborated on. Abstracting away from the syntactic treatment of CLLD and Topicalization, the above-mentioned discourse-related conditions and semantic effects introduced by these two phenomena are encoded in (9). (9) implements discourse update and interpretation as they are related to semantic conditions, in this case plural/singular entity type denoted by the agent, since different rhetorical relations are inferred between an explicit topic in utterance π_1 and a sentence either with Topicalization or with CLLD in utterance π_2 , while these relations trigger different semantic effects.

- (9) a. **Topicalization in utterance π_2 :**
 $[\text{agent}(F, e)]\pi_1 \wedge [\text{PLU}(F)]\pi_1 \wedge [\text{agent}(x, e)]\pi_2 \wedge [P(x,y)]\pi_2 \wedge \text{subtype}_D(\pi_2, \pi_1) >$
 $\text{Elaboration}(\pi_1, \pi_2)$
[Semantic Effects of Elaboration:
 $\text{Elaboration}(\pi_1, \pi_2) \Rightarrow \text{part-of}(e\pi_2, e\pi_1) \wedge \text{part-of}(x,F)]$
 \bigvee_D
 $[\text{agent}(z, e)]\pi_1 \wedge \neg[\text{PLU}(z)]\pi_1 \wedge [\text{agent}(x, e)]\pi_2 \wedge [P(x,y)]\pi_2 \wedge \text{subtype}_D(\pi_2, \pi_1) >$
 $\text{Continuation}(\pi_1, \pi_2)$
[Semantic Effects of Continuation:
 $\text{Continuation}(\pi_1, \pi_2) \Rightarrow e\pi_1 < e\pi_2 \wedge x \neq z]$

- b. **CLLD in utterance** π_2 :
 $[\text{agent}(z, e)]\pi_1 \wedge \neg[\text{PLU}(z)]\pi_1 \wedge [\text{agent}(x, e)]\pi_2 \wedge [\text{P}(x, y)]\pi_2 \wedge \text{subtype}_D(\pi_2, \pi_1) >$
 $\text{Elaboration}(\pi_1, \pi_2)$
[Semantic Effects of Elaboration:
 $\text{Elaboration}(\pi_1, \pi_2) \Rightarrow \text{part-of}(e\pi_2, e\pi_1) \wedge z=x]$

$[\text{PLU}(F)]\pi_1$ in the antecedent of the conditional of (9a) stands for the property of the agent in π_1 being a plural entity. \bigvee_D is meant to be an exclusive disjunction between two different discourse update alternatives as they are described in (8a) and (8b) respectively. Moreover, notice the semantic effect of x being a part of the plural entity in the first disjunct of (9a) and the semantic exclusiveness expressed by $x \neq z$ for the interpretation of *Continuation* in the second disjunct in contrast to CLLD in (9b).

4 Conclusion

Different word orders signal different choices made in specific contexts. The current discourse topic imposes tests on the information packaging of the sentence. Sentences with left-dislocation allow discourse topic match with sentential topics when specific semantic conditions are met. The type of entity denoted by the agent of the verb in the sentence of the explicit topic establishes topic continuity for sentences with CLLD or Topicalization. Sentential and discourse topics are related closely and reveal aspects of the semantic function of the clitic in a broader context. The next step is to study left-dislocated focused XPs in MG and trace their role for discourse coherence and topic continuity.

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