Topic particles, agreement and movement in an Arabic dialect

Murdhy Alshamari Anders Holmberg
University of Ha'il Newcastle University

Abstract

The dialect of North Hail in Saudi Arabia, a variety of Najdi Arabic, has a set of sentence-initial particles marking topics of various kinds. The kinds of topics they mark correspond closely to the three classes of topics argued by Frascarelli & Hinterhölzl (2007) to be characteristic of Italian and German: Shift-Topic, Contrastive Topic, and Familiar Topic. In their work, as in much other work in the cartographic tradition, a hierarchy of abstract Topic heads is postulated in the C-domain, which host the topical phrases as specifiers. In North Hail Arabic the Topic heads are not abstract, but overt, spelled out as particles. Some of the Topic heads mark topics by attracting them to the C-domain, as familiar from other languages, other particles mark topics by φ-feature agreement. The particles in the C-domain agree in person, number and gender with a DP in TP, subject or object. This is analysed in terms of Agree (Chomsky 2001, 2008). Arguments and adverbials are assigned particular Topic values either by agreement or by movement. The particles thus provide evidence that topicality can be a syntactic feature, inherent in lexical items (the particles), and assigned to constituents by operations familiar from standard syntactic relations such as subject agreement and case. The theory articulated observes the Inclusiveness condition, known to be a problem for the cartographic theory of topic and focus.

1. Introduction

This paper is about a set of particles employed in the Arabic dialect of North Hail in Saudi Arabia, a variety of Najdi Arabic. The particles occur in the left periphery (the C-domain), and their function is to mark Topics of various kinds. Some of the particles occur with a dislocated, externally merged Topic. Other particles trigger movement; a constituent moves to the specifier of a projection headed by the particle and is interpreted as Topic of a particular kind. Still other particles mark a Topic by agreement; the particle has a suffix agreeing in person, number, and gender with a DP within TP, which is thereby interpreted as Topic of a particular kind. (1a) is an example of a particle triggering movement, in this case of the object *l-bint* 'the girl'. (1b) is an example of a particle marking the object *l-bint* as Topic by agreement. All examples in the paper are in North Hail Arabic (henceforth NHA), unless indicated otherwise.

(1) a. l-bint **tɪgɪl** ʃaf-ah Firas.
DEF-girl PRT saw.3SG.M-3SG.F Firas
'The girl, Firas saw her.'

b. **ʁedɪ**-ah ʃaf-ah l-bint Firas
PRT-3F saw.3SG.M-3SG.F DEF-girl Firas
'The girl, Firas saw her.'

Topicalization by external and internal merge (base-generation and movement) in the left periphery is highly familiar, and Topic particles occurring with such topicalized constituents are familiar from various languages, including Japanese (Miyagawa 2010, 2017) and Gungbe (Aboh 2006). Combining movement of a Topic constituent to the C-domain with agreement occurs in some languages, including Dinka Bor (van Urk 2015). Another possible case is so called Contrastive Left-Dislocation or Copy Left-Dislocation in Germanic V2 languages, according to Eide (2011) and Holmberg (2020).[1] Topicalization purely by means of agreement with a particle in the C-domain has, to the best of our knowledge, not been observed before, though. One notable consequence of this phenomenon is that Topic-marking, which is to do with the discourse-functional/information-structural interpretation of the sentence, is shown to be integrated with the core syntactic construction of the sentence even more closely than was evident before, employing overtly the same kind of features and operations that are employed in the construction of the vP and the TP, subject to the same syntactic conditions, as we will argue.

Another notable consequence of the facts to be presented and discussed here is that it provides strong evidence for the theory of Topics articulated in Frascarelli & Hinterhölzl (2007), Frascarelli (2008), Bianchi & Frascarelli (2010), adopted in various other works including Rizzi (2010), Eide (2011). According to this theory, there are three types of Topic, distinguished by their interpretation, correlating with their syntactic position and prosody.

[1]An example would be (i).

(i) Vargen den har vi inte sett ännu. (Swedish)
the.wolf it have we not seen yet
'The wolf, we haven't seen yet.'

According to Eide (2011) and Holmberg (2020), what looks like the pronoun 'it', agreeing in person, gender and number with the fronted Topic *vargen*, is the spell-out of an agreeing Topic head.

These are Shifting Topic (also called Aboutness-Shift Topic), Contrastive Topic, and Familiar Topic. The function of Shifting Topic is to introduce or reintroduce a Topic in the discourse. In English this type of Topic is often signalled by *as for*. A Contrastive Topic (C-Top) selects a referent out of an understood set of competing referents already part of the discourse universe. A Familiar Topic is "used to resume background information or for Topic continuity" (Bianchi & Frascarelli 2010: 57), with no contrast or reintroduction.[2]

As we will demonstrate, NHA has particles exactly matching Frascarelli & Hinterhölzl's three Topic types, showing the internal order and positioning in the C-domain that their theory predicts. Thereby it provides a new kind of evidence in favour of this theory, from morphologically overt functional categories. Frascarelli & Hinterhölzl (2007) postulate abstract heads in the C-domain encoding the three Topic features. In NHA the heads are not abstract but realized as particles. In this paper we will present and discuss the conditions and rules governing the use of these particles, and discuss their consequences for syntactic theory.[3]

There is a set of Focus particles, too, in NHA, which, like the Topic particles, appear in the C-domain, marking focused constituents by movement. We include a presentation of these particles in section 6, but in less detail than the Topic particles, pending more research.

Sentence-initial Topic and Focus particles are found in neighbouring varieties of Arabic as well, including cognates of the particles discussed here (Alshamari 2017b; Jarrah & Harb 2021; Harb, Jarrah & Alghazo 2022, Alrawi 2022). There is much variation, though, in the use and meaning of the particles. We focus on one variety, NHA, describing in detail the system of Topic particles in this particular dialect. The data are based on linguistic intuitions of speakers from North Hail from various social backgrounds. Altogether more than 100 people have been consulted.[4]

The paper is organized as follows: Section 2 introduces the three kinds of Topic described by Frascarelli and Hinterhölzl (2007) in Italian. Section 3 introduces the three kinds

[2]Bianchi & Frascarelli (2010) have, for some reason, opted to rename it Given Topic, abbreviated G-Topic.

[3]As will be stated explicitly in section 4.1, we assume a more or less mainstream minimalist theory of syntax (Chomsky 2001). We will nevertheless occasionally employ familiar X-bar theoretic terminology, such as 'movement to the spec-position of XP', for ease of exposition.

[4]The consultation has been in the form of informal discussions. Corpus data of NHA do not exists to date. See Jarrah and Harb (2021) for a study of a Jordanian Arabic discourse particle based on a corpus of spoken data.

of Topic particles in NHA. Section 4 presents the theoretical assumptions and the syntactic derivation of the various Topic constructions. Section 5 discusses constructions with multiple Topics, section 6 is a brief presentation of Focus particles. Section 7 is a summary and a discussion of some theoretical consequences.

2. Three kinds of Topic: Frascarelli and Hinterhölzl's (2007) arguments

2.1. Introduction

Frascarelli and Hinterhölzl (2007) propose that there are several types of topics, each associated with a different discourse function which differ both phonologically and syntactically. As for the phonology, Frascarelli and Hinterhölzl (2007) state that each Topic type is distinguished by a unique intonational contour used by the speaker when articulating the Topic in question. As for syntax, they maintain that each Topic is delimited to a specific syntactic position which can be detected with reference to the position of the Focus Phrase in the left periphery, and when topics are combined. Here we articulate the semantics and syntax of Frascarelli and Hinterhölzl's (2007) three types of Topic:

2.2. The Shifting Topic

The function of a Shifting Topic (or Aboutness-shift Topic, Frascarelli 2008), henceforth S-Topic,[5] is "to newly introduce a Topic in the discourse" (Bianchi & Frascarelli 2010: 54). S-Topic is a piece of information that is part of the common ground (Stalnaker 2002) familiar to the interlocutors but is introduced or re-introduced as a Topic, shifting the conversation to a new Topic. Consider the following example from Frascarelli and Hinterhölzl (2007: 90-91) illustrating S-Topic.

(2) *Il materiale era tantissimo quindi all'inizio l'ho fatto tutto di corsa cercando di impiegarci il tempo che dicevate voi magari facendolo un po' superfi-cialmente pur di prendere tutto-l'ultima unit la sto facendo l'ho lasciata un po' da parte perché ho ricominciato il ripasso…*
'The material was quite a lot, so at the beginning I did it in a rush, trying to do it all in the time that you had fixed, maybe a little superficially, so as to do everything- I'm doing the last unit now, I put it aside before because I had started to go through the program again…'

[5]Bianchi & Frascarelli (2010) use the abbreviation A-Topic.

In (2), the speaker talks in general terms about the material, and proceeds talking about being involved in doing the material, including the time and the way she would do the material. Then, she introduces into the conversation a new but discourse-related bit expressed by the direct object *l'ultima unit* again ('the last unit'), which is discourse given, and in syntax is expressed and retrieved by the resumptive clitic ***la*** in the sentence, as seen in (3) below (as will be clear and relevant in section 2.3, the constituent expressing S-Topic carries low-high tone):

(3) L'ultima unit la sto facendo. (Italian)
the last unit it(CL) be.1SG do.GER
'I'm working on the last unit.'

2.3 The Contrastive Topic

A Contrastive Topic (henceforth, C-Topic) expresses a choice among a set of alternatives which may have been explicitly mentioned in the preceding discourse, or may be implicit, yet part of the common ground of the interlocutors (Krifka 2007, Chocano 2012: 143). Bianchi & Frascarelli (2010) exemplify Contrastive Topic with the following dialogue:

(4) A: *come mai hai fatto due lingue, cioè, inglese e francese?* (Italian)
Why did you study two languages, namely English and French?

B: ***francese*** *l'ho fatto alle medie per tre anni con una professoressa con cui mi sono trovata benissimo […]-* ***con l'inglese*** *mi sono trovata sempre a disagio.*
'**French**, I have studied at school for three years with a professor that I liked a lot […](while) **with English,** I never felt at ease.'

Here, the question provides the two alternatives. The answer consists of two sentences dealing with one alternative each. Syntactically, the sentences start with the constituent referring to one alternative, the C-Topic, resumed by a pronominal clitic (as all topics are in Italian; see Bianchi & Frascarelli 2010). Phonetically, the C-Topic is marked by a high pitch (Frascarelli & Hinterhölzl 2007, Bianchi & Frascarelli 2010: 56-57). Notably, the C-Topic belongs to a discourse-given set of alternatives; it does not introduce a referent expressing new, non-discourse-given information, as Contrastive Focus does (Büring 1997, 1999, 2003; Lambrecht

1994; Krifka 2007). The following English dialogue exemplifies Contrastive Topic and Focus (adapted from Lee 2003: 2).

(5) A: What do your siblings do?
B: MY SISTER C-Top studies MEDICINE Foc, and MY BROTHERC-Top is working on a FREIGHT SHIP Foc.

The question in (5) raises an inquiry about a discourse-given entity, 'your siblings'. The answer identifies two contrasted referents, 'my sister' and 'my brother', as a possibly complete answer to the question. The example shows that the set of alternatives need not have been explicitly mentioned in the preceding discourse, although they might have been. The question presupposes the existence of a group of siblings, not specifically a sister and a brother; this is sufficient to license expression of two Contrastive Topics, marked by 'contrastive stress' (or more accurately, high pitch). Notice that the constituents *medicine* and *freight ship* are also contrastively stressed, but refer to non-discourse-given entities, that is, they express Contrastive Focus (Büring 1997, 1999, 2003; Lambrecht 1994; Krifka 2007).

2.4 The Familiar Topic

Familiar Topic (henceforth, F-Topic) is a syntactic category referring to an entity which is contextually given and discourse-linked in the ongoing conversation. It resumes background information and maintains Topic continuity of the background (Reinhart 1981, Frascarelli and Hinterhölzl 2007, Bianchi and Frascarelli 2010). As illustration, consider the following contribution to a dialogue, from Frascarelli and Hinterhölzl (2007).

(6) *il problema secondo me di questo autoapprendimento è stato affrontare la grammatica proprio no quindi lì ti trovi davanti ad argomenti nuovi nei quali avresti bisogno appunto di qualcuno […] invece l'autoapprendimento questo non- non me l'ha dato ecco.*
'In my opinion, the problem of this self-learning course was the grammar part- you deal with new topics for which you would exactly need someone […] on the contrary, self-learning could not give it to me, that's it.'

The relevant part of (6) is shown in (7), with glosses.

(7) l'autoapprendimento questo non me l' ha dato (Italian)
self-learning this not to-me it.CL have.3SG give.PTCP
'Self-learning did not give this to me.'

The subject Topic *l'autoapprendimento* 'self-learning' and the direct object Topic *questo* are both familiar to the conversation interlocutors. Being F-topics, they simply refer to the existing common ground content with a retrieval function that is simply being the Topic throughout the conversation. The syntactic and phonological expression is that both constituents are fronted, pronounced with low, more or less flat intonation (Bianchi & Frascarelli 2010: 59).

Frascarelli and Hinterhölzl (2007: 88-89) then proceed to show that the three types of topic can co-occur in the C-domain of a sentence, which they exemplify by a sentence drawn from the same corpus of spoken Italian.

(8) **Questo**, **io** **ai** **ragazzi** non l' ho detto direttamente.
this I to.the boys not it(CL) have.1SG told directly
'I did not tell that fact to my students directly.'

In the relevant context, the fronted anaphoric demonstrative *questo* 'this' is an S-Topic, the pronoun *io* is a C-Topic, and *ai ragazzi* 'the boys' is an F-topic, the background topic of the conversation. No other order of the fronted constituents would give the same interpretation. They then show how the Topics interact with a fronted wh-phrase or focused phrase. The generalization is that S-topic precedes but F-topic follows a fronted wh or Focus-phrase. C-Topic, they claim, cannot co-occur with a wh or Focus-phrase in the same C-domain. The order of the phrasal constituents in the C-domain of Italian is thus (9):

(9) [S-Top [Foc/wh/C-Top [F-Top TP]]].

In the following section, we show how NHA patterns with these types of Topic and show that the Topic heads are morphologically realized, spelling out the relevant Topic features as particles.

3. Three kinds of particles in NHA

3.1 Pragmatic and syntactic functions of the particle mar*, an S-Topic marker*

In this section, we describe a set of discourse particles used in NHA. A discourse-related property that all the particles have in common is that they mark a definite constituent referring to a discourse-given entity; a Topic. However, as we will see, they have special properties that make them distinct in terms of their effect on the conversational common ground. There are also particles marking Focus, which will be presented briefly in section 6.

The particle *mar* is used when an entity is introduced in the running conversation which is already part of the common ground (cf. Stalnaker 2002).

Consider the dialogue in (10) in which the context contains five speakers reflecting on a match they just attended in person.

(10) Speaker A: ʔel-mubarah kanat ħilwah min kil ʔe-nawaħi.
DEF-match was.3SG.F good from all DEF-ways
'The match was good on the whole.'

Speaker B: ʃakl ʔel-malʕab wa ʔadaʔ ʔe-laʕibi:n kanu mudhiʃi:n
design DEF-stadium and performance DEF-players was.PL amazing.P
'The design of the stadium and the performance of the players were amazing.'

Speaker C: ʔena ħabeɪt tafaʕul ʔel-dʒumhu:r
I loved.1S interaction DEF-audience
'I loved the interaction of the crowd.'

Speaker D: ʔaħla ʃae ʔin ʔen-nas dʒaji:n
best thing Comp DEF-people coming.PTCP.PL
min kil duwal ʔel-xali:dʒ
from all states DEF-gulf
'The best thing was that the people came from all the states of the Gulf.'

Speaker B: lahdʒat mixtalfah ʃae ʔidʒtimaʕi ħilu:
dialects different thing social good
'Different dialects. A good social thing.'

Speaker E: l-mubarah **mar** ʔel-ʔhdaf kan ʔefzˁal ʃae
DEF-match PRT DEF-goal.PL was best thing
'As for the match, the best thing was the goals.'

The main conversation is about the match, along with the speakers' opinions about it. As the conversation proceeds, it starts to drift away from the main topic it, i.e., the match, to different, though related, topics. Wanting to say something more about the match as a sports event rather than a social or political one, Speaker E shifts from the current topic to the previous topic, which is already part of the discourse universe as it is a particular part or aspect of the match, using the particle *mar*.

This shows that this particle is a device that signals an element functioning as a 'revived' topic, present in the common ground of the interlocutors. If the topic in Speaker E's contribution were not from the common ground, the utterance would be infelicitous and the communication would break down. The generalization we can formulate now is that *mar* must be immediately preceded by an element that expresses part of the common ground of the running conversation, never a piece of information that the interlocutors are unfamiliar with. In view of this, we can account for the observation that the constituent marked by *mar* must be definite. While (13), featuring an initial unmarked indefinite subject, is fine in the right context without the particle *mar*, there is no context where (11) would be acceptable with *mar* included.

(11) weled (*mar) raħ li-l-beɪt badri ʔel-bariħ
boy went to-DEF-house early yesterday
'A boy went home early yesterday.'

Without the particle in Speaker E's contribution to the conversation (10) the sentences would be grammatical but contextually infelicitous. The initial DP would tend not to be interpreted as S-Topic but rather as F-Topic, and as such infelicitous in the context, as the match is not mentioned in the preceding sentence. In Italian and German, as discussed in Frascarelli and Hinterhölzl (2007), beside syntactic position, S-Topic is identified prosodically by the low-high tone it carries. In NHA, prosody alone cannot mark S-Topic function. For this, a particle is required. More generally, where other languages rely on prosody to distinguish topic functions, NHA relies mainly on particles.

3.2 tara *and* zad*: C-Topic markers*

The particle *tara* marks a constituent as Topic by morpho-syntactic and phonological means. If the constituent is a DP, *tara* agrees with it in φ-features (person, number, and gender), the agreement expressed as a clitic on the particle, the same clitic that expresses object agreement (Shlonsky 2000; Kramer 2014, Alshamari 2017) on the verb. In addition, the DP will bear contrastive stress. If the Topic is non-nominal, typically a PP, φ-feature agreement is not an option. Instead, the Topic-marked constituent moves to the position immediately preceding *tara*, by hypothesis the specifier position of the C-TopP headed by *tara*. See section 4 for a more articulated analysis of the syntactic structure, including the agreement operation. At the LF interface, the constituent that *tara* marks is interpreted as contrasted against a set of entities that are also discourse-given. The C-Topic particle *zad* does not have the agreement option, but marks a constituent, nominal or not, as C-Topic by means of movement and contrastive stress. Consider the following dialogue (Father asks his three children about whether they have seen a new neighbour move in, in the neighbourhood).

(12)

Speaker A (Father): min min-kum ħabaib-i ʃaf ʔel-hurmah
who amongst-2.PL lovely-POSS.1SG saw.3SG.M DEF-woman
ʔilli skenat ib-ħaret-na tau
Comp moved.in in-neighbourhood-POSS.1PL recently
'Who (amongst you children) has seen the woman who recently moved in in our neighbourhood?'

Speaker B (daughter): **tara**-h ʕOMAR ʃaf l-ħurmah
PRT-3SG.M Omar saw.3SG.M DEF-woman
'OMAR, (neither me nor Ali), saw the woman.'

Speaker B': (*tara-h) WAĦID min ʔel-ʕjal ʃaf l-ħurmah
PRT-3SG.M one of DEF-boys saw.3SG.M DEF-woman
Intended meaning: 'ONE OF THE BOYS, not me, saw the woman.'

Speaker B'': ʕOMAR **zad** ʃaf l-ħurmah
Omar PRT saw.3SG.M DEF-woman
'OMAR, (neither me nor Ali), saw the woman.'

(13) Speaker A: ʃift-u: ʔer-radʒa:l w l-ħurmah ʔilli skenau
saw.2PL DEF-man and DEF-woman Comp moved.in.3PL
ʔib-ħaret-na
in-neighbourhood.POSS.1PL
'Have you seen the man and the woman who have just moved in in our neighbourhood?'

Speaker B: **tara**-ah ʃaf-ah L-ĦURMAH ʕomar.
PRT-3SG.F saw.3SG.M-3SG.F DEF-woman Omar
'THE WOMAN, Omar saw.'

Speaker B': L-ĦURMAH **zad** ʃaf-ah ʕomar.
DEF-woman PRT saw.3SG.M-3SG.F Omar
'THE WOMAN, Omar saw.'

In (12a), Speaker A, the father, addresses a set of discourse participants, his three children. He asks whether anyone, amongst them, has seen the woman in question. Upon Speaker A's question, a set of specific entities are now available in the conversational common ground, among whom the interlocutor selects one entity to serve as the felicitous answer (Kruijff and Steedman 2003; Büring 2003). Speaker B, the daughter, asserts that Omar is the (only) one who saw the woman. Using *tara*, she selects Omar out of the children, by which she excludes herself and the other person in the set, Ali.

In Speaker B's alternative utterance in (12), even though the phrase *waħid min ʔilʕjal* 'one of the boys' means that the one who saw the woman might be Omar or Ali, who are discourse-given, *tara* is not possible. It can only mark a single definite discourse-given element. Another way to express the meaning of B's first utterance is by using *zad*, triggering movement of the Topic constituent. The same holds in (13), where Speaker B selects one entity over the other, both of which compose the set, the woman being the entity that Omar saw. In (12, B) and (13, B), the DPs *Omar* and *l-ħurmah* 'the woman' express the Topic of the clause, respectively; they denote an entity that is a familiar member of a set of alternative entities that the predicate says something about. The particle *zad*, functioning exactly like *tara* with the difference that the only strategy used to mark constituents expressing C-Topic is by movement of the C-Topic constituent to the spec-position of the particle.

In the cases above, *tara* marks a DP as C-Topic by φ-feature agreement. (14) exemplifies the case where *tara* marks a non-nominal item by virtue of movement: the item

moves to the specifier position of C-TopP headed by *tara*, while still being contrastively stressed. That is, in this case, the particles *tara* and *zad* behave alike. We assume that the topicalised constituent in (14) is a PP headed by a null preposition.[6]

(14)

(There are certain timeslots given in the discourse, from noon till sunset.)

Speaker A: mita ʃift-u: ʔer-radʒa:l w l-ħurmah ʔilli skena-u
when saw.2PL DEF-man and DEF-woman Comp moved.in-3PL
ʔib-ħaret-na
in-neighbourhood- POSS.1PL
'When (at midday, in the afternoon, or in the evening) did you see the man and the woman who have just moved in in our neighbourhood?'

Speaker B : ʔena ʕad, ʔAD-DAĦA **tara** ʃift-hum
I PRT DEF-midday PRT saw.1SG.3PL
'As for me, I saw them at MIDDAY.'

Speaker C: ʔena mar, ʔEL-ʕASIR **tara** ʃift-hum
I PRT DEF-afternoon PRT saw.1SG.3PL
'As for me, I saw them in the AFTERNOON.'

The examples above demonstrate that *tara* marks constituents that express Contrastive Topic by two distinct strategies: (i) in case the constituent is a DP, *tara* spells out the φ-features of this DP, and (ii) if the constituent is not a DP, it is marked by movement to the specifier position of *tara*. In both cases, the marked constituent also bears contrastive stress. The particle *zad* is restricted to option (ii). (15a), to be compared with (14a), shows that *tara* needs to show agreement if it can, that is, if the associated Topic is a DP. (15b) shows that the Topic DP marked by *tara* cannot undergo movement, with or without agreement (except in some

[6]The particle *ʕad* in Speaker B's answer is another S-Topic marker. The alternation between *ʕad* and *mar* in the two answers signals that Speaker C is presenting another point of view than Speaker B. *Mar* in Speaker C's answer is roughly translatable as 'on the other hand'.

exceptional cases to be discussed in section 5.2). (16a) shows that *zad* cannot show agreement, or mark a Topic except by movement (16b).[7]

(15) a. *tara ʕOMAR ʃaf l-ħurmah
PRT Omar saw.3SG.M the-woman

b. *ʕOMAR tara (-h) ʃaf l-ħurmah
Omar PRT-3SG.M saw.3SG.M the-woman

(16) a. *zad (-h) ʕOMAR ʃaf l-ħurmah
PRT 3SG.M Omar saw.3SG.M the-woman

b. ʕOMAR zad ʃaf l-ħurmah
Omar PRT saw.3SG.M the-woman

The observations above may suggest that *tara* and *zad* are Contrastive Focus markers, but this is not the case. *Tara* and *zad* mark a constituent that is contrastive, but is crucially not new, non-presupposed information. A strong indication that *tara* marks Contrastive Topic, not Contrastive Focus, is that the constituent it marks must be definite. Compare (17a,) with (17b), featuring the Contrastive Focus particle *ʔadʒal* (which will be discussed in section 6), where the marked constituent may be definite or indefinite (*ʔadʒal* marks Focus by movement of the focused item). The distinction is also obvious in (17c,d), where a Contrastive Topic and Contrastive Focus particle co-occur, in the rigid order Foc > C-Top, as will be discussed in section 6.[8]

(17) a. **tara**-h L-MUʔALIF/*muʔalif kitab ʔer-risalah
C-Top-3SG.M DEF-author / author wrote.3SG.M DEF-letter
'The author wrote the letter.' (Not his wife.)

[7](16b) shows that agreement *and* movement is not an option. We take this to be an economy-of-derivation effect. Movement is a 'last resort' when agreement is not an option. See below section 4.4 for more discussion.

[8]According to Frascarelli & Hinterhölzl (2007) Contrastive Topic and Focus do not co-occur in the C-domain in Italian; see (9).

b. L-MUʔALIF/MUʔALIF **ʔadʒal** kitab ʔer-risalah
DEF-author/author C-Foc wrote.3SG.M DEF-letter
'It was the author/an author who wrote the letter.'

c. RISALAH **ʔadʒal** **tara**-h L-MUʔALIF kitab
letter C-Foc C-Top DEF-author wrote.3SG.M
'The AUTHOR wrote a LETTER.' (His wife made a phone call).'

d. RISALAH **ʔadʒal** L-MUʔALIF **zad** kitab
letter C-Foc DEF-author C-Top wrote.3SG.M
'The AUTHOR wrote a LETTER.' (His wife made a phone call).'

3.3 ʁedı *and* tıgıl: *F-Topic markers*

Consider the following dialogue:

(18) A: Ali qal yzu:r-na l-yaum bus ma ħadad wuqt
Ali said 3SG.M.visit-1PL DEF-day but Neg specified time
'Ali said that he would visit us today, but he did not specify which time.'

B: mazal-uh ma ħadad ma ʔezˁin-uh
as.long.as-3SG.M Neg specified.3SG.M Neg think.1SG-3SG.M
jidʒi l-kaθrat ʃɪʁl-uh ʔel-jaum
come.3SG.M for-plenty work-POSS.3SG.M DEF-day
'As long as he didn't specify which time he would come, I don't think he will come, for he has lots of work to do today.'

There is a knock on the door.

A: **ʁedı**-h tuq l-bab
PRT-3SG.M knocked.3SG.M DEF-door
'He's knocking on the door.'

In (18), the conversation is about Ali. He is mentioned at the beginning of the discourse but later reference to him is retrieved by the clitic on *mazal* (18B). Being the familiar Topic the discourse is still about, it is then marked by *ʁedɪ* in A's second utterance where *ʁedɪ* bears a clitic agreeing with the null 3SG pronoun. The informational value of the subject is F-Topic, expressing discourse-given information with no contrast implied. This is a condition on the use of *ʁedɪ*, entailing that a DP marked by *ʁedɪ* be definite and void of contrastive stress, as (19) shows.

(19) **ʁedɪ**-h l-weled/ *weled /*l-WELED ʃaf ʔes-sayarah bi-a-sa:ħah
PRT-3SG.M DEF-boy/boy DEF-boy saw.3SG.M DEF-car in-DEF-yard
'The boy/*a boy/*the BOY saw the car in the yard.'

As in the case of the C-Topic particle *tara*, *ʁedɪ* can mark a non-nominal constituent, in which case marking by agreement is not an option. Instead, the marked constituent moves to the specifier position of the head spelled out as *ʁedɪ*. This is what we see in (20), where the PP *bi-a-sa:ħah* 'in the yard' immediately precedes *ʁedɪ*, which we analyze as remerging of the PP with F-TopP, the CP headed by *ʁedɪ*, and is thereby interpreted as F-Topic (the syntactic analysis will be detailed in section 4.4.1). The sentence could be an answer to the question 'What happened in the yard?'

(20) bi-a-sa:ħah **ʁedɪ** Firas kalam xawij-uh
in-DEF-yard F-Top Firas talked.3SG.M friend-POSS.3SG.M
'In the yard Firas talked to his friend.'

(21) demonstrates that *ʁedɪ* cannot mark a DP as Topic by means of movement, with or without a clitic.

(21) *Firas **ʁedɪ** (**-h**) kalam xawij-uh bi-a-sa:ħah
Firas F-Top -3SG.M talked.3SG.M friend-POSS.3SG.M in-DEF-yard

tɪgɪl is an F-Topic particle like *ʁedɪ*,, but unlike *ʁedɪ* it cannot mark a Topic by agreement. Instead, movement is always required, whether the Topic is nominal or not. (22c,d) show that agreement is not an option for this particle.

(22) a. bi-a-sa:ħah **tɪgɪl** l-weled ʔiʃttaʁal
in-DEF-yard F-Top DEF-boy worked.3SG.M
'In the yard, the boy worked there.'

b. l-weled **tɪgɪl** ʔiʃttaʁal bi-a-sa:ħah
DEF-boy F-Top worked.3SG.M in-DEF-yard
'The boy, he worked in the yard.'

c. *__tɪgɪl__ -h l-weled ʔiʃttaʁal bi-a-sa:ħah
F-Top-3SG.M DEF-boy worked.3SG.M in-DEF-yard

d. *l-weled __tɪgɪl__ -h ʔiʃttaʁal bi-a-sa:ħah
DEF-boy F-Top-3SG.M worked.3SG.M in-DEF-yard

3.4 Multiple topics

We have seen that the grammar of Italian distinguishes three types of topics by syntactic position in the C-domain and by intonation, as established by Frascarelli & Hinterhölzl (2007), Frascarelli (2008), Bianchi & Frascarelli (2010). We have now seen that NHA patterns with Italian in this regard, by more explicit means than in Italian, employing a variety of particles in the C-domain, where the particles mark the topical constituents either by movement, the constituents moving to the specifier positions of the particle, or by φ-agreement, the particle agreeing with the person, number and gender of a topical subject or object DP. That is to say, the abstract Topic heads postulated by Frascarelli & Hinterhölzl for Italian and German, are not abstract in NHA, but spelled out as particles.

Just as in Italian, the C-domain in NHA may host multiple topics, each one marked by a distinct particle. Consider (23) below, containing an S-Topic marked by *mar*, a focused wh-item, a C-Topic marked by *zad*, and an F-Topic marked by *ʁedɪ*, in that order. The preceding conversation, we assume, is about a yard where people do some work, but apparently only on and off, and the question is what the pattern is. A boy has been mentioned as being one of those who work there certain days.

(23) l-weled **mar** leaʃ ʔEMS **zad** bi-a-sa:ħah **ʁedı** ʔiʃttaʁal
DEF-boy S-Top why yesterday C-Top in-DEF-yard F-Top work.3SG.M
'As for the boy, why did he work in the yard YESTERDAY?'

The order of the topics/particles and the wh-phrase is exactly as predicted by Frascarelli & Hinterhölzl (2007) (taking the wh-phrase to be an exponent of Focus): S-Top > Foc > C-Top > F-Top. No other order of the particles is possible. Consider the list in (24) of dual combinations of the three particle types, in the context given, demonstrating that the only possible order is indeed (S-Topic) > (C-Topic) > (F-Topic). We have chosen to represent the order of C-Topic and F-Topic in (24) with PP topics, hence without agreement. The ordering facts are in principle the same if the topics are DPs, but an additional complication arises in that two agreeing particles cannot co-occur (see note 22).[9]

(24) a. l-weled **mar** ʔEMS **zad** ʔiʃttaʁal
DEF-boy S-Top yesterday C-Top worked.3SG.M
'As for the boy, he worked YESTERDAY.'

b. *ʔMS **zad** l-weled **mar** ʔiʃttaʁal

c. l-weled **mar** bi-a-sa:ħah **ʁedı** ʔiʃttaʁal
DEF-boy S-Top in-DEF-yard F-Top worked.3SG.M
'As for the boy, he worked in the yard.'

d. *bi-a-sa:ħah **ʁedı** l-weled **mar** ʔiʃttaʁal

e. ʔEMS **zad** bi-a-sa:ħah **ʁedı** ʔiʃttaʁal
yesterday S-Top in-DEF-yard F-Top worked.3SG.M
'He worked in the yard YESTERDAY.'

f. * bi-a-sa:ħah **ʁedı** ʔEMS **zad** ʔiʃttaʁal

[9](23) also shows that Topic particles are not restricted to declaratives; a question can contain S-Topic, C-Topic, and F-Topic particles.

g. l-weled **mar** bi-a-sa:ħah **ʁedı** ʔiʃttaʁal
DEF-boy S-Top in-DEF-yard F-Top worked.3SG.M
'As for the boy, he worked in the yard.'

h. * bi-a-sa:ħah **ʁedı** l-weled **mar** ʔiʃttaʁal

Consider also (25), to be compared with (23). (25) would conceivably be well formed and comprehensible with the indicated reading. The preceding conversation would be about some named locations where some people worked yesterday, and the question is what the pattern is. A boy has been mentioned as being one of those who worked in one of those locations yesterday. The particle *ʁedı* would be immediately preceded by the (covert) PP ʔe*ms* functioning as familiar Topic, while *zad* would be preceded by the PP *bi-a-sa:ħah* 'in the yard' functioning as contrastive Topic.

(25) *l-weled **mar** leaʃ ʔems **ʁedı** BI-A-SAĦAH **zad** ʔiʃttaʁal
DEF-boy S-Top why yesterday F-Top in-DEF-yard C-Top work.3SG.M
Intended: 'As for the boy, why did he yesterday work IN THE YARD?'

However, even though the meaning would be transparent in the given context, each particle having their own Topic-marking function as described, the result is distinctly odd, when compared with (23). This is explained if the various Topic functions, which in NHA are associated with one or more particles, have a universally fixed hierarchic order, as argued by Frascarelli and Hinterhölzl (2007).

The particles discussed here can have other discourse functions than marking Topic value, but typically in addition to, or alongside, this primary function, employing the same morphosyntactic characteristics, including agreement and movement. For instance, the particle *tara* can be a marker of surprise (cf. Hack 2014). We will leave these additional functions aside here, pending more research.[10]

[10]Sentence (i) would be an example. The context is that Firas is reported to be away on a trip.

Are the particles optional in the sense that they can be left out without affecting the interpretation? There are differences among the particles in this respect. As regards S-Topic, it can be marked in more than one way. One is by the particles *mar* and *ʕad*, as in (12) and (15). Another is by assigning a high-low prosodic contour to the constituent in question (in (12) *l-mubarah*) in sentence-initial position, with no particle. A third way is by introducing the constituent with *bi-nisba-li* 'with regard to'. As for C-Topic, contrastive stress is always required on the topic constituent. The broad generalization is that the particle *tara* or *zad* is required except when the context makes it completely clear that the intended meaning is Contrastive Topic, not Contrastive Focus. Finally, the F-topic particles *ʁedɪ* and *tɪgɪl* can typically be left out preserving the information-structural interpretation. For instance the final contribution in (18), exhibiting *ʁedɪ*, may convey exactly the same message without *ʁedɪ* and the clitic, and for example (22a) will convey the same message, with all the same connotations, without *tɪgɪl*, provided, though, that the fronted phrase does not have contrastive stress (identifying C-Topic) or high-low contour (identifying S-Topic).[11]

4 Topic-marking by agreement or movement

4.1 Theoretical assumptions

On a very general level, in the expressions discussed above a relation is established between a particle, analysed as a head in the C-domain, and a phrasal constituent inside TP. The relation is morphosyntactically realized as φ-feature agreement marked on the particle or by movement of the phrasal constituent to the spec-position of the particle/C-head. The relation is interpreted as a particular Topic or Focus on the phrasal constituent. The new observation

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(i) tara-h FIRAS b-l- ħelewijat
PRT-3SG.M Firas in-DEF-sweet.shop
'Firas was in the sweet shop (and it was a surprise to see HIM there, of all people).'

[11]There are exceptions, though, to this generalization. Compare, for example, (i) and (ii) with the corresponding sentence in (18). Assume that the object, too, is F-Topic, a null pronoun referring to the door, with required object agreement on the verb. The F-Topic particle, too, agrees with the object. In this case, the particle cannot be left out.

(i) ʁedɪ-h tuq-h
F-Top-3SG.M knocked.3SG.M-3SG.M
'He's knocking on it.'

(ii) *tuq-h

here is that the relation can be marked by φ-feature agreement, in addition to the more familiar mechanism of movement, subject to conditions that appear similar to what is seen in other cases of sentential agreement. We will formalize our findings in terms of the theory of syntactic features, agreement and movement first articulated in Chomsky (2001), according to which certain grammatical features, including the φ-features person, number, and gender, come in two guises, valued and unvalued, and where agreement and movement are effected by the operation Agree, where unvalued features get valued by probing for a constituent with matching but valued features, copying their values, with movement as a possible consequence.[12]

In this model, the Topic particle in the C-domain in NHA is the spell-out of a C-head made up of two features, one which looks for a constituent to establish a relation with, one a feature providing the interpretation of the relation, that is the feature S-Topic, C-Topic, or F-Topic. The former feature makes the head a probe looking for a goal, that is a constituent with matching features (this notion will be defined below) which can either provide the φ-values or else can move to the spec-position of the probing C-head/particle. If the probing C-head wants φ-features and the goal has φ-features, they are copied by the C-head. If the goal lacks φ-features, the entire goal is copied and remerged with CP, or, in X-bar-theoretic terms, is moved to the specifier position of the C-head/particle. In return, the goal is assigned a particular Topic or Focus value.

Within the more recent characterization of movement in Miyagawa (2010:33), movement is an alternative to agreement in the computational system of natural language, with movement viewed as a requirement on the computational system to keep a record for the interfaces that there is an Agree relation between a probing head and a goal. If the grammar of a language provides agreement morphology as a record of Agree, then this may be sufficient. If not, movement is an alternative. In the case of non-nominal items probed by the C-head/particle, overt φ-agreement is not an option, so movement applies. In Chomsky (2001, 2008), the relation between the probing head and the goal is a relation of mutual dependency. The case discussed by Chomsky is subject-verb agreement in, for example,

[12]In the theory assumed here, following Chomsky (2001, 2008), an unvalued feature is by definition uninterpretable. We do not assume the distinction between unvalued and uninterpretable postulated by Pesetsky & Torrego (2000, 2007) and adopted in much subsequent work, because (a) a theory without this distinction is more parsimonius, and (b) we see no need for it, for the phenomena we discuss.

English, where the head T wants ϕ-feature values, while the goal, the subject DP, wants Case. In the present context, the C-head/particle wants either φ-feature values from the goal or, in the absence of φ-feature values, a copy of the entire goal as a specifier, while the goal wants what we will call a δ-feature value (δ for discourse), where the possible values are S-Top, C-Top, F-Top, C-Foc and I-Foc.[13] In terms of Agree, the particle/C-head has a valued δ-feature, while the probed XP has an unvalued one. The matching feature that makes a constituent a goal for the probing C-head/particle is a δ-feature, which furthermore must be 'active' in Chomsky's (2001) sense, that is, it must be unvalued. A constituent with an already valued δ-feature is ignored by the probing C-head.

The result is a chain (C-head, XP) with a valued δ-feature, the morphosyntactic expression of which is either a set of spelled-out φ-features on the particle, or spell-out of XP in the spec of the particle. In some cases there is prosodic expression as well, in the form of accent on the XP. In other languages there may be no particles, but finer prosodic distinctions instead (see section 2 on Italian).

As in other cases of Agree, the relation between the probe and the goal is subject to locality; the goal must be the structurally closest constituent that can enter the relation, that is, which has an active δ-feature. An effect of this is that an object entering the relevant relation with a C-particle must first move across the subject, as seen in example (14bB), featuring the contrastive Topic particle *tara*, repeated here as (26a), to be compared with (26b), ungrammatical because it exhibits the same agreement but does not observe this order.

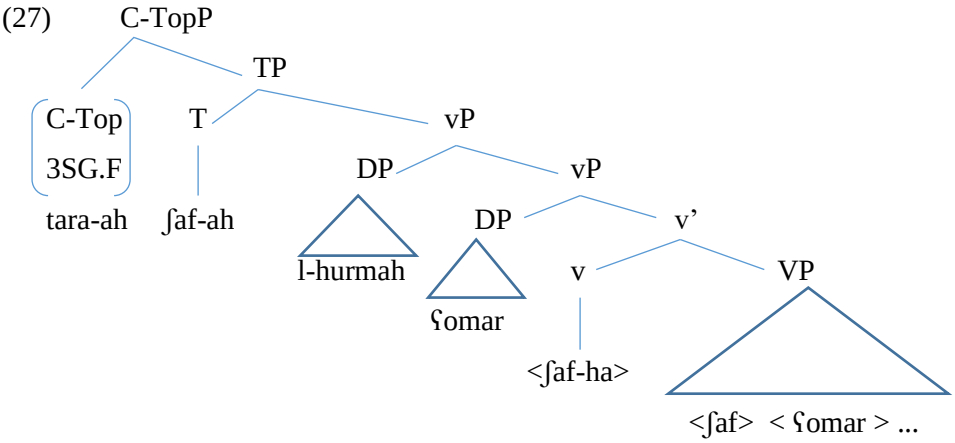
(26) a. **tara**-ah ʃaf-ah L-ĦURMAH ʕomar.
PRT-3SG.F saw.3SG,M-3SG.F DEF-woman Omar
'THE WOMAN, Omar saw.'

b. ***tara**-ah ʃaf-ah ʕomar L-ĦURMAH.
PRT-3SG.F saw.3SG.M-3SG.F Omar DEF-woman

(27) is the structure of (26a).

[13]For precursors of this theory, see Holmberg & Nikanne (2002) and Miyagawa (2010), where arguments come with a [±Focus] feature which needs to be assigned a + or – value, that is Focus or Topic value, in the course of the derivation.

(27)



The verb moves from VP to v to T, as is always the case in Arabic (Fassi Fehri 1993, Ouhalla 1994).[14] The object moves from VP to the edge of vP. The subject remains in the (inner) spec of vP. The verb agrees with the subject (the form *ʃaf* is 3SG.M) and agrees with the object, realized as the 3SG.F clitic *–ah*. The C-Topic particle *tara* also agrees with the object. The agreement rules will be detailed in the next section. The movement of the object to the edge of vP is also consistent with the phase theory in Chomsky (2001) and much subsequent work; to be accessible to the probe in C, the object has to move out of the vP phase, by moving to the edge of vP.

[14]Aoun et al. (2010: 28-33) argue that the verb moves to T in the past tense only, while the non-past verb remains in the predicate. This predicts that the fronted object as well as the subject in construction with an agreeing C-particle would precede the verb. This is not the case; compare (i), (ii), and (iii) with (26a).

(i) *tara-ah L-ĦURMAH ʕomar jʃuf-ah
PRT-3SG.F DEF-woman Omar see.PRS.3SG.M-3SG.F

(ii) *tara-ah L-ĦURMAH jʃuf-ah ʕomar
PRT-3SG.F DEF-woman see.PRS.3SG.M-3SG.F Omar

(iii) tara-ah jʃuf-ah L-ĦURMAH ʕomar
PRT-3SG.F see.PRS.3SG.M-3SG.F DEF-woman Omar
'THE WOMAN Omar does see.'

The verb precedes the object and the subject, explained if the verb moves to T, or at any rate, moves to a head position higher than the object at the edge of the predicate.

4.2 On agreement in Arabic

We have established that the Topic particles *tara* and *ʁedɪ* mark a nominal constituent in TP by φ- feature agreement. We have said that the agreement is spelled out 'as a clitic', apparently the same pronominal clitic that is found attached the verbs when the object of the verb is a pronoun (28a,b), or to prepositions when their object is a pronoun (28c), or nouns when the possessor is a pronoun (28d).

(28) a. kala-**ah** ʔel-weled
ate.3SG.M-3SG.F DEF-boy
'The boy ate it.' (it = ʔel-ħalawah, the sweet.3SG.F)

b. ʔel-weled kala-**ah**
DEF-boy ate.3SG.M-3SG.F
'The boy ate it.'

c. ʔel-weled kala ʔel-ħalawah ʕalea-**h** (ʔel-kirsi)
DEF-boy ate.3SG.M -3SG.F DEF-sweet.F on-3SG.M DEF-chair
'The boy ate the sweet on it (sitting on the chair).'

d. difaʕt taðkrit-**uh**
paid-1SG ticket-3SG.M
'I paid for his ticket.'

The clitic shows up on the transitive verb not just when the object is a pronoun but also when the object is a Topic lexical DP. See, for example, the sentences in (1), repeated here as (29).

(29) a. l-bint **tɪgɪl** ʃaf-**ah** Firas.
DEF-girl PRT saw.3SG.M-3SG.F Firas
'The girl, Firas saw her.'

b. **ʁedɪ -ah** ʃaf -**ah** l-bint Firas
PRT-3SG.F saw.3SG.M-3SF DEF-girl Firas
'The girl, Firas saw her.'

Consider now the same set of data with different discourse context in (30). The clitic here does not appear on the transitive verb when the object is (part of) Focus, in which case the object DP, expressing new, non-presupposed information, moves past the Focus-marker *ʔadʒal* (30a). This fact remains the same and is further captured by the observation in (30b), which involves the object DP as a wh-phrase, an inherently focalised item.

(30) a. (l)-bint *ʔadʒal* ʃaf-(*ah) Firas.
DEF-girl FOC saw Firas
'It was a girl that Firas saw.'

b. wiʃ ʃaf-(*ah) Firas
what saw.3SG.M Firas
'What did Firas see?'

Apparently, constituents without topical, referential or specificity properties cannot be resumed on v in NHA.

In both cases of F-Topic marker in (29), a clitic is attached to the verb. In the case of (29a), one may at least consider an analysis where the initial F-Topic object is externally merged in the C-domain, in which case the clitic on the verb would be a cliticized resumptive object pronoun. In the case of (29b), this is not a possible analysis; the Topic object here is the DP *l-bint*, by hypothesis moved to the edge of vP. The clitic on the verb is thus not the object, but, we claim, following Shlonsky (1997) and Alshamari (2017), the spellout of object agreement. More specifically, following Roberts's (2010) account of object clitics in Romance languages, we assume that the transitivizer head *v* has a set of unvalued φ-features. It enters an Agree-relation with the object, assigns Case to the object and has its own uφ-features valued by the object. The valued φ-features of *v* are spelled out as what is traditionally called an object clitic (see section 4.4 below). The verb moves to *v* merging with the valued φ-feature set, and moves on to T, merging with the φ-feature set valued by the subject, together with tense and mood features. Another Agree operation takes place between the F-Top spelled out as *ʁedɪ* and the object, with the same morphological effect: *ʁedɪ* is spelled out with what is standardly called an object clitic (standardly, but somewhat misleadingly; if the item is a realization of agreement it is more aptly classified a suffix). We would maintain that the clitic in (28a,b) is also the realization of agreement of *v* with an object, in this case a null pronominal object. We would like to think that the same holds true of (28b,c) as well: the clitic is the realization of agreement

between an abstract functional P-head in (28c) and N-head in (28d), but we are not committed to such an analysis here.

This is the formal account of the clitics seen in (28). Note how a case such as (29b) rules out an analysis of the clitics as incorporated object pronouns: there are two clitics, but only one object.

4.3. *Movement or agreement?*

As discussed, some particles mark topics by agreement, other particles by attracting the XP in question to their spec. The latter operation is familiar from a wide range of languages, the former is known only from NHA (Alshamari 2017a,b). There is no reason to think that NHA would be unique in this respect, though, among Arabic dialects in the region. Furthermore, the particles that mark Topics by agreement do so only when the Topic is a DP. Other potential Topic XPs are marked by remerge with the CP headed by the particle (movement to the spec of the particle). Could it be that the agreement is an effect of covert movement, in which case all topicalization of the C-Topic and F-Topic type in NA would be derived by movement? Harizanov (2014) argues that what he calls 'true clitic-doubling' is derived by movement, the clitic being "a reduced articulation of a raised object" (Harizanov 2014:1033). The fact that the agreement in the relevant Topic constructions in NHA is realized as what is more commonly identified as a pronominal clitic (Fassi Fehri 1993, Aoun et al. 2010) suggests that something like this may be the right analysis here.[15]

Since Arabic has long-distance movement, with extraction from embedded complement clauses (Aoun et al. 2010: 7-11), we can use this as a test. Consider (31a,b). The context is a discussion of whether Firas, who is not present, saw Rome and Milan on his recent trip to Europe.

(31) a. MILAN **zad** gal ʔin-uh zahr-ah.
Milan C-Top said.3SG.M Comp-3SG.M visited.3SG.M-3SG.F
'Milan, he said that he visited (but not Rome).'

b. *MILAN **zad** hu: kıðeb ʔin -uh zahr-ah
MILAN C-Top he lied Comp-3SG.M visited.3SG.M-3SG.F

[15]We are grateful to an LI reviewer for raising this possibility. Note that Harizanov (2014) does not discuss A-bar movement and clitics in the C-domain.

Intended: He lied that he visited MILAN.

c. ***tara**-ah gal ʔin -uh zahr-ah Milan.
C-Top-3SM said.3SG.M that-3SG visited-3SG.F Milan
Intended: 'He said that he visited MILAN (but not Rome).'

d. **tara**-ah gal MILAN ʔin -uh zahr-ah
C-Top-3SG.F said.3SG.M Milan that-3SG.M visited -3SG.F
'He said that he visited MILAN (but not Rome).'

(31a) is well-formed, derived, we assume, by movement (with object agreement on the embedded verb, as always when an object is Topic). (31b) would be ill-formed because the complement of *kıðeb* 'lie', a non-bridge verb, is an island. (31c) is ill-formed, which is explained if Topic-particle agreement is not derived by (covert) movement but by Agree, a strictly local operation, unable to relate an agreeing head, a probe, in the matrix clause with a goal in an embedded clause. This can be remedied by moving the object to the edge of the embedded spec-CP, and, we assume, from there to the edge of the matrix vP, as in (31c), where the probing head *tara* in the matrix C can access it.

4.4 Deriving the Topic constructions

4.4.1. The F-Topic particle *ʁedı*

The context of the sentences in (32) is where the boy saw a koala in the garden. In (32a) the Topic particle marks the subject as F-Topic by agreement (the noun *koala* is inherently Feminine). In (32b) it marks the object as F-Topic by agreement, and in (32c) it marks an adjunct PP as F-Topic by triggering fronting of the PP.

(32) a. **ʁedı**-h l-weled ʃaf koala bi-l-ħadiqah ʔems
F-Top-3SG.M DEF-boy saw.3SG.M koala in-DEF-garden yesterday
'The boy, he saw a koala in the garden yesterday.'

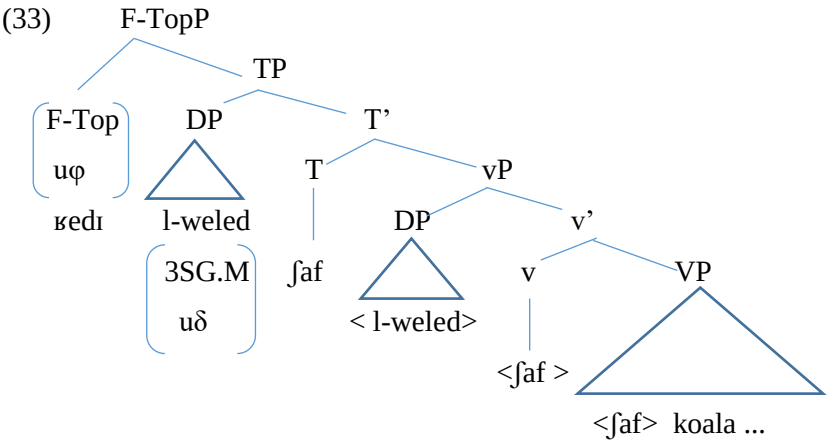
b. **ʁedɪ**-ah ʃaf-ah l-koala l-weled bi-l-ħadiqah ʔems
F-Top-3SG.F saw.3SG.M-3SG.F DEF-koala DEF-boy in-DEF-garden yesterday
'The koala, the boy saw it in the garden yesterday.'

c. bi-l-ħadiqah **ʁedɪ** l-weled ʃaf koala ʔems
in-DEF-garden F-Top DEF-boy saw.3SG.M koala yesterday
'In the garden, the boy saw a koala yesterday.'

d. *l-weled **ʁedɪ**(-h) ʃaf koala bi-l-ħadiqah ʔems
DEF-boy F-Top-3SG.M saw.3SG.M koala in-DEF-garden yesterday

(32d) shows that movement of a Topic-marked constituent which can agree with the particle is not an option, with or without agreement on the particle. The structure of (32a) is given in (33). The verb moves to v, and V+v moves on to T. T agrees with, and assigns Nominative Case to, the subject (subject agreement and Case is not shown in the glosses). The subject moves to spec-TP, deriving the unmarked SV order (Alshamari 2017a). The object remains in situ. F-Top in (33) is = C with a valued F-Top feature.

(33)



The subject is probed by the F-Topic head looking for φ-feature values. The subject's 3SG.M values are copied by the F-Topic head, which is spelled out as *ʁedɪ-h*, and in return the F-Topic feature is copied by the subject. The result is spelled out as in (32a).

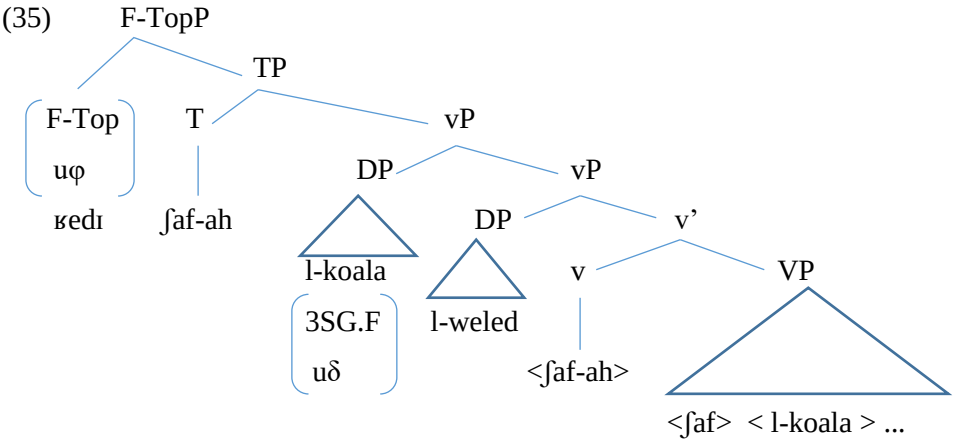
The object remains in the VP, and is interpreted as Focus or part of Focus (we return to the δ-feature status of the object below). The subject DP is the closest possible goal for the probing C-head, and thereby the only possible one. With this word order, an Agree relation

between *ʁedɪ* and the Feminine object *koala* is therefore, not an option, even if we make the object definite and thereby a possible Familiar Topic, as in (34).

(34)	***ʁedɪ**-ah	l-weled	ʃaf-ah	l-koala	bi-l-ħadiqah	ʔems
	F-Top-3SG.F	DEF-boy	saw.3SG.M-3SG.F	DEF-koala	in-DEF-garden	yesterday

(32b), with the object marked as F-Topic by agreement with the F-Topic head, has the derivation (35) (essentially the same as in (27) for the C-Topic case):

(35)



In this case, the subject remains in situ in spec-vP, while the object moves to the edge of vP, where it can be probed by the F-Topic head. The F-Topic head copies the φ-feature values of the object, 3SG.F. In the present case, spelled out as the clitic *–ah* (see (29b)), and the object copies the F-Topic feature of the C-head.[16]

In this case, where the object is Topic, the φ-features of the object are spelled out on v, that is on the verb moved to v and subsequently, with v, to T. The formal account of this is the following: Following Roberts (2010), v and the object form a chain. As such, they share their formal feature values. When the object is assigned F-Topic value, as in (32b/35), this value is shared by v. As a language particular property (shared by most or all Arabic

[16]A reviewer asks why the object in (35) does not intervene and block the Agree relation between T and the subject. The standard answer (see Chomsky 2001) is that T is looking for an active DP, in the sense of a DP not already assigned Case. The object at the edge of vP is already assigned Objective Case by v, and is thus not active in this sense. It is still active, though, in the sense of having an unvalued δ-feature (at the point when T is merged). We need to stipulate that this feature is not 'visible' to T.

dialects), the feature combination [φ, Top], regardless of the precise value of φ or Top) on little *v* is spelled out as a clitic (suffix) on the verb. Without the Topic feature, v remains abstract.[17] This is a particular implementation of Shlonsky's (1997) analysis of the object clitics on Arabic verbs as agreement markers, not cliticized pronouns.

In (32a) the object remains in situ in the VP, and in (32b) the subject remains in situ in spec-vP. How is the postulated δ-feature of the object assigned a value in (32a), and the δ-feature of the subject in (32b)? We assume there is a set of default rules, part universal, part language particular, that apply to unvalued δ-features that are not assigned a value by a head in the C-domain. For example, the object which remains in situ in (32a/33) is Focus or part of Focus by default. The following are four such default rules.

(36) 1. A definite pronoun is F-Topic.
2. An indefinite DP is (part of) Focus.
3. An object in situ in VP is (part of) Focus.
4. A subject in spec-vP is (part of) Focus.

See Holmberg & Nikanne (2002) and Miyagawa (2010) for precursors to this idea. These are default rules, so other syntactic properties of the expression may override them. We will not attempt to articulate this idea any further here, as we focus on the Topic-marking particles.

[17]This entails that whenever the Topic particle agrees overtly with the object, the verb in T will also agree overtly with the object. A referee suggests that the agreement on the particle could be a case of agreement between T and C, possibly with no direct relation between the particle and the object. The case where the particle agrees with the subject, as in (32a), would then be a case of subject agreement between C and T. If we are right, though, there is no direct relation between the particle and T, so the fact that the same φ-feature values show up on the particle and the verb, by assumption in T, in most examples is a coincidental consequence of how subject and object agreement work in NHA and Arabic more generally. Evidence that we are right comes from a comparison with the case where a non-nominal constituent is marked as F-Topic by *ʁedɪ* (or C-Topic by *tara*).

(i) bi-l-ħadiqah **ʁedɪ** l-weled ʃaf koala
in the garden C-Top DEF-boy saw.3SG.M koala
'In the garden, the boy saw a koala there.'

Here T has 3SG.M value, agreeing with the subject. This value is not reflected on the particle, though. Instead the particle 'agrees' with the fronted PP. There is no feature-sharing between F-TopP and T.

In (32c), finally, the adverbial PP *bi-l-ħadiqah* 'in the garden' is F-Topic, realized as movement of the PP to Spec-CP, where C is the F-Topic head *ʁedı*. The derivation involves, by hypothesis, movement of the PP first to the edge of vP, where it will be visible to the C-head with the F-Top feature. In this case, where the goal (the PP) has no accessible φ-features, the result is copying/movement of the entire PP remerging it with CP.

As for what triggers movement of the object or adjunct to the edge of vP, we assume, following Chomsky, Gallego and Ott (2019), that movement is 'free', in the sense that it need not be triggered by an EPP feature or by 'greed', the need to value a feature of the moved constituent (as in Bošković 2007). It applies freely, as a special case of 'Simplest Merge' (see Chomsky, Gallego and Ott 2019), but subject to the usual locality conditions, including those imposed by phases and Relativized Minimality (Rizzi 1990, Chomsky 2001, 2008, Roberts 2010). Free movement is forced upon us once we postulate default assignment of δ-values, as in (33). There are δ-feature values that can only be assigned to a DP/PP if it moves out of the predicate (Topic values), but as long as there is a default value assigned to a DP/PP inside the predicate, the need for a δ-feature value will never force movement. As we will see in section 5, there are independent reasons as well, based on certain word order facts in NHA, to assume free movement.[18]

There are other aspects of the theory in Chomsky, Gallego and Ott (2019) that we do not adopt. In particular, they argue against taking information-structural features to be syntactic features:

> *"[…] notions such as "Topic" or "focus," like grammatical functions or thematic roles, are properties of configurations and their syntactic/discursive context, not of individual syntactic objects […]; consequently, they should neither be represented in the lexicon, nor in the narrow syntactic derivation."* Chomsky, Gallego, and Ott (2019).

They note that the Inclusiveness Condition (Chomsky 1995: 228, 2000) "bars introduction of features that are not inherent to lexical items, such as the discourse-related features (Topic, focus, etc.) assumed in the cartographic tradition and elsewhere" (Chomsky, Gallego, and Ott

[18]Although technically free, movement is still strictly circumscribed. For one thing, it must respect principles of economy. Another way to put it is that it must 'have an effect on the outcome' (Chomsky 2001: 34-35), such as making possible extraction of a phrase from a vP or embedded clause, or directly affecting the interpretation. This rules out, for instance, movement of the object to the spec of a particle which overtly agrees with the object, as in (16b) or below in (38d).

2019). But we have now established that (valued) discourse features are inherent in certain lexical items, namely, the Topic and Focus particles in NHA. The cartographic theory, following Rizzi (1997), also assumes the existence of heads, albeit typically abstract ones, with inherent Topic and Focus value, which are drawn from the lexicon and merged in the C-domain. However, versions of this theory typically assume that the phrases moved to the C-domain and interpreted as Topic or Focus are also endowed with a Topic or Focus value which is licensed by movement to the corresponding C-head. If we exclude the possibility that referential phrases have Topic or Focus value as an inherent lexical property (Neeleman & Szendröi 2004, Fanselow & Lenetrová 2011, Trotzke & Zwart 2014), they must be assigned these features after entering the syntactic derivation, violating Inclusiveness. In the theory we have articulated here, referential phrases (arguments and circumstantial adverbials) all have an unvalued δ-feature (perhaps ultimately a feature of D), encoding their capacity to assume Topic or Focus interpretation. This feature is then assigned a value in the course of the syntactic derivation, thus observing Inclusiveness.

4.4.2 The F-Topic particle *tɪgɪl* marking subject, object, and adverbial

(37a,b,c) exemplify the fact that *tɪgɪl* marks a Topic constituent by movement, of the subject (37a), the object (37b), a PP adjunct (37c), and a CP in (37e). *tɪgɪl* is therefore necessarily preceded by a constituent, with F-Topic value, as illustrated by (37d). As shown by (37f) the constituent cannot be indefinite.

(37) a. ʕali **tɪgɪl** ʃaf l-koala bi-l-ħadiqah
Ali F-Top saw.3SG.M DEF-koala in-DEF-garden
'Ali, he saw the koala in the garden.'

b. l-koala **tɪgɪl** ʃaf-**ah** ʕali bi-l-ħadiqah
DEF-koala F-Top saw.3SG.M-3SG.F Ali in-DEF-garden
'The koala, Ali saw it in the garden.'

c. bi-l-ħadiqah **tɪgɪl** ʃaf ʕali l-koala
in-DEF-garden F-Top saw.3SG.M Ali DEF-rose
'In the garden, Ali saw the koala.'

d. ***tɪgɪl** ʃaf ʕali l-koala bi-l-ħadiqah
F-Top saw.3SG.M Ali DEF-koala in-DEF-garden

e. qal Firas ʔin ʕali ʃaf l-koala bi-l-ħadiqah **tɪgɪl**
said Firas Comp Ali saw DEF-koala in-DEF-garden F-Top
'Firas said that Ali saw the koala in the garden.'

f. *weled **tɪgɪl** ʃaf l-koala bi-l-ħadiqah
a.boy F-Top saw.3SG.M DEF-koala in-DEF-garden
Intended: 'A boy saw the koala in the garden.'

(37e) could be the answer to the question 'Why do you think that Ali saw the koala in the garden?' The focus would be 'Firas said x', and the complement clause would be F-Topic. We assume that the entire embedded clause has moved and remerged with F-TopP headed by *tɪgɪl*. In instances where the F-Top head is realised as *tɪgɪl*, F-Topic marking is only done by movement, no matter what syntactic category the marked constituent is.

We have opted to model the syntax of the Topic particles in terms of Chomsky's (2001) Agree. This operation requires two sets of complementary features: an unvalued and a valued feature on the probe (the C-head) and matching valued and unvalued features on the goal, the argument or adverbial interpreted as Topic. The valued feature on the probe is a Topic value, copied by the δ-feature on the goal. The unvalued feature on the probe in the case of *ʁedɪ* is [uφ], copying the φ-values of the goal. The non-agreeing particles, including *tɪgɪl*, have no such feature. What all the Topic particles have in common, though, is that they mark a definite constituent; only definite constituents can be Topics. We postulate, therefore, an unvalued definite feature [uDef] on the Topic C-heads, meaning that the C-head needs to link up with a definite constituent that will thereby be assigned a Topic value. Some of the C-heads have, in addition, a uφ-feature. For those that do (*ʁedɪ* and *tara*; see below), Agree is satisfied by copying the φ-feature values of the definite goal (if the goal has any). For the Topic C-heads that do not have uφ-features, valuation of the uDef-feature requires movement, i.e. copying the entire goal, remerging it with the projection of the Topic head. In the case of goals that do not have accessible φ-features, copying the entire goal is how the Topic C-head and the definite

constituent are linked. This rules out linking the Topic C-head and an indefinite constituent by agreement or movement, as in (37f).[19]

4.5. C-Topic: subject, object, and adverbial

In section 3.2 we introduced the particles marking C-Topic, the agreeing *tara* and the non-agreeing *zad*., and in section 4.1 we showed the derivation of a sentence with *tara* and a Topic object. Recapitulating, *tara* marks a constituent as Contrastive Topic by agreement, if the constituent is a DP, and movement if the constituent is a PP. Combining agreement and movement is not an option, as shown by (38d).

(38) a. **tara**-h ʕOMAR raʕa l-ħurmah bi-taxafi
C-Top-3SGM Omar watch.3SG.M DEF-woman in-secret
'OMAR, (not anyone else in the discourse-given set), watched the woman secretly.'

b. **tara**-ah raʕa-ah L-ĦURMAH ʔomar bi-taxafi
C-Top-3SG.F watch.3SG.M-3SG.F DEF-woman Omar in-secret
'THE WOMAN, Omar watched secretly.'

c. BI-TAXAFI **tara** ʕomar raʕa l-ħurmah
in-secret C-Top Omar watch.3SG.M DEF-woman
'Omar did watch the woman SECRETLY.'

d. *ʕOMAR **tara**-h raʕa l-ħurmah bi-taxafi
Omar C-Top-3SGM watch.3SG.M DEF-woman in-secret
Intended: 'OMAR watched the woman secretly.'

[19]Since CPs can be Topics, it must be the case that CPs can be definite. This is uncontroversial. Complement CPs are typically resumed by a definite pronoun: *She knows **it*** (= that John is coming). In our terms C in this case would have a definite feature. PPs pose a more interesting challenge. PPs are topicalizable only if the complement DP of P is definite. We would need to assume that the probing C-head can probe into the PP. In the case of (32c), the uϕ-feature of *ʁedɪ* does not get valued. See Preminger (2014) for arguments that redundant unvalued features can, against Chomsky (2001), be ignored/deleted.

A postsyntactic prosodic rule will assign nuclear accent to the constituent marked by *tara*. The interpretation is that the marked constituent refers to an individual or group selected from of a discourse-given set, that is to say, it is Contrastive Topic. As discussed and exemplified in section 3.2, the constituent marked by *tara* must be definite, which shows that *tara* does indeed mark Contrastive Topic, not Contrastive Focus.

The derivation of sentences with *tara* involves the same syntactic operations and conditions as in the case of the F-Topic particle *ʁedɪ*. The C-Topic head has an inherently valued C-Topic feature and a set of unvalued φ-features. It probes TP for a constituent with matching, active features, that is a set of valued φ-features and an unvalued δ-feature. If it finds such a constituent, which presupposes that it is close enough, it copies the φ-features, while the constituent copies the C-Topic feature of the C-head. If the constituent with an active δ-feature does not have φ-features, the entire constituent is copied, remerging with CP, the δ-feature copying the C-Topic value of the C-head.

The C-Topic particle *zad* has a derivation like the F-Topic particle *tɣɪl,* exemplified in (39a,b). Being a topic marker, *zad* never marks an indefinite DP (39c).

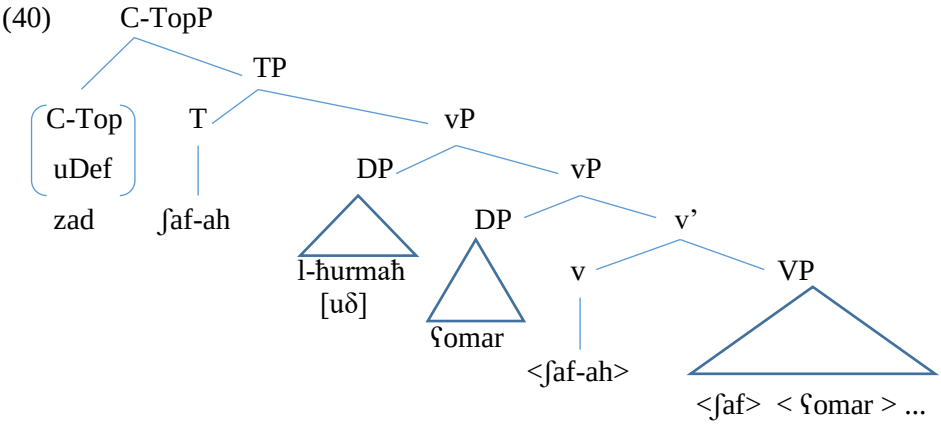
(39) a. ʕOMAR **zad** ʃaf.3SG.M l-ħurmah .
Omar C-Top saw DEF-woman
'OMAR saw the woman.'

b. L-ĦURMAH **zad** ʃaf-ah ʕomar.
DEF-woman C-Top saw.3SG.M-3SG.F Omar
'THE WOMAN, Omar saw.'

c. *****ĦURMAH **zad** ʃaf (-ah) ʕomar.
woman C-Top saw.3SG.M-3SG.F Omar
Intended: 'A WOMAN, Omar saw.'

The derivation of (39b) is shown in (40).

(40)



This C-head has no φ-features, but an unvalued Def-feature paired with a valued C-Topic feature. It probes TP for a constituent with matching features, crucially including an active δ-feature. In this case the closest active constituent is the object, which is copied in full and remerged with CP, receiving C-Topic value. The result is the word order and interpretation shown in (39b). A prosodic rule assigns nuclear stress to the C-Topic-valued constituent.

In (41), featuring the particle *tara*, the fronted, contrastively focused constituent is an adverbial PP. (41) could be answer to a question 'Did Omar watch the woman secretly a long time?'

(41) BI-TAXAFI **tara** ʕomar raʕa l-ħurmah
in-secret C-Top Omar watch.3SG.M DEF-woman
'Omar did watch the woman SECRETLY' (but not a long time).'

As in the derivation of the adjunct F-Topic with the particle *ʁedı*, the adjunct moves, by hypothesis initially to the edge of vP, by free movement, where it is accessible to the probing C-head containing the C-Topic and uφ-features. Lacking accessible φ-features, the adjunct gets copied in full and remerges with CP (CTopP), its own uδ-feature copying the C-Topic value of C. The derivation is the same with *zad*.[20]

[20]This would seem to imply that *zad* and *tara* are entirely interchangeable in (41), which would be unusual; function words in a language are seldom exact synonyms, but tend to specialize. More generally, the rich inventory of topic particles marking three functions in NHA is unexpected. We have discussed two particles marking C-Topic and two marking F-Topic, and we have mentioned more than one marking S-Topic (see (14) above, and note 5). This does not exhaust the list; see Alshamari (2017: 25) for some additional particles. The explanation is that there are more or less subtle semantic or pragmatic differences between the particles, often to do with speaker attitude. We refrain from

4.6. S-Topic: subject, object and adjuncts

S-Topic is the topmost head in the Topic hierarchy of the left periphery of NHA, paralleling Frascarelli & Hinterhölzl's (2007) findings for Italian and German, and presumably representing a universal pattern. Consider the following sentences:

(42) a. Manal **mar** qarat ʔel-kitab bi-l-hadiqah
Manal **S-Top** read.3SG.F DEF-book in-DEF-garden
'As for Manal, she read the book in the garden.'

b. ʔel-kitab **mar** Manal qarat-**h** bi-l-hadiqah
DEF-book **S-Top** Manal read.3SG.F-3SG.M in-DEF-garden
'As for the book, Manal read it in the garden.'

c. bi-l-hadiqah **mar** Manal qarat ʔel-kitab
in-DEF-garden **S-Top** Manal read.3SG.F DEF-book
'As for the garden, Manal read the book there.'

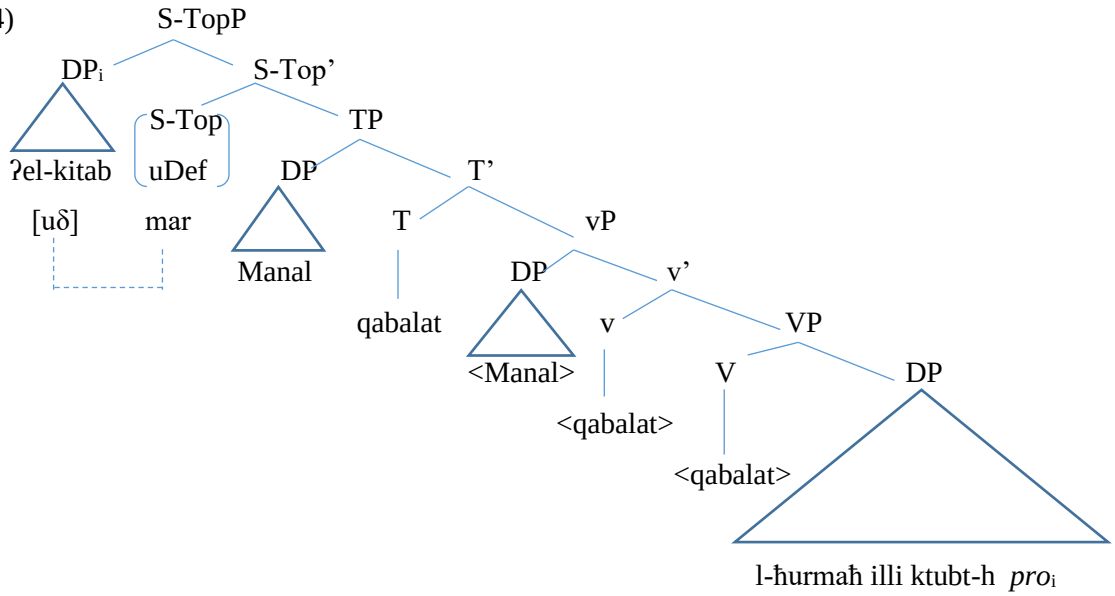
In (42a), the subject is S-Topic, in (42b) the object, and in (42c) an adverbial. On the face of it, this looks like the pattern we see with the F-Topic and C-Topic particles which do not mark by agreement but by movement. A closer look reveals an important difference, though: In the case of S-Topics, but not in the case of F and C-Topics, the corresponding TP-internal position may be within an island. Consider (43), where the DP *ʔel-kitab* 'the book' is associated with a clitic spelled out on the verb in a relative clause, a syntactic island:

(43) ʔel-kitab **mar** Manal qabalat ʔel-ħurmah ʔilli ktubt-**h**
DEF-book **S-Top** Manal met.3SG.F DEF-woman Comp wrote.3SG.F-3SG.M
'As for the book, Manal met the woman who wrote it .'

elaborating on this issue in the present paper, as more research is required. See also the comment on other meanings at the end of section 3.

The S-Topic *ʔel-kitab* could not move from inside the relative clause without violating Ross's (1967) Complex NP Constraint, or any more recent version of this island-constraint, which provides a strong argument that the DP marked as S-Topic by the particle *mar* is externally merged at the spec of the S-Topic-marking head labelled S-Top in (44). The object in VP, in this case, is a null resumptive pronoun, with object agreement spelled out on the verb.

(44)



This is a case where the more detailed structure of the C-domain matters. The S-Topic-marking head is high in the C-domain, as will be discussed in section 5. Arguably, it is outside the C-domain proper, and thereby not able to probe into TP, and not within reach of movement (Beninca & Poletto 2004, Rizzi 2010). It is thereby restricted to establishing an Agree relation with its specifier, as indicated by the dotted line.

5. Multiple F-Topics

5.1 Topic values and updating the Conversational Common Ground management

Bianchi & Frascarelli (2010) observe and discuss the fact that a single sentence can exhibit several F-topics but only one S-Topic or C-Topic. They explain this in terms of the role the topics play in the management of the common ground content, and specifically updating of the conversational common ground management (CCGM).[21] A Topic is always associated with

[21]Krifka distinguishes two dimensions of the CG, which he calls CG content vs. CG management. Roughly, CG content is the truth-conditional information accumulated up to a given point in the conversation; CG management is the sequence of conversational moves performed by participants

the pragmatic property *givenness*, but, given that there are different values of Topic, as we have discussed, following Frascarelli & Hinterhölzl (2007), each Topic behaves differently with respect to updating the flow of CCGM. Bianchi & Frascarelli (2010: 56-57) argue that S-Topic and C-Topic update the CCGM while F-Topic does not do that. S-Topic does this by means of shifting the flow of the conversation and the interlocutor's attention to a reintroduced Topic, signalling a shift in the direction of the conversation. C-Topic does it by selecting an entity from a contextually given set of alternative entities. F-Topic, on the other hand, entails no change, nothing new in the CCGM, but only maintains the pragmatic status of a set of entities already introduced in the discourse. This, according to Bianchi & Frascarelli (2010), explains why there can be only one S-Topic or C-Topic per sentence, but more than one F-Topic. Relevant is also the observation that S-Topic and C-Topic are root phenomena, i.e. they do not occur in embedded clauses. This is not the case for F-Topic. See Bianchi & Frascarelli (2010) for discussion. The following sentences show that the F-Topic particle ***ʁedɪ*** can, but the S-Topic particle *mar* and the C-Topic particle *tara* cannot occur in an embedded sentence in NHA, especially if embedded under a 'non-bridge verb', as we would predict.

(45)a. Firas j-iʃîk ʔin **ʁedɪ**-ah Manal qarat
Firas 3SG.M-doubt.PRS Comp F-Top-3SG.F Manal read.3SG.F
ʔel-kitab bi-l-hadiqah
DEF-book in-DEF-garden
'Firas doubts that Manal, she read the book in the garden.'

b. *Firas j-ʃîk ʔin Manal **mar** qarat
Firas 3SG.M-doubt.PRS Comp Manal S-Top read.3SG.F
ʔel-kitab bi-l-hadiqah
DEF-book in-DEF-garden
Intended: 'Firas doubts that as for Manal, she read the book in the garden.'

(assertions, questions) that determines the way in which the CG content develops, and the information about these conversational moves that is reflexively stored in the CG.

c. *Firas j-ʃik ʔin **tara**-ah MANAL qarat
Firas 3SG.M-doubt.PRS Comp C-Top-3SG.F Manal read.3SG.F
ʔel-kitab bi-l-hadiqah
DEF-book in-DEF-garden
Intended: 'Firas doubts that MANAL read the book in the garden.'

5.2 Multiple F-topics by recursion and without recursion

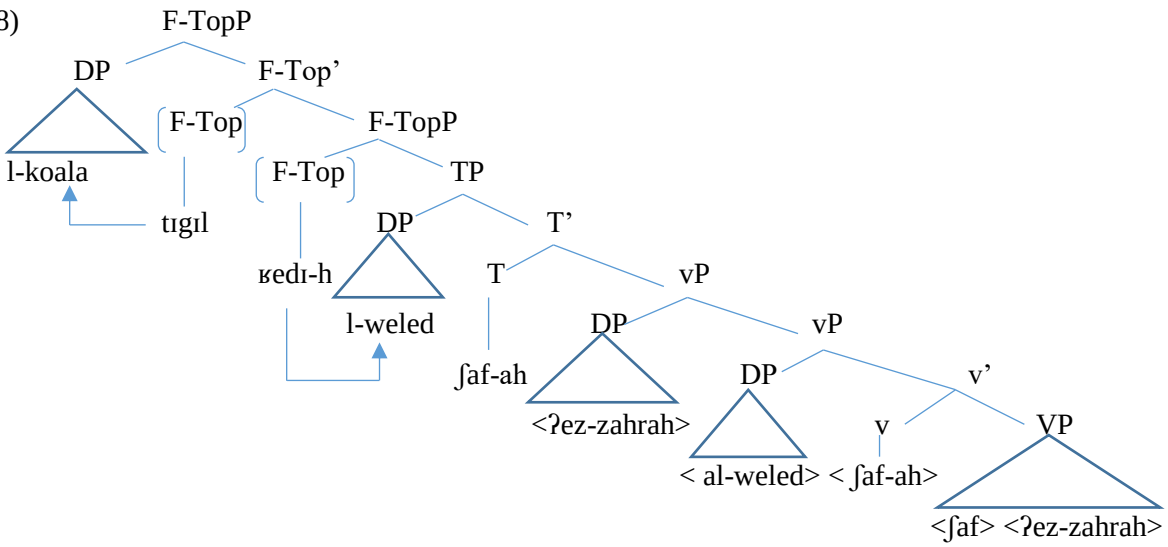
So, following Bianchi & Frascarelli (2010), we link the fact that F-Topic does not affect/update the CCGM, because it maintains a continuing Topic that does not require updating, to the observation that there can be several F-Topics in a single sentence, with recursion of F-TopP. The following are two ways to express two F-Topics in NHA:

(46) l-koala **tɪgɪl** **ʁedɪ**-h l-weled ʃaf-**ah** bi-l-ħadiqah ʔems
DEF-koala F-Top F-Top-3SG.M DEF-boy saw.3SG.M-3SG.F in-DEF-garden yesterday
'The boy, the koala, he saw it in the garden yesterday.'

(47) l-koala **ʁedɪ**-h l-weled ʃaf-**ah** bi-l-ħadiqah ʔems
DEF-koala F-Top-3SG.M DEF-boy saw.3SG.M-3SG-F in-DEF-garden yesterday
'The koala, the boy, he saw it in the garden yesterday

(46) has the structure (48), with recursion of F-Top. Arrows indicate the assignment of Topic value by the particles.

(48)



Starting from the bottom, the object *l-koala* 'the koala' is probed by *v*, values *v*'s uφ-features, eventually spelled out as a clitic on the verb, and receives Accusative Case in return (Chomsky 2001, Roberts 2010). The object moves to the edge of vP by free movement. The verb moves to *v* and V+*v* moves to T. The subject *l-weled* 'the boy' is probed by T, values T's uφ-features spelled out as subject agreement inflection on the moved verb, receives Nominative Case and re-merges with TP (moves to spec-TP). There, the subject is probed by *ʁedɪ*, values *ʁedɪ*'s uφ-features, spelled out as a clitic on *ʁedɪ*, and has its uδ-feature valued F-Top, in return. Once the F-Top head spelled out as *tɪgɪl* is merged, it will provide a marker/valuator of the uδ-feature of the object. The object, by virtue of having moved to the edge of vP, is, by assumption, in the same phase (Chomsky 2001, 2008 Citko 2014) as the F-Top head *tɪgɪl*, and is thereby accessible to it. The subject, having already had its δ-feature valued, is not visible for the probing head *tɪgɪl*. The F-Top head spelled out as *tɪgɪl* has no uφ-features, so the object has to move, i.e. be copied in full, and remerge with the projection of the F-Top head to provide the required morphological expression of the sharing of features between the DP and the particle.

We propose that (47) is derived exactly in the same manner, the only difference being that the higher F-Top head is spelled out null (which is the only option in many languages).

Consider (49-50). (49) is another way to express a sentence with two F-topics.

(49) l-weled l-koala **ʁedɪ-h** ʃaf-**ah** bi-l-ħadiqah ʔems
DEF-boy DEF-koala F-Top-3SG.M saw.3SG.F in-DEF-park yesterday
'The boy, the koala, he saw it in the park yesterday.'

(50) *****l-koala l-weled **ʁedɪ-h** ʃaf-**ah** bi-l-ħadiqah ʔems
DEF-rose DEF-boy F-Top-3SG.M saw.3SG.F in-DEF-park yesterday
Intended meaning: 'The boy, the koala, he saw it in the park yesterday.'

Note that *ʁedɪ* agrees with the subject, but both DPs have moved, the subject necessarily higher than the object. We propose the following account of this construction: Both arguments are probed by the F-Top head, both have their uδ-feature valued by the F-Top head. In this case, the F-Top head is *ʁedɪ*, with a uφ-feature. Only one of the DP arguments can value this feature. This is the subject, presumably by virtue of being closer to the F-Top head, once it has moved to spec-TP. The F-Top head copies the φ-features of the subject, whose uδ-feature is assigned F-Top value in return. No movement is required as morphological expression of this Agree relation. The object has to resort to movement, though, as morphological expression of the

Agree relation with *ʁedɪ*, the F-Top head. Interestingly, the subject moves as well, and, as comparison between (47) and (48) shows, has to move higher than the object. This, we assume, is because of locality: the object cannot move across the subject in spec-TP. This problem is avoided if the subject moves higher than the object. The object will still move across the copy of the subject in spec-TP, but will not move across the subject chain, which is what matters (see Chomsky 2013: 44). If this is right, movement of the subject would be purely 'altruistic'; the subject has all its unvalued features valued even before movement. The altruistic movement is allowed without any auxiliary assumptions as we have assumed free movement, following Chomsky, Gallego, and Ott (2019).[22]

How come movement of the object across the subject chain is allowed in (46) and (47)? The difference is that the object in (46), and by hypothesis in (47) as well, moves to the spec of a different head than the one which has an Agree relation with the subject (in (47) this head is phonologically null). The movement of the object in (46,47) does not 'see' the intervening subject, which is in a feature valuation relation with a different head than the object. The movement in (49,50) does see the intervening subject, because the subject and the object are dependents of the same F-Top head.

A difference between (46, 47) and (50) is, then, that the former two are formed by recursion of F-TopP, while the latter is formed by having two Topics marked by the same F-Topic head. Both of these possibilities must be allowed by the theory (by UG), if we are right.[23]

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[22]Agreeing Topic particles do not allow movement of a Topic DP to spec-F-ToP in other contexts, though. So movement of the subject in (50) is allowed only as a last resort.

[23]An interesting restriction on multiple particles is that there cannot be two agreeing particles in the same clause (Alshamari 2017a: 131). Compare (i), (ii), and (iii).

(i) ***tara**-ah ʔEZ-ZAHRAH **ʁedɪ**-h l-weled ʔesq-ah
C-Top DEF-rose F-Top-3SG.M DEF-boy water-3S.F
Intended: 'THE ROSE, the boy, he watered it.'

(ii) **tara**-ah ʔEZ-ZAHRAH l-weled **tɪgɪl** ʔesq-ah
C-Top DEF-rose DEF-boy F-Top water-3S.F
'THE ROSE, the boy, he watered it.'

(iii) ʔEZ-ZAHRAH **zad** **ʁedɪ**-h l-weled ʔesq-ah
DEF-rose C-Top F-Top-3SG.M DEF-boy water-3S.F
'THE ROSE, the boy, he watered it.'

The reason why (i) is ill-formed while (ii) and (iii) are good is that (i) combines two agreeing particles, the C-Top-marking *tara* and the F-Top-marking ***ʁedɪ*.** Comparison with (ii) and (iii) shows

6. Focus particles in NHA

NHA has two particles, each marking a distinct value of Focus: non-presupposed, new Information Focus (I-Foc) and Contrastive Focus (C-Foc) (È Kiss 1995; Holmberg and Nikanne 2002). The particle *yamar* marks I-Foc and *ʔadʒal* C-Foc. In most respects the syntax of the Focus particles parallels that of the Topic particles we have explored, particularly the ones which mark topics by movement: They are heads in the C-domain which attract a phrase in TP, subject to standard locality conditions, assigning a particular Focus interpretation to them. A difference between the Focus particles is that with the C-Foc particle movement is combined with a particular prosodic contour, contrastive stress, while *yamar* marks by movement only. Consider the conversation (53), where Speaker A asks about what Firas did with the money he has just received as a cash prize. Speaker B states that he bought a car, but Speaker C corrects Speaker B's statement.

(51) Speaker A: wiʃ sawa Firas baʕd ʔel-mukafaʔah
what did Firas after DEF-cash.prize
'What did Firas do after winning the cash prize?'

Speaker B: ʃera sajarah **yamar**
bought.3SG.M car I-Foc
'He bought a car.'

Speaker C: SALAF XAWI-UH **ʔadʒal**. mu ʃera sajarah
lent.3SG.M friend-Poss.3SG.M C-Foc Neg bought.3SG.M car
(No) he lent it to a friend of his, he didn't buy a car.

---

that combining a C-Top and an F-Top particle is fine except if they are both agreeing particles. While we suspect that locality is ultimately the explanation, we do not at present have a good account of this restriction, so we leave it for future research.

Compare now (51) with (52), where lending is given in the discourse and the question is to whom.

(52) A: min salaf Firas baʕd ʔel-mukafaʔah
who lent.3SG.M Firas after DEF-cash.prize
'Whom did Firas lend (the money) to after winning the cash prize?'

B: Dilara **yamar** salaf
Dilara I-Foc lent.3SG.M
'He lent it to Dilara.'

C: FURAT **ʔadʒal** salaf mu Dilara
Furat C-Foc lent.3SG.M Neg Dilara
'It was Furat that he lent it to, not Dilara.'

We submit that the Focus particle *yamar* in both (51B) and (52B) is the spell-out of a Focus head in the C-domain. In (51B), since the question is about a propositional event, in the answer the entire propositional TP, incorporating the lexical verb, moves to the specifier position of FocP, headed by *yamar*, leaving, in this case, the particle as the rightmost overt constituent. Correcting, i.e., contrasting, the propositional TP *salaf xavi-uh* 'he lent it to a friend' in (53C) against *ʃera sajarah* 'he bought a car' in (53B), the former is contrastively stressed and moved to the spec of a Focus head with a C-Foc feature in the C-domain, spelled out *ʔadʒal*. In (52), the focused constituent is a DP. In (52B) the object *Dilara* is marked as I-Foc by movement to the spec of the I-Foc head *yamar*. In (52C) the object *Furat* is C-Foc, contrasted with *Dilara*, and as such is marked by contrastive stress and movement to the spec of the C-Foc head *ʔadʒal*.

The Focus head/particle in NHA is located between S-Topic and C-Topic. (53a) was discussed already in section 3.2, numbered (17c). It combines the C-Focus particle *ʔadʒal* with the C-Topic particle *tara***.** It could be a retort to 'I heard that the author called the publisher to make a complaint'. The order C-Foc > C-Top is fine, the reverse order is ungrammatical.

(53) a. RISALAH **ʔadʒal** **tara**-h L-MUʔALIF kitab
letter C-Foc C-Top-3SG.M DEF-author wrote.3SG.M
'The AUTHOR wrote a LETTER.,' (His wife made a phone call).'

b. * RISALAH **tara**-h **ʔadʒal** L-MUʔALIF kitab
letter C-Top-3SG.M C-Foc DEF-author wrote.3SG.M

In (54) an S-Topic is added, necessarily preceding the C-Focus and the C-Topic.

(54) ʔeʃ-ʃekwa **mar** RISALAH **ʔadʒal** **tara**-h L-MUʔALIF kitab
DEF-complaint S-Top letter C-Foc C-Top-3SG.M DEF-author wrote.3SG.M
'As for the complaint, The AUTHOR wrote a LETTER.' (His wife made a phone call).'

(55) combines the I-Focus particle *yamar* with the C-Topic particle. It could answer the question 'Who did Firas lend the money to that he won?' The order is necessarily I-Foc > C-Top.

(55) a. Dilara **yamar** JIZʔ min ʔel-meblagh **tara**, Firas salaf-h ʔel-baqi waffar-h
Dilara I-Foc part of DEF amount C-Top Firas lent-it DEF-rest kept-it
'Firas lent Dilara part of the amount, the rest he kept.'

b. *JIZA min ʔel-meblagh **tara** Dilara **yamar** Firas salaf-h ʔel-baqi waffar-h
part of DEF amount C-Top Dilara I-Foc Firas lent-it DEF rest kept-it

(56) combines (55a) with the S-Topic particle *mar*, with the order *mar* > *yamar* > *tara* as the only possible one. The conversation is about the prize that Firas won and the money that he lent to someone, but has drifted off, and is now brought back to the main topic.

(56) a. baʕd ʔel-mukafaʔah **mar** Dilara **yamar** JIZA min ʔel-meblagh **tara** salaf-ah Firas
after DEF-prize S-Top Dilara I-Foc part of DEF.amount C-Top lent-it Firas
'As for after the prize, he lent part of the amount to Dilara' (and kept the rest).

7. Conclusions

Frascarelli & Hinterhölzl (2007) argued for a distinction between three types of Topics, expressed in the left periphery of Italian and German, distinguished by a correlation of interpretation with intonation and relative order of constituents in the left periphery. The S-Topic is highest, preceding Focus/wh, the C-Topic is next, lower than Focus/wh but higher than F-Topic. They observed, furthermore, that there could only be one S-Topic or C-Topic in

a sentence, but more than one F-Topic (Frascarelli & Bianchi 2010). In the spirit of the cartographic program (Rizzi 1997, 2004) Frascarelli & Hinterhölzl postulated a sequence of abstract Topic heads in the left periphery, each of which has a specifier with the predicted kind of Topic interpretation.

It is by no means obvious that these abstract heads actually exist as entities in the syntactic structure, rather than just being convenient descriptive devices. As we have endeavoured to show, the heads postulated by Frascarelli & Hinterhölzl (2007) are overt, realized as particles, in NHA. By the familiar methodological rule of thumb that functional categories that are overt in one language can be abstract in another language, the facts discussed here provide support for the reality of the abstract heads postulated by Frascarelli & Hinterhölzl (2007) and assumed in much subsequent work.

Where do discourse-functions like Topic and Focus belong in the architecture of the grammar? This is a long-standing point of controversy in syntactic theory. One position is that they are syntactic features along with Tense, Mood, Wh, Number, Definiteness, etc. As such they would determine aspects of PF by triggering movement and agreement and affecting intonation, and determine aspects of LF, namely, the discourse-functional/information-structural interpretation of various constituents. This is the view taken within the cartographic program (Rizzi 1997, 2004, 2013, Cinque & Rizzi 2010), and is arguably the mainstream view in current minimalist syntactic theory. Another position is that they belong to an interpretive component assigning interpretations to structures generated by syntactic operations, with no causal effect on these operations; see Chomsky (2001, 2008), Chomsky, Gallego & Ott (2019), Neeleman & Szendröi (2004), Trotzke & Zwart (2014), Titov (2020). Consideration of the syntax of the topic particles in the left periphery of sentences in NHA seems to us to provide compelling evidence in favour of the former view, at least for this language, and other languages with similar particles.

The most compelling single argument against the 'syntactic feature theory' of information structure, in particular in a minimalist context, is that it appears to violate the Inclusiveness Condition (Chomsky 1995: 228), a powerful economy condition on syntactic derivation. According to this condition, given that syntactic structures are constructed from lexical items, they cannot contain elements that are not present in lexical items. But, in the words of Trotzke & Zwart (2014: 137), citing Neeleman and Szendröi (2004: 155), lexical items cannot be viewed as inherently possessing information structure properties, and therefore such properties must be inserted after an element has been taken from the lexicon, violating the Inclusiveness Condition.

But as we have demonstrated, Topic and Focus are indeed encoded as features of lexical items at least in some languages, namely, as features of a set of particles in the left periphery. Furthermore, if the particles assign Topic and Focus values to sentential constituents in a manner, and under conditions very similar to how Case is assigned by finite T to the subject and by v to the object, in mainstream minimalist theory, that is by Agree, following Chomsky (2001), then Inclusiveness is respected even under a syntactic feature theory of information structure.

Do all languages have syntactic heads corresponding to the Topic particles in NHA? As we have shown, the Topic particles in NHA are arranged and interpreted as predicted by Frascarelli & Hinterhölzl's (2007) theory, based on Italian and German, where Topic values are not morphologically realized as particles but by word order and prosodic contours. This suggests that aspects of the relation between syntax and Topic interpretation is universal. It does not 'prove' that Italian and German have abstract counterparts to the NHA particles, but does add plausibility to the hypothesis

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