Demonstrative-Reinforcer Constructions*

Jaehoon Choi

(University of Arizona)

Choi, Jaehoon. (2013). Demonstrative-Reinforcer Constructions. The Linguistic Association of Korea Journal, 21(1), 1-27. This paper examines demonstrative-reinforcer constructions. I review the previous analysis by Bernstein (1997), and show that it cannot account for relevant data drawn from Modern Greek and thus cannot be maintained. By demonstrating similarities between the demonstrative-reinforcer construction and the ordinary modifiee-modifier construction, I propose an analysis that demonstrative-reinforcer constructions are phrasal on their own. Such an analysis is a useful tool to compare the theories of demonstratives—Guardiano (2011), Julien (2002), and Jackendoff (1977), and determine the first one is superior empirically and theoretically to the other two.

Key Words: demonstrative, reinforcer, Modern Greek, English

1. Introduction

This paper investigates the demonstrative-reinforcer construction, which has received relatively less attention in the study of DP (in the sense of Abney, 1987). (1) is a typical nonstandard English¹⁾ example, in which *here* and *there* are reinforcers (adapted from Bernstein's (1997) examples in (11-12)).

^{*} An earlier version of this paper was presented at WECOL 2011. I would like to thank the audiences of the event for their helpful comments. I also wish to thank my consultants of English, Modern Greek for their time and patience. Unless otherwise noted, all the data in this paper were elicited from native speakers of each language.

¹⁾ It is not clear what Bernstein (1997) means by 'nonstandard English'. My consultants associate the examples illustrated in (1) with northeastern working-class dialects.

- (1) a. This here book
 - b. That there book
 - c. This here man
 - d. That there man
 - e. These here books
 - f. Those there books
 - g. These here men
 - h. Those there men

The primary goal of the current study is to show that the demonstrative-reinforcer construction is more or less an instance of modification constructions and as such is a phrase. To achieve this goal, the constructions in question drawn from Modern Greek will be investigated. This approach to the demonstrative-reinforcer construction enables us to compare and properly evaluate three different approaches to the syntax of demonstratives, presented by Guardiano (2011), Julien (2002), and Jackendoff (1977). Ultimately, the first one will be favored over the latter two.

follows. Facts This the paper is organized as concerning demonstrative-reinforcer construction in Modern Greek are introduced in section 2. Section 2.1 and section 2.2 describe relevant properties of demonstratives and reinforcers in the language, respectively. In section 3, I argue that Bernstein's (1997) previous analysis of the reinforcer is untenable. In section 4, I demonstrate the semantic and syntactic similarities between the constructions under consideration and normal modification constructions; I propose an analysis that can capture the similarities, which is in turn shown to be compatible with a syntactic analysis of demonstratives (Guardiano, 2011; among others). Section 5 discusses inadequateness of an alternative approach to the syntax of demonstratives (Julien, 2002; among others). Section 6 extends to English the proposed analysis built upon Modern Greek, and shows that Jackendoff (1977; among others) is untenable.

2. Demonstratives and Reinforcers in Modern Greek

2.1. Demonstratives

It is well-known that demonstratives in Modern Greek can appear in two different positions within the DP in the simplest manifestation (i.e., without any other modification such as adjectives). Consider (2) and (3).

- (2) a. Afti Ι glossologi these the linguists 'These linguists' Ekini Ι b. glossologi the those linguists 'Those linguists'
- afti (3) a. Ι glossologi the linguists these 'These linguists' b. Ι glossologi ekini the linguists those

'Those linguists'

The demonstrative can appear either in the pre-article position, as in (2), or in the post-nominal position, as in (3). The position of a demonstrative within DP is crucial to its two interpretations. On the one hand, with a demonstrative in the pre-article position, the DP receives a deictic interpretation. In (2), the demonstrative helps to identify the referent – a group of linguists in this case – in a non-linguistic context. Hence, a pointing gesture can accompany the utterance of (2). On the other hand, with a demonstrative in the post-nominal position, the DP receives an anaphoric interpretation. In other words, the referent of the DP is connected to a linguistic antecedent. That is, (3) can be used to refer back to a group of linguists that have been mentioned in the discourse.

Before moving on to the discussion of reinforcers, a short remark on definite

articles in Modern Greek is in order. Importantly, the presence of a definite article in the DP is obligatory when there is a demonstrative. Compare (2)-(3) with (4)-(5).

- (4) a. *Afti glossologi these linguists
 b. *Ekini glossologi those linguists
- (5) a. *Glossologi afti linguists theseb. *Glossologi ekini linguists those

The ungrammaticality of the examples in (4) and (5) is due to the absence of a definite article within the DP, regardless of the position of the demonstratives. The co-occurrence of a demonstrative and a definite article will be crucial to our discussion in what follows.

2.2. Reinforcers

Reinforcers are morphemes that are used along with a demonstrative, with the purpose of strengthening the deictic property of demonstratives (Bernstein, 1997, 2001), as in (6).

edho (6) a. Afti glossologi these here the linguists 'These here linguists' Ekini eki b. I glossologi those there linguists the 'Those there linguists'

The proximity of *afti* 'these' and the distalness of *ekini* 'those' are reinforced by the following *edho* 'here' and *eki* 'there', respectively.

Since the purpose of adding a reinforcer is to reinforce the deictic property of a demonstrative, we expect to see ungrammaticality when there is a mismatch between the deictic property of a demonstrative and that of a reinforcer (see also Brugè, 2002). That is, proximal demonstratives are only compatible with the proximal reinforcer and distal demonstratives with the distal reinforcer, as exemplified in (7).

*Afti eki i glossologi2) (7) a. linguists these there the 'These here linguists' b. *Ekini edho i glossologi those here linguists the 'Those there linguists'

(7a) is an impossible combination of a demonstrative and a reinforcer since the demonstrative is proximal while the reinforcer distal. So is (7b), where the distal demonstrative is combined with the proximal reinforcer.

Given the above relation of reinforcers to demonstratives, it is not surprising to find that only deictic demonstratives (in the pre-article position) can be combined with a reinforcer. That is, anaphoric demonstratives (in the post-nominal position) followed by a reinforcer yields ungrammaticality, as previously noted by Campos & Stavrou, 2004):

(8) a.	*I	glossologi	afti	edho
	the	linguists	these	here
b.	*I	glossologi	ekini	eki
	the	linguists	those	there

Another important aspect of the demonstrative-reinforcer construction is that there is a dependency relationship between a demonstrative and a reinforcer (Bernstein, 1997). In other words, a reinforcer can be present only when there

²⁾ Afti 'these' in Modern Greek is ambiguous and thus can be used as a deictically neutral demonstrative. In this case, its deictic value is determined by the following reinforcer: proximal when followed by edho 'here' or distal when followed by eki 'there'.

is a demonstrative. According to Bernstein (1997, 2001), nonstandard English allows both [Demonstrative-here/there-Noun], as in (9), and [Demonstrative-Noun-here/there], as in (10). Examples in (9) and (10a) are taken from Bernstein (1997, p. 91).

- (9) a. this here guy
 - b. that there car
- (10) a. this guy here
 - b. that guy there

But only (9) is an instance of true reinforcers while (10) is an instance of true adverbials. Bernstein argues that one way to distinguish (9) from (10) is to test if the demonstrative is replaceable. For instance, the demonstrative in (10) can be replaced by an article without causing ungrammaticality, as in (12). In contrast, replacing the demonstrative in (9) with an article results in ungrammaticality, as in (11).

- (11) a. *a here guy
 - b. *the here guy
 - c. *a there guy
 - d. *the there guy
- (12) a. **a** guy here
 - b. the guy here
 - c. a guy there
 - d. the guy there

The grammaticality difference between (9) and (11) suggests the dependent relationship of *here* and *there* to the demonstrative, while no such relationship is observed in the examples in (10). I will call Bernstein's reinforcerhood test as 'dependency diagnosis'.

In addition to Bernstein's dependency diagnosis, I propose two more diagnoses for reinforcers: replacement diagnosis and modification diagnosis.

First, replacement diagnosis tests whether or not here and there can be replaced by a prepositional phrase. If such replacement cannot be done without affecting grammaticality, here and there are instances of reinforcers; otherwise, they are adverbials. Consider (13) and (14).

- (13) a. **These** here linguists
 - a'. ***These** in Greece linguists
 - b. **Those** there linguists
 - b'. *Those in Greece linguists
- (14) a. **These** linguists here
 - a'. **These** linguists in Greece
 - b. **Those** linguists *there*
 - b'. **Those** linguists in Greece

In (13) ([Demonstrative-here/there-Noun]), here and there cannot be replaced by a prepositional phrase in Greece. By contrast. (14)([Demonstrative-Noun-here/there]), such replacement is possible. This suggests that here and there in (13) are reinforcers whereas those in (14) are adverbials.

Second, the modification diagnosis is concerned with whether or not an additional prepositional phrase can be stacked with here and there. In other words, if here and there can be modified by a prepositional phrase, then they are not reinforcers; they are simply adverbials. This point is exemplified by the paradigm in (15) and (16).

- (15) a. **These** here linguists
 - a'. ***These** here in Greece linguists
 - b. **Those** *there* linguists
 - b'. *Those there in Greece linguists
- (16) a. **These** linguists here
 - a'. **These** linguists here in Greece
 - b. **Those** linguists *there*
 - b'. **Those** linguists there in Greece

In (15), adding a prepositional phrase *in Greece* to *here* and *there* yields ungrammaticality; in (16), such addition is possible. This suggests that the former is an instance of reinforcers, while the latter of adverbials.

The additional two diagnoses are naturally motivated if we consider the nature of reinforcers and true adverbials. Adverbials, *here* and *there*, are locative expressions, but their exact content cannot be identified on their own without relying on the (extra)linguistic context. There are some ways of clarifying what one means by adverbials. One such way is to use a body gesture—such as pointing with fingers, chin, etc—along with the utterance of adverbials. Another way is to use more specific linguistic expressions, which is our concern here. In using alternative linguistic expressions, there seem to be (at least) two ways of achieving the goal. First, one can simply choose to use more specific locative expressions, such as prepositional phrases, rather than vague adverbials, as illustrated in (17).

(17) a. A: Did you put the keys on the table?

b. B: No. They are here.

c. A: Where?

d. B: In this little box.

Speaker A is looking for the keys, as in (17a). Presumably due to the multiple possible interpretations of *here* in speaker B's answer in (17b), speaker A asks for clarification by uttering (17c). As a response, speaker B, instead of using the adverbial *here*, provides a specific information about the location of the keys by using a prepositional phrase *in this little box*, as in (17d). Second, one can restrict the possible interpretation of adverbials by adding a modifying prepositional phrase. Consider (18).

(18) A: Did you put the keys on the table?

B: No. They are here in this little box.

In (18), under the same context as (17), speaker B in the first place states in a less vague way what (s)he means by *here*, by narrowing down its possible interpretations via adding a prepositional phrase.

By contrast, the function of reinforcers, as discussed above in this section, is limited to modifying a deictic property of demonstrative; they do not denote a location. Given this difference, it is expected that replacement and modification diagnosis can be used to distinguish reinforcers from adverbials.

Modern Greek, like English, allows for two different word orders when it comes to the addition of edho/here and eki/there to a DP. Edho 'here' and eki 'there' show the same distribution within DP as their English counterparts. Unlike the examples in (6) (reproduced in (19) for convenience), edho 'here' and eki 'there' can also appear in the position that immediately follows a noun, as in (20).

- (19) a. Afti edho glossologi these here the linguists 'These here linguists' b. Ekini eki i glossologi those there the linguists 'Those there linguists'
- (20) a. Afti i glossologi edho these the linguists here 'These linguists here' b. Ekini glossologi eki those the linguists there 'Those linguists there'

We then need to decide whether edho and eki in (20) should be treated as a case of reinforcers, and thus be included in our discussion of reinforcers. In the rest of this section, I will apply the above three reinforcerhood diagnoses to the Modern Greek data in (19) and (20). It will turn out that (19) exhibits a case of reinforcers, but not (20). Let us first start with the dependency diagnosis. Compare (21) and (22).

- (21) a. *Edho i glossologi here the linguists
 b. *Eki i glossologi there the linguists
- (22) a. I glossologi edho
 the linguists here
 'The linguists here'
 b. I glossologi eki
 the linguists there
 'The linguists there'

The examples in (19) become ungrammatical without the demonstrative, as in (21), which suggests a dependency relationship between demonstratives and reinforcers. The fact that the examples in (20) remain grammatical even without the demonstrative, as in (22), suggests the lack of a dependency relationship.

Second, the replacement diagnosis is in order. Compare (23) and (24).

(23)	a.	*Afti	stin	Ellada	i	glossologi	
		these	in	Greece	the	linguists	
	b.	*Ekini	stin	Ellada	i	glossologi	
		those	in	Greece	the	linguists	
(24)	a.	Afti	i	glossologi	stin	Ellada	
		these	the	linguists	in	Greece	
		'These linguists in Greece'					
	b.	Ekini	i	glossologi	stin	Ellada	
		those	the	linguists	in	Greece	
		'Those lin	guists	in Greece'			

Replacing *edho* 'here' and *eki* 'there' of (21) and (22) with a prepositional phrase *stin Ellada* 'in Greece' incurs ungrammaticality, as shown in (23), in contrast with (24). Thus, the result of the replacement diagnosis is consistent with that of the dependency diagnosis.

Lastly, the modification diagnosis leads to the same conclusion as the other two diagnoses, as shown in (25) and (26).

(25) a.	*Afti	edho	stin	Ellada	i	glossologi
	these	here	in	Greece	the	linguists
b.	*Ekini	eki	stin	Ellada	i	glossologi
	those	there	in	Greece	the	linguists
(26) a.	Afti	I g	glossologi	edho	stin	Ellada
	these	the l	inguists	here	in	Greece
	'These linguists here in Greece'					
b.	Ekini	I g	glossologi	eki	stin	Ellada
	those	the l	linguists	there	in	Greece
	'Those linguists there in Greece'					

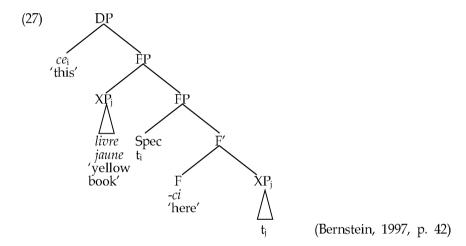
Modifying edho 'here' and eki 'there' by adding a prepositional phrase is unacceptable, as in (25), which indicates that they are reinforcers. In contrast, the additional prepositional phrase does not affect the grammaticality, as in (26), which shows that edho 'here' and eki 'there' in (26) are adverbials.

To summarize, we have seen that there are two possible positions for demonstratives, each of which is associated with a specific interpretation: a deictic interpretation in the pre-article position and an anaphoric interpretation in the post-nominal position. Between these two positions, a reinforcer is allowed to be adjacent to a pre-article deictic demonstrative. Also, using the three diagnosis, the reinforcer has been shown to be different from the adverbials.

3. Existing Analysis

A syntactic analysis has been proposed for the demonstrative-reinforcer construction in Romance and Germanic languages by Bernstein (1997). She claims that demonstratives and reinforcers are base-generated in [Spec, FP] and the head position, F, respectively. In her account, the pre-nominal surface

position of demonstratives is derived by raising to D, which is triggered by the [+definite] feature on D. The landing position is not [Spec, DP]; what moves here is not the whole phrase that contains the demonstrative but rather only the demonstrative head. Furthermore, the movement of XP is motivated by the strong feature³) of F (in the sense of Chomsky, 1995), which must be checked by a phrasal movement to its specifier. (27) illustrates the derivation of a French example.

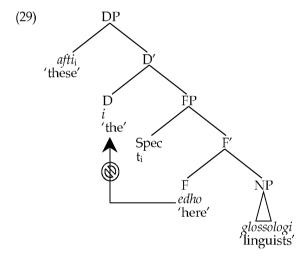


Bernstein's proposal is problematic for (at least) two reasons, however. First, (27) does not capture the dependency relationship discussed in section 2.2. I have shown that reinforcers can be present only when a demonstrative is present. In (27), however, the reinforcer occupies the head F position while the demonstrative is introduced in [Spec, FP]. This syntactic configuration rather suggests that the dependency relationship is in the opposite direction—the presence of demonstratives is contingent on that of a reinforcer. Second, the correct word order for Modern Greek cannot be derived. In Modern Greek, demonstratives and reinforcers are always adjacent (cf. (28a) and (28b)), and reinforcers must appear to the immediate left of the definite article in D (cf. (28a) and (28c)).

³⁾ The exact nature of the strong feature is not identified in Bernstein (1997). Given that F is occupied by a reinforcer, I would presume that the strong feature is related to deixis.

(28) a.	Afti	edho	i	glossologi
	these	here	the	linguists
	'these her	e linguists'		
b.	*Edho	afti	i	glossologi
	here	these	the	linguists
c.	*Afti	i	edho	glossologi
	these	the	here	linguists

If we assume Bernstein's structure in (27) to be correct, with a slight modification, in order to accommodate the obligatory definite article, that the demonstrative moves to [Spec, DP] (as she admits), then the structure of (28) would be (29).



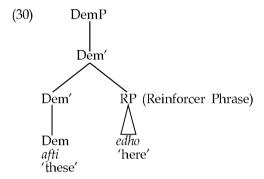
In (29), in order for reinforcers in Modern Greek to appear between the demonstrative and the definite article, there must be a head position to which a reinforcer can move via head-movement. But the highest head position available for this movement is the head D position, which is already filled with the definite article. 4),5) Therefore, Bernstein's analysis is not tenable.

⁴⁾ One might argue that there is an empty FocusP, whose specifier and head is filled with a demonstrative and a reinforcer, respectively, on the assumption of the split DP-hypothesis (see fn. 5 for details). That is, a reinforcer can move up to this empty Focus head. Even if

4. The Proposals

4.1. The Structure of Demonstrative-Reinforcer Constructions

In order to resolve the problems noted above, I propose that a reinforcer, being a modifier, is a right adjunction⁶) to demonstrative phrase (DemP), and reinforces the deictic property of the demonstrative. Thus, the structure of the demonstrative-reinforcer portion of (28a) would look like (30).



This analysis solves the two problems mentioned above. First, the correct word order in (28a) can be derived; the reinforcer is always adjacent to the demonstrative. Moreover, the dependency relationship between demonstrative and reinforcer straightforwardly follows since on the current analysis, the reinforcer, being a right adjunction to Dem', can be present only if the demonstrative is present. (Recall that in Bernstein's analysis, a reinforcer

Giusti (2005, 2006), in the spirit of Rizzi (1997), proposes that the head D, the nominal counterpart of C, is also composed of different functional heads, as shown in (ii).

(ii)
$$DP > TopP^* > FocP > TopP^* > dP$$
 (Giusti, 2005, p. 35)

this is the case, the dependency relationship between demonstratives and reinforcers still remains mysterious.

⁵⁾ Rizzi (1997) proposes the split CP-hypothesis, in which the C head is decomposed into several functional heads, as illustrated in (i).

⁽i) $ForceP > TopP^* > FocP > TopP^* > FinP$

⁶⁾ Adjunction, by definition, extends a projection to a larger one of the same type.

(modifier) introduces a demonstrative (modifiee) in its specifier.)

The current analysis in which demonstrative-reinforcer constructions are phrasal on their own is further supported by considering other types of modifier-modifiee relationship. First, the function of reinforcers is almost the same as other modifiers. Consider (31).

(31) Einai poly exypnos. is.M very smart 'He is very smart.'

In (31), the modifier poly 'very' modifies its modifiee exypnos 'smart'—the degree of "being smart" is modified. This is exactly the same as what reinforcers do: reinforcers modify (or strengthen) the degree of the deictic property of demonstratives. Second, we can observe the same dependency relationship of demonstrative-reinforcer constructions in the modifier-modifiee relationship in (31). Consider (32).

(32) a. Einai exypnos. is.M smart 'He is smart.' b. *Einai poly. is.M very

When the modifier poly 'very' is absent, as in (32a), the grammaticality does not change. However, when the modifiee is absent and its modifier is present, as in (32b), the ungrammaticality arises. 7) This is exactly the same pattern that we

⁷⁾ As a reviewer points out, there is a word order asymmetry between demonstrative-reinforcer constructions and adjective-noun constructions. That is, poly 'very' precedes exypnos 'smart' as in (ia), but cannot follow its modifiee, as in (ib).

⁽i) a. Einai poly exypnos. is.M verv smart 'He is very smart.' b. *Einai exypnos poly. is.M smart very

observed for demonstrative-reinforcer constructions in section 2.2.

Given that demonstrative-reinforcer constructions resemble other ordinary modifiee-modifier constructions both semantically and syntactically and that a modifiee forms a phrase with its modifier, we can reach the conclusion that a demonstrative (modifiee) also forms a phrase with a reinforcer (modifier).

4.2. Demonstrative-Reinforcer Constructions within DP

Now that we have at hand an analysis of the structure of demonstrative-reinforcer constructions, the task left for us to do is to examine how the analysis can fit in with the DP structure in Modern Greek.

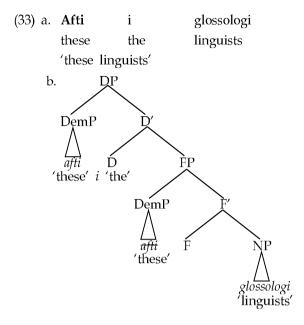
Demonstratives in Modern Greek have received much attention and it has been argued in the literature (Brugè, 1996, 2002; Brugè & Giusti, 1996; Giusti, 1997, 2002; Grohmann & Panagiotidis, 2004, 2005; Guardiano, 2009, 2011; see also Vangsnes, 1999; cf. Campbell, 1996; Panagiotidis, 2000) that the demonstrative in the language is base-generated in the specifier position of an extended nominal projection and moves to [Spec, DP] for deictic interpretation.⁸⁾ For instance, the syntactic derivation of the deictic demonstrative example in (33a) is illustrated in (33b).

However, another instance of modifier-modifiee relationship allows the opposite order, in which a modifier follows its modifiee. (ii) is a case in point; the verb (modifiee) precedes its modifier (adverb).

(ii) Etrexa schedon.
ran.1SG fast
'I ran fast.'

I do not have an account for this asymmetry that holds in modifier-modifiee phrases. I leave this issue aside for future study.

8) The movement of the demonstrative is assumed to be triggered by the EPP feature on the head D, given the DP/CP parallelism, in this paper. In older terms, the movement can be said to be triggered by TH-Criterion (Campbell, 1996), which bears an analogy to Rizzi's (1991) WH-Criterion. The TH-Criterion, which is different from the theta-criterion, requires [Spec, DP] to be filled by either a lexical item (via movement) or a phonologically null Operator (via direct merge). See Campbell (1996), Panagiotidis (2000), Giusti (2002) for detailed discussion. Note, however, that whatever the motivation of the demonstrative movement may be is immaterial to our discussion.



This analysis was proposed to account for two facts. First, by base-generating the demonstrative in a lower position than D, it is possible to derive the post-nominal anaphoric demonstrative, with an additional assumption of N-raising.⁹⁾ Second, the pre-article surface position of the deictic demonstrative can be explained: demonstratives, being phrasal, occupy [Spec, DP]. As a result of the analysis, the demonstrative has been argued to be phrasal even though it is not combined with any other lexical item or phrase.

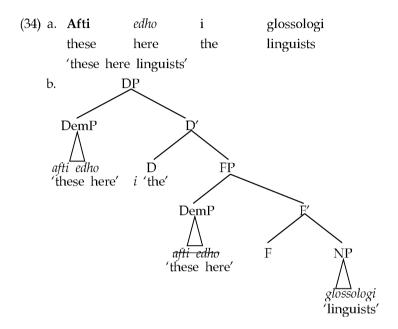
Then the structure in (33b) can accommodate the demonstrative combined with reinforcer as well. (34a) is an example that contains demonstrative-reinforcer construction afti edho 'these here'. Since demonstratives are analyzed to occupy the specifier position - both in its base-position and

Even though I do not assume TH-Criterion discussed in footnote 8, I partially adopt the idea that [Spec, DP] is occupied by a null Operator. I assume that the null Operator satisfies the EPP on D.

⁹⁾ The post-nominal demonstrative is derived by moving the N head to a function head higher than the functional head that introduces the demonstrative which does not move, as illustrated in (i) below.

⁽i) [DP Operator_{null} Definite Article [FP1 N+F1 [FP2 Demonstrative F2 [NP t_N]]]]

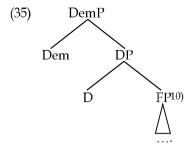
surface position, the phrasal status of the demonstrative-reinforcer construction fits well in with the structure in (33b). The structure of DP that contains a demonstrative-reinforcer construction is illustrated in (34b).



The idea that the demonstrative is phrasal in Modern Greek can now be further justified by the demonstrative-reinforcer construction discussed in this paper. Since demonstratives can form a phrase in combination with a reinforcer, the phrasal status of demonstratives is not any more a mere result of the analysis illustrated in (33b), but is empirically supported.

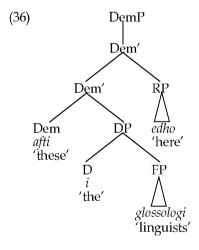
5. Another Theory of Demonstratives

Notice that the analysis of demonstratives in section 3.3 is not the only way to capture the two distinct surface positions of demonstratives in Modern Greek. Julien (2002) proposes an alternative approach, according to which the demonstrative projects its own projection by taking a whole DP as a complement, as illustrated in (35) (cf. Svenonius, 2008).



On this analysis, the deictic demonstrative occupies the pre-article position with no movement; the post-nominal position of the anaphoric demonstrative is derived via movement of the FP to [Spec, DemP].

Then, a question may arise as to which is the better analysis. An answer follows straightforwardly if we take into account the demonstrative-reinforcer construction. Julien's approach is empirically challenged when it comes to consideration of demonstrative-reinforcer constructions. As discussed in section 3.3, demonstratives form a phrase with a reinforcer. If the demonstrative takes a DP as a complement to project DemP, to which the reinforcer, being a modifier, is adjoined (see (30)), the resulting word order is expected to be demonstrative > definite article > noun > reinforcer, as in (36), contrary to the facts.



¹⁰⁾ D takes Cardinality phrase as its complement in Julien (2002). However, the nature of the FP is immaterial to our purpose.

As already discussed in section 2.2, the right-most position of the RP is for adverbials, but not for reinforcers. The word order in (36) is acceptable only when the RP is intended to be adverbial. Hence, the demonstrative-reinforcer construction cannot receive a proper analysis if we assume Julien's analysis of demonstratives.

6. Demonstratives in English

In the previous sections, empirical evidence was presented that shows that demonstratives form a phrase either on their own or with a reinforcer. The facts regarding the demonstrative-reinforcer construction support the hypothesis in which the left-most surface position of demonstrative is derived via movement from the base-position [Spec, FP]. Then, one might wonder if demonstratives in English can receive the same analysis as Modern Greek.

Unlike Modern Greek, in which demonstratives must co-occur with a definite article, demonstratives are in complementary distribution with a definite article in English, as shown in (37) and (38).

- (37) a. The linguists
 - b. These linguists
 - c. Those linguists
- (38) a. *The these linguists
 - b. *These the linguists
 - c. *The those linguists
 - d. *Those the linguists

The examples in (37), in which a definite article and a demonstrative do not co-occur, are all grammatical. In contrast, the co-occurrence of the two yields ungrammaticality, as in (38). This complementarity between the definite article and the demonstrative suggests that they compete for the same syntactic position in English. This is why demonstratives have been argued to be the head D like the definite article (Jackendoff, 1977; among others; cf. Bernstein,

2008).

In section 2.2, however, we have seen that English demonstratives can be collocated with a reinforcer. If so, this constitutes an argument against the hypothesis that demonstratives in English are one of the elements that occupy the head D. Recall the line of reasoning noted in section 4. If the demonstrative in English is the head D, which takes FP as its complement to project the DP, we fail to capture the fact that demonstratives can be modified by a reinforcer in English. For this reason, we can draw the conclusion that English demonstratives are also phrasal and occupy [Spec, DP]. Therefore, we can maintain a unified analysis of demonstratives in Modern Greek and English, rather than two different analyses for each language, based on the behaviors of demonstratives and reinforcers common in the languages.

One reasonable question we might want to ask is why the definite article cannot co-occur with a demonstrative in English, as in (38b) and (38d), unlike Modern Greek. I attribute the reason to the doubly filled DP filter (DFDF). The DFDF, adapted from Koopman & Szabolcsi's (2000) generalized doubly filled COMP filter (DFCF), can be defined as (39).

(39) Doubly Filled DP Filter If D is a head containing some feature F, $*[DP XP D^0 \cdots]$ when XP and D^0 both overtly encode F.

If we take DFDF to be a parameter following Alexiadou et al. (2007),11) an

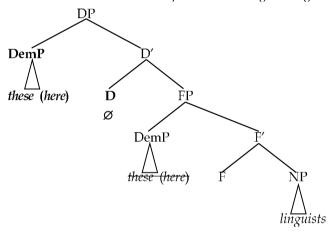
¹¹⁾ As a reviewer points out, the value for DFDF parameter does not hold in other domains. For instance, in English wh-questions, both C and [Spec, CP] can be overtly filled (e.g., what can I do?), and this fact suggests a negative value for DFCF. Here, I assume the Borer-Chomsky Conjecture (as coined in Baker, 2008, p. 156) in (i), to which I attribute the reason for the inconsistency between the parameter value of DFDF and that of DFCF.

⁽i) All parameters of variation are attributable to differences in the features of particular items (e.g., the functional heads) in the lexicon.

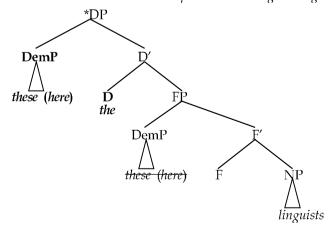
If we assume the Borer-Chomsky Conjecture, it follows that D does not necessarily have to bear the same parametric value as the other functional heads (e.g., C) for these filter-type parameters in question (or any other parameters).

account for the difference between Modern Greek and English becomes available. In Modern Greek, the DFDF parameter is set to be negative. That is, both [Spec, DP] and D can be overtly realized. Demonstratives can thus co-occur with a definite article. In contrast, the DFDF parameter is set to be positive in English. More specifically, only either [Spec, DP] or D can be overtly realized. Thus, when a demonstrative surfaces in [Spec, DP], the head D cannot be realized as the definite article. The discussion of English demonstratives can be summarized by the syntactic structure illustrated in (40) (where the optionality of reinforcers is indicated by the parentheses).

(40) a. Consistent with the DFDF parameter setting in English



b. Inconsistent with the DFDF parameter setting in English



If the present proposal is on the right track, it implies that even though the demonstrative seems to be in complementary distribution with the definite article, they in fact occupy a different position.

The idea that DFDF can be parameterized has been suggested in Alexiadou et al. (2007), in order to explain the difference with respect to the (non-)co-occurrence of definite article with demonstrative in Modern Greek and Spanish. Consider (41) below (taken from Alexiadou et al., 2007, p. 110).

hombre (41) a. Este this man b. *Este el hombre this the man c. El hombre este the this man

Unlike Modern Greek, the definite article can occur when the demonstrative follows the noun, as in (41c), while it cannot occur with the pre-nominal demonstrative (cf. (41a) and (41c)). Recall that the definite article is obligatory regardless of the position of the demonstrative in Modern Greek. It is argued that the parametric value of DFDF in Spanish is positive and thus the definite article cannot occupy the head D when [Spec, DP] is filled by the demonstrative.

Although the idea that DFDF is parameterized needs to be attested more extensively, it seems that postulating the DFDF parameter can account for the (non-)co-occurrence of the demonstrative in [Spec, DP] and the definite article in D in languages other than English, Modern Greek, and Spanish. Putting aside the issue of the pre-/post-nominal positions of demonstratives, for instance, it seems that the value of the DFDF parameter is set to be positive in Italian and Romanian. As a result, the co-occurrence of a demonstrative and a definite article is disallowed, as in (42b) (Italian) and (43c) (Romanian; adapted from Brugè's (2002) (2)).

(42) a. Questo libro this book 'This book'

- b. *Questo il libro this the book
- (43) a. Bàiatul acesta boy.the this 'This boy' b. Acest bàiat
 - this boy'
 - c. *Acest bàiatul this boy.the

By contrast, the value of the DFDF parameter seems to be negative in Hungarian like Modern Greek, and thus a definite article can co-occur with a demonstrative, as in (44). (Demonstratives always precede other elements in DPs in Hungarian.)

(44) Ez a gyerek this the child 'This child'

To summarize, I have shown that the analysis presented in section 4, coupled with the assumption that DFDF is a parameter, can account for English data as well. Also, the possibility for DFDF being a general parameter has been tested in other languages such as Hungarian, Italian, Romanian, and Spanish.

7. Conclusion

In this paper, I have shown that the demonstrative-reinforcer construction is a type of a modifiee-modifier relationship, and thus is phrasal. I have argued that its phrasal status lends further support to the hypothesis that demonstratives are base-generated in [Spec, FP] and undergo movement to [Spec, DP], rejecting the other hypothesis in which the demonstrative is the head

which takes DP as its complement. I have also shown how the favored hypothesis can be extended to a language like English, in which demonstratives have been argued to be the head D.

References

- Abney, S. (1987). The English noun phrase in its sentential aspect. Unpublished doctoral dissertation, MIT, Boston, MA.
- Alexiadou, A., Haegeman, L., & Stavrou, M. (2007). Noun phrase in the generative perspective. Berlin: Walter De Gruyter.
- Baker, M. (2008). The syntax of agreement and concord. Cambridge: Cambridge University Press.
- Bernstein, J. (1997). Demonstratives and reinforcers in Romance and Germanic languages. Lingua, 102(2-3), 87-113.
- Bernstein, J. (2001). The DP Hypothesis: Identifying clausal properties in the nominal domain. In M. Baltin, & C. Collins (Eds.), The handbook of contemporary syntactic theory (pp. 110-145). Oxford: Blackwell.
- Bernstein, J. (2008). English th- Forms. In H. Müller, & A. Klinge (Eds.), Essays on nominal determination: From morphology to discourse management (pp. 213-232). Amsterdam: John Benjamins.
- Brugè, L. (1996). Demonstrative movement in Spanish: A comparative approach. University of Venice Working Papers in Linguistics, 6(1), 1-53.
- Brugè, L. (2002). The position of demonstratives in the extended nominal projection in functional structure. In G. Cinque (Ed.), DP and IP: The cartography of syntactic structures, Vol. 1 (pp. 15-53). New York: Oxford University Press.
- Brugè, L., & Giusti, G. (1996). On demonstratives. In Newsletter of the 19th GLOW Colloquium, 24-25.
- Campbell, R. (1996). Specificity operators in SpecDP. Studia Linguistica, 50(2), 161-188.
- Campos, H., & Stavrou, M. (2004). Polydefinite constructions in Modern Greek and Aromanian. In O. Mišeska Tomic (Ed.), Balkan syntax and semantics (pp. 136-173). Amsterdam: Benjamins.

- Chomsky, N. (1995). The minimalist program. Cambridge, MA: MIT Press.
- Giusti, G. (1997) The categorial status of determiners. In L. Haegeman (Ed.), *The new comparative syntax* (pp. 95-123). London and New York: Longman.
- Giusti, G. (2002). The functional structure of noun phrases: A bare phrase structure approach. In G. Cinque (Ed.), *DP and IP: The cartography of syntactic structures, Vol.* 1 (pp. 54-90). New York: Oxford University Press.
- Giusti, G. (2005). At the left periphery of the Rumanian noun phrase. In *Proceedings of the Tense and Aspect Conference*, 23-49.
- Giusti, G. (2006). Parallels in clausal and nominal periphery. In M. Frascarelli (Ed.), *Phases of interpretation* (pp. 163-186). Berlin: Mouton de Gruyter.
- Grohmann, K. K., & Panagiotidis, P. (2004). Demonstrative doubling in Modern Greek. In P. Chandra, T. Fujii, U. Soltan, & M. Yoshida (Eds.), *University of Maryland Working Papers in Linguistics* 13. (pp. 109-131). University of Maryland, College Park.
- Grohmann, K. K., & Panagiotidis, P. (2005). An anti-locality approach to MG demonstratives. In L. Brugè, G. Giusti, N. Munaro, W. Schweikert, & G. Turano (Eds.), *Contributions to the 30th incontro di grammatica generativa*. (pp. 243-263). Venice: Cafoscarina.
- Guardiano, C. (2009). *The Greek demonstratives: History and syntax.* Paper presented at the 9th International Conference on Greek Linguistics. University of Chicago, October 28-November 1, 2009.
- Guardiano, C. (2011). Demonstratives and the structure of the DP: Crosslinguistic remarks. Paper presented at the Doctoral Seminars, Università di Padova, April 8, 2011.
- Jackendoff, R. (1977). X-bar syntax. Cambridge, MA: MIT Press.
- Julien, M. (2002). Determiners and word order in Scandinavian DPs. *Studia Linguistica*, 56(3), 264-314.
- Koopman, H., & Szabolcsi, A. (2000). Verb complexes. Cambridge, MA: MIT Press.
- Panagiotidis, P. (2000). Demonstrative determiners and operators: The case of MG. *Lingua*, 110(10), 717-742.
- Rizzi, L. (1991). Residual verb second and the wh-criterion. Unpublished manuscript.
- Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman (Ed.), *Elements of grammar* (pp. 281-337). Dordrecht: Kluwer.
- Svenonius, P. (2008). The position of adjectives and other phrasal modifiers in

the decomposition of DP. In L. McNally, & C. Kennedy (Eds.), Adjectives and adverbs: Syntax, semantics, and discourse (pp. 16-42). Oxford: Oxford University Press.

Vangsnes, Ø. A. (1999). The identification of functional categories. Unpublished doctoral dissertation, University of Bergen.

Jaehoon Choi Department of Linguistics University of Arizona Douglass Building, Room 200E Tucson, AZ 85721-0028 U.S.A.

Phone: 1-520-621-6897

Email: jhchoi@email.arizona.edu

Received on December 31, 2012 Revised version received on February 27, 2013 Accepted on March 8, 2013