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RESEARCH

Recasting the typology of multiple *wh*-fronting: Evidence from Pontic Greek

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In this paper we revisit and revise the typology of multiple questions and multiple wh-fronting (MWF) in the light of data from Romeyka, a Greek variety spoken in Pontus, Turkey, and from another Pontic Greek variety spoken in northern Greece. Both varieties provide evidence for wh-fronting as focus movement, their most striking feature being the availability of single-pair interpretations in spite of strict Superiority. It turns out that the parametric system deriving the space of variation in multiple wh-fronting must be extended to accommodate the facts presented here, which seem to instantiate a further type of MWF (with a corresponding type of non-MWF languages), not predicted by the existing typology. At the same time, put in a cross-linguistic perspective, the Romeyka facts may help us uncover independent restrictions on the possibilities that this parametric system makes available. We propose that the availability of peripheral positions and their activation in the left or low periphery may be a point of parametric variation. Furthermore, still complying with Bošković's (2007) theory of Attract-1/all, certain Focus heads can be Attract-1, thus deriving the compatibility of Superiority with single pair readings. Finally, we present some speculations about a potential correlation between word order/head directionality in the clausal domain and the kind of information structure-related head (e.g. Topic vs. Focus) that can take on an Attract-1 feature.

Keywords: multiple wh-fronting; Pontic Greek; Romeyka; Superiority effects; focus

1 Introduction

The aim of this article is twofold: (a) to discuss some previously understudied dimensions of variation in the syntax of multiple questions, focusing on novel data from Romeyka, a Greek variety spoken in Pontus, Turkey, and from another Pontic Greek variety spoken in northern Greece; (b) to revisit and revise the typology of multiple questions and multiple *wh*-fronting (MWF) in the light of the Romeyka data. It turns out that the parametric system deriving the space of variation in multiple *wh*-fronting must be extended to accommodate the facts presented here, and at the same time, put in a cross-linguistic perspective, the Romeyka facts may help us uncover independent restrictions on the possibilities that this parametric system makes available.

In Bošković's (2002; 2003; 2007) typology (see also Grohmann 2000; Simpson 2000), a correlation between Superiority effects and the availability of *wh*-movement to SpecCP is postulated. For Bošković, a multiple question in a language will show Superiority effects if it requires a *wh*-phrase to move to SpecCP for *wh*-feature checking. Bošković comes to this conclusion based on the following two observations. First, he notes that with respect

to whether languages show Superiority effects or not, there are at least three groups of multiple *wh*-fronting languages:

(1) *MWF languages*
   a. Languages like Russian that never show Superiority effects.
   b. Languages like Bulgarian that always show Superiority effects.
   c. Languages like Serbo-Croatian that show Superiority effects in some contexts (i.e., in long distance questions, in embedded questions, and in sentences in which C is overt), but not in others.

Second, he shows that with respect to whether languages involve *wh*-movement to SpecCP or not, there are also three groups of languages:

(2) *Non-MWF languages* (Bošković 2002; 2007)
   a. Languages like Chinese or Japanese, which do not move any *wh*-phrases to SpecCP.
   b. Languages like English, which involve *wh*-movement to SpecCP.
   c. Languages like French, which may, but in some contexts do not need to, involve *wh*-movement to SpecCP.

French is a language that allows both the *wh*-movement and the *wh* in-situ strategy in constructions corresponding to English examples such as 'What did John buy?'. Nevertheless, Bošković (2002; 2003; 2007) points out that the contexts in which Serbo-Croatian shows Superiority effects are exactly the contexts in which French has obligatory *wh*-movement. Given this, he reaches the following conclusion: Serbo-Croatian has superiority effects where French must have *wh*-movement (namely, in some contexts); Bulgarian has superiority effects where English must have *wh*-movement (namely, in all contexts), and Russian has superiority effects where Chinese must have *wh*-movement (namely, never).

In other words, the range of parametric options with respect to obligatory *wh*-movement is exactly the same as the range of possibilities with respect to Superiority effects in multiple *wh*-fronting. Therefore, whatever regulates the former (a strong [+wh] feature in C according to Bošković) also regulates the latter. Overt movement of a *wh*-phrase is required for *wh*-feature checking in both cases and only the highest *wh*-phrase can be attracted. If no *wh*-phrase moves to SpecCP, Superiority effects are absent. Going back to multiple *wh*-fronting languages, this means that in languages like Russian, no *wh*-phrase moves to SpecCP, and that all of them move to a Focus position lower than SpecCP. In multiple questions in Bulgarian, one *wh*-phrase must always move to SpecCP, since Bulgarian exhibits Superiority effects in all contexts. And in languages like Serbo-Croatian, one *wh*-phrase must move to SpecCP in the contexts where Serbo-Croatian shows Superiority effects (long-distance questions, embedded questions, and in questions with an overt C). In other cases, where Serbo-Croatian does not show Superiority effects, no *wh*-phrase moves to SpecCP overtly, but they all undergo focus movement. Notably, Focus movement does not obey Superiority, as focused phrases can be attracted in any order. So, under Bošković's analysis, there is a perfect correlation between Superiority and *wh*-movement; any time a MWF language must have *wh*-movement (i.e., movement to SpecCP), it shows Superiority effects.

Additionally, Bošković shows that there is also another type of correlation: if a multiple *wh*-question involves *wh*-movement (i.e., at least one *wh*-phrase undergoes movement to SpecCP for *wh*-feature checking), the multiple *wh*-question cannot have a single pair reading. If a multiple question does not involve *wh*-movement, it may (but does not have to) have a single pair reading. Bošković shows that this correlation falls out of the

mechanisms of multiple question interpretation employed in Hagstrom (1998) – see 4.2 below. Thus, Bošković's two generalisations can be summarized as follows:

(3) a. If a multiple question allows a single pair reading, it does not involve *wh*-movement to SpecCP.
b. If a multiple question exhibits Superiority effects, it involves *wh*-movement to SpecCP, i.e. the checking of a *wh*-feature with an Attract-1 property, see Bošković (2007).

It is exactly this correlation that Pontic Greek appears to challenge, as we will see below, while also being exceptional in being the only dialectal group within Greek exhibiting multiple *wh*-fronting.

Standard Modern Greek (henceforth SMG), at least *prima facie*, behaves like English, since both English and SMG behave alike with regards to *wh*-in-situ in multiple questions and in terms of Superiority, as shown in (4) and (5):

(4) a. $[_{CP}$ Who$_i$ $[_{TP}$ t$_i$ brought what]]?
b. *$[_{CP}$ Who$_i$ what$_k$ $[_{TP}$ t$_i$ brought t$_k$]]?
c. *$[_{CP}$ What$_k$ will $[_{TP}$ who$_i$ bring t$_k$]]?

(5) *SMG*
a. Pços efere ti?
who.NOM bring.PAST.3SG what.ACC
'Who brought what?'
b. *Pços ti efere?
who.NOM what.ACC bring.PAST.3SG
c. Pços filise pçon?
who.NOM kiss.PAST.3SG who.ACC
'Who kissed whom?'
d. ?*Pçon filise pços?
who.ACC kiss.3SG.PAST who.NOM

However, in the absence of almost any work on *wh*-formation across Greek varieties (but see Kontossopoulos 1981; Tsiplakou et al. 2007 on Cypriot Greek), very little is known about the fact that Pontic Greek varieties are the only Greek varieties which seem to fall under the MWF type, where all *wh*-phrases are fronted (but see Michelioudakis & Sitaridou 2012: 220 for a brief discussion). Consider (6) from the Romeyka variety of Of (henceforth ROf), as spoken in the region of Çaykara (Of) in Turkey, and (7) from Pontic Greek, as spoken in Thessaloniki and Northern Greece (henceforth TPG) but also elsewhere – note that both varieties belong to Pontic Greek Group within the broader Asia Minor Greek Group (see Sitaridou 2013; 2014):

(6) *ROf*
Tinan doɣna endžes?
who.ACC.HUM what.ACC bring.PAST.2SG
'What did you bring for whom?'

(7) *TPG*
Tinan do eferes?
who.ACC.HUM what.ACC bring.PAST.2SG
'What did you bring for whom?'

Crucially, in Pontic Greek, putting aside D-linked *wh*-phrases for the time being, multiple *wh*-fronting is strictly order-preserving (8), as e.g. in Bulgarian (9) (see Bošković 1997), i.e. Superiority is obeyed (even in questions with a single pair interpretation, as shown later on):

(8) *ROf*

a. Pios tinan aɣapai?
who.NOM who.ACC.HUM love.3SG
'Who loves whom?'

b. *Tinan pios aɣapai?
who.ACC.HUM who.NOM love.3SG
TPG (Michelioudakis & Sitaridou 2012: 221)

c. Pios tinan aɣapa?
who.NOM who.ACC.HUM love.3SG
'Who loves whom?'

d. *Tinan pios aɣapa?
who.ACC.HUM who.NOM love.3SG

(9) *Bulgarian*

a. Koj kogo obia?
who.NOM who.ACC love.3SG
'Who loves whom?'

b. *Kogo koj obia?
who.ACC who.NOM love.3SG

In this article, we establish that Pontic Greek MWF only partially resembles MWF of the Bulgarian type and in fact instantiates a new distinct type of MWF language, which constitutes an apparent challenge to the set of predictions in (3) above, featuring both single-pair readings and strict superiority effects. Crucially, Bošković's (2002) idea that each type of MWF language has its non-MWF counterpart is further reinforced by correlating and coupling the understudied Pontic Greek MWF with a non-MWF language, namely SMG. We extend Bošković's (2007) Attract-1/Attract-all system in such a way that languages may also allow for Attract-1 heads other than $C_{[+wh]}$, e.g. Topic^0 or, crucially for Pontic Greek, Focus^0, though arguably constrained by independent language-specific properties, Drawing on the relevant contrasts between Pontic Greek and Basque, we argue that head-directionality in the VP/clause may be such a property. We further propose that activating an Attract-1 Focus position in the left periphery or in the low/vP periphery is a parametric option, deriving the contrast between languages instantiating the new MWF type (e.g. Romeyka) and their non-MWF counterpart (e.g. SMG).

The article is organised as follows. In section 2.1 we present our methodology, whilst in section 2.2 we contrast Pontic to SMG. In section 3, we focus on Pontic, and in 3.1 we analyse the *wh*-patterns attested in Romeyka, whilein 3.2 we discuss (nano-)variation within the Pontic Greek dialectal group, contrasting Romeyka to TPG. In section 4.1 we argue for a fourth, separate MWF type whilst in section 4.2 we link the syntax of focus to *wh*-syntax to derive the fourth type and provide a detailed analysis of the landing sites of *wh*-phrases in Pontic and SMG. We conclude our findings in section 5.

2 Micro-variation in Greek *wh*-questions

The goal of this section is to set the stage for the micro-comparative analysis presented in the following sections by (a) providing some necessary information on the methodology of data collection and (b) providing relevant information on micro-variation, as is demonstrated by various differences between the Pontic Greek language group on the one hand and SMG on the other.

2.1 Methodology of data collection

The dialectal data examined in this article derive from two Pontic Greek varieties: (a) Pontic Greek as spoken in Thessaloniki and Northern Greece (henceforth, TPG); and (b) Romeyka as spoken in the Of region of Pontus in Turkey (henceforth ROf). When we use the term Pontic Greek in this article we refer to both ROf and TPG. In both cases, the data derive exclusively from fieldwork conducted by one of the authors. In particular: (a) for the Romeyka data, data collection was carried out in the village of Anasta, in the Of (Çaykara) region of Pontus in Turkey (see Sitaridou 2013). Data was obtained, principally, from three informants: three females (20 years old, 42 year old and 65 years old, respectively), and occasionally from one male (45 years old); (b) as for TPG, two informants have been consulted, one 67 years old female from Thessaloniki and one 55 years old female from Komotini (who has also been living in Thessaloniki for some years) who have been exposed to Pontic Greek from birth. These speakers have been consulted in other works too (see Michelioudakis & Sitaridou 2012; Sitaridou & Kaltsa 2014). In all cases, the data were elicited using a structured questionnaire on *wh*-formation and multiple *wh*-fronting comprising ca. 70 tokens (for more information regarding the field techniques employed, see Sitaridou 2013).

2.2 Dimensions of variation: exponents and other variables

As we have already seen in the introduction, the main parametric difference between SMG on the one hand and Pontic Greek on the other is that the latter allows for MWF. Other variables include: (i) different lexical items (Table 1), (ii) (un)availability of spurious coordination, (iii) morphological exponence/syncretisms of number and gender, (iv) exponence of D-linking and/or the lack thereof.

Second, in SMG, fronting of more than one *wh*-phrase is possible with the use of spurious coordinators (Sinopoulou 2011; see also Merchant 2008 for Vlach), as shown in (10), whereas these are absent in Pontic Greek, as shown in (11):

(10) Background: 'One student came and got a book out of your library'
SMG
Boris na mu pis [pços ce ti] / [pço
can.2SG SUBJ.PRT me tell.PNP.2SG who.NOM and what.ACC / which.ACC
(vivlio) ce pços *(to)] pire?
book.ACC and who.NOM it.ACC take.PAST.3SG
'Can you tell me who took which book?'

(11) *ROf*
a. *Pios tše tinan efilise?
who.NOM and who.ACC.HUM kiss.PAST.3SG
'Who kissed whom?'
b. *TPG*
*Pios ce tinan efilise?
who.NOM and who.ACC.HUM kiss.PAST.3SG
'Who kissed whom?'

Third, Pontic Greek lacks number/gender distinctions on the interrogative pronoun, i.e., there is no plural/gender form of 'who' (12), in sharp contrast to SMG (12e–f). Instead, we observe that Pontic Greek either (i) uses the same form (underspecified) as in the singular (12a–b); or (ii) resorts to alternative devices: (a) ROf optionally uses a Turkish loanword (*kaç kisi* 'how many people) to mark plurality (12c). However, it should be noted that *kaš(i)kisi*, when used alone/not accompanying '*pios*', becomes obligatory in the

***wh*-words**	**ROf**	**TPG**	**SMG**
'when?'	*Pote?* When	*Pote?* When	*Pote?* When
'where/ which place?'	*Pu merea /tšeka?* where side/there e.g.: (i) Pote pu merea epies? when where side went.2SG 'When and where did you go?' (ii) Pote mo tinan when with who.ACC.HUM pu merea epies? where side went.2SG 'When, where and with whom did you go?'	*Poθen merean/pion merean?* where side /which side e.g.: (v) Poθen merean epies where side went.2SG pote? when 'When and where did you go?' (vi) Pote me when with tinan se who.ACC.HUM to pion merean epies? which side went.2SG 'When, where and with whom did you go?'	*Pu?* Where
'from where?'	*Apoxen?* from.where e.g.: (iii) Apoxen erθes? from.where came.2SG 'Where did you come from?' (iv) (pote) apoxen (pote) erθes? when from.where when came.2SG 'Where did you come from when?'	*Poθen?* from.where e.g.: (vii) poθen erθes? from.where came.2SG 'Where did you come from?' (viii) Poθen pote from.where when erθes? came.2SG 'When and from where did you come?'	*Apo pu?* from where
'How many?'	*Kaš(i)kisi/* how.many.person.NOM.PL *aškisus?* how.many.person.ACC.PL	*Pos' nomat/* how.many person.NOM/ *pos' nomats?* how.many person.ACC.PL	*Posi/* how.many.NOM.PL/ *Posus?* how.many.ACC.PL
'with whom?'	*Motinan?* with.who.ACC.HUM	*Me tinan?* with who.ACC.HUM	*Me pçion?* with who.ACC

Table 1: *wh*-words in Pontic Greek and SMG.

accusative, as shown in (13a),which features the Greek inflection *–us* (despite the fact that in Turkish there is no *phi*-agreement between the numeral and the noun); (b) TPG uses a periphrastic expression (12d):

(12) *ROf/TPG*

a. Pios erθen?
who.NOM come.PAST.3SG
'Who came?'

a'. *ROf*
Tš' erθen?
who.NOM come.PAST.3SG

b. *ROf*
Pios erθen?
who.NOM come.PAST.3SG
'Who (=many) came?'

c. *ROf*
(Pios) kaš(i)kisi erθen
who many.person.NOM.PL come.PAST.3SG
'Who (=many) came?'

d. *TPG*
Posi nomat erθane?
how.many.NOM.PL person.NOM.PL come.PAST.3PL
'Who and how many came?'

e. *SMG*
Pços irθe?
who.NOM.SG come.PAST.3SG
'Who came?'

f. *SMG*
Pçi irθan?
who.NOM.PL come.PAST.3PL
'Who (=many) came?'

(13) a. *ROf*
Esi kaš kisus aɣapas?
you.NOM how.many.ACC person.ACC.PL love.2SG
'How many/who (=many) do you love?'

b. –Eɣo eki kisus aɣapo.
I.NOM two.ACC person.ACC.PL love.1SG
'I love two people.'

For a summary of the number/[+/–human] distinctions in Pontic Greek and SMG, consider Table 2:

Number	**Case**	**Pontic Greek**		**SMG**
Singular		**+Human**	**–Human**	
	Nom	pios/-on (TPG)/tš (ROf)[1]	pios/pion	pços/-a/-o
	Acc	tinan	do/doxna/doɣna[2] (ROf)/	pçon/-a/-o
			pion/-a (TPG)	
	Gen	tinos	tinos	tinos pç(an)u/-is/-u
Plural	**Nom**	pios.MASC/-a.FEM (TPG)/ pios kaš(i) kisi, tš (ROf)/ pios nomat (TPG)	pios	pçi/-es/-a
	Acc	tinan/tinas (TPG)	do/doxna/doɣna (ROf)/	pçus/-es/a
			pion (ROf)	
	Gen	tinon (TPG)/tinos (ROf)	pion	pç(an)on

Table 2: Number/[+/-human] distinctions on interrogatives in Pontic Greek and SMG.

Fourth, Pontic Greek *do* is genuinely non-D-linked (14) as shown by its contrast to D-linked *pion fai* 'what (food)' (14c). ROf *doxna*, on the other hand, is aggressively non-D-linked (in the sense of Pesetsky's (1982) 'aggressively non-D-linked *wh*-phrases') as

[1] This form, namely *tš*, is also recorded by Dawkins (1914: 67) for Romeyka of Santa and is etymologized as deriving from *tis* (indefinite/*wh*-element in Classical Greek).

[2] The form *doxnan/doɣna(n)* is also attested in our data. If *doxna* derives out of *do*+*na* then the diachronic trajectory of *doxna* indicates amalgamation of *na* with an interrogative C head. Given the strictly synchronic goal of this article we leave this and other diachronic issues aside.

shown in (15), whereas Pontic Greek *do* is less so. In our case, 'aggressively non-D-linked' means that the answer to (15a) cannot be a concrete action, but rather a more generic state of affairs, which is why *doxna* could never be selected with a verb such as "make" – cf. (14b, e). In other words, ROf has lexicalized the D-linking properties to the maximum. Crucially, in SMG this distinction does not hold, as shown in (16), since the same *wh*-word is used regardless of the (non-)D-linking properties of the question (for periphrases marking aggressively non-D-linked environments in SMG, see Roussou, Vlachos & Papazachariou 2013: 482–484):

(14) *ROf*

a. Esi d' epitšes?
you.NOM what.ACC make.PAST.2SG
'What did you make?'

b. ?*Doxna epitšes?
what.ACC make.PAST.2SG

c. Pion fai epitše?
Which.ACC food.ACC make.PAST.3SG
'Which food did she make?'

d. Esi do fai epitšes?
you.NOM what.ACC food.ACC make.PAST.2SG
'What food did you make?'

e. *Esi doxna fai epitšes?
you.NOM what.ACC food.ACC make.PAST.2SG
'What food did you make?'

TPG

f. Do endžen?
what.ACC bring.PAST.3SG
'What did he bring?'

TPG

g. Pion fai epices?
which.ACC food.ACC make.PAST.2SG
'What food did you make?'

(15) *ROf*

a. –Esi doxna aɣapas?
you.NOM what.ACC love.2SG
'What do you love in general?'

b. –Eɣo aɣapo to porpatima, to tšimiθin = emuneθe,
I.NOM love.1SG the.ACC walking.ACC the.ACC sleep.INFIN.its
to maireman...
the.ACC cooking.ACC
'I love walking, sleeping, cooking…'

(16) *SMG*

a. –Apo ola osa mu ipes, apofasises ti θa ftçaksis telika?
Of all that me said.2SG decided.2SG what will make.2SG in the end
'Of all the things/dishes you told me about, have you decided which one you will make in the end?'

b. –Ti kanis ta apojevmata?
What.ACC do.2SG the afternoons
'What do you (usually) do in the afternoon?'

3 *Wh*-patterns and nano-variation in Pontic Greek

In this section, we focus on nano-variation within Pontic Greek (in the way it was conducted in Michelioudakis & Sitaridou 2012): (a) a detailed description of all attested patterns in the syntax of multiple *wh*-phrases in ROf; and (b) nano-variation within Pontic, i.e. between ROf and TPG.

3.1 Wh-*patterns in Romeyka (ROf)*

The major empirical generalisations regarding the distribution of *wh*-items are: (i) all *wh*-phrases move, *in situ* spellout is not an option; (ii) as opposed to other MWF languages, even D-lnked *wh*-phrases are fronted; (iii) if there is a D-linked *wh*-phrase, it goes to the leftmost position; (iv) even echo *wh*-phrases are fronted; (v) putting D-linked *wh*-phrases aside, Superiority is obeyed, without excluding single pair interpretations; (vi) Superiority is only suspended with two or more D-linked *wh*-phrases, which can be fronted in any order. We illustrate and discuss these observations in turn.

First, all *wh*-phrases obligatorily move to the left periphery, where two (17) or more *wh*-phrases (18) can be fronted, with no option to leave any *wh*-phrase *in situ*:

(17) *ROf*

a. Pios tinan endže?
who.NOM who.ACC.HUM bring.3SG
'Who brought whom?

b. *Pios endže tinan?
who.NOM bring.PAST.3SG who.ACC.HUM

c. Tinan doxna endžes?
who.ACC.HUM what.ACC bring.PAST.2SG
'What did you ever bring to whom?'

d. *Tinan endžes doxna?
who.ACC.HUM bring.PAST.2SG what.ACC

e. Pios mo tinan erθe?
who.NOM with who.ACC.HUM come.PAST.3SG
'Who came with whom?'

f. *Pios erθe mo tinan?
who.NOM come.PAST.3SG with who.ACC.HUM

(18) *ROf*

a. –Pios tinan endže? endže?
who.NOM who.ACC.HUM what.ACC bring.PAST.2SG
'Who brought what to whom?

b. –O Yusifis tin Ilaidan ɣalemin endže.
the Yusufis.NOM the.ACC Ilaida.ACC pencil.ACC bring.PAST.3SG
'Yusufis brought Ilaida a pencil.'

In the data considered so far, it is not in principle clear if the ungrammatical options in (17) exemplify the unavailability of postverbal positions for (*wh*-) non-subjects, due to 'some degree' of OV[3] for instance, or indeed the unavailability of *wh*-in-situ. Let us first deal with the former question, namely whether the MWF in ROf is a consequence

[3] Michelioudakis & Sitaridou (2012: 216–217) in a preliminary discussion of head directionality in Romeyka note that, apart from the DP which is head-final (i.c) (as in TPG), there is some indication that the VP can be superficially head-final as well (i.a–b) without, however, excluding unmarked VO orders. Our working hypothesis here is that ROf is underlyingly VO, with OV arising in all/most contexts with objects presented as (new and contrastive) information, possibly also influenced by its contact with Turkish, though we do not

of 'some degree of OV' since this may be relevant in the case of ROf, given its previously noted OV 'tendency'. Put differently, from a typological perspective, in an OV language, it is not clear how there can be any other option other than having all *wh*-phrases precede the verb. In the case of MWF languages like Bulgarian this has never been an issue since Bulgarian is VO, but what about languages such as Latin, Classical Greek, which are considered to be OV? We therefore need some diagnostic for discriminating between VO MWF languages and OV MWF languages. We assume that in an OV non-MWF language (19) should be possible, but not (20). Crucially, this is not to say that (19) is never possible in a MWF language. In fact, it is possible to split (i.e., separate) fronted *wh*-phrases as in (19) in languages of the Serbo-Croatian type (see Rudin 1988; Stjepanović 2003), which are both MWF and VO, though not in languages of the Bulgarian type. It is thus the availability of (20) that serves as a safe diagnostic for MWF, while the unavailability of (19) is a sufficient, though not necessary, condition for MWF in a VO language.

(19) OV *non-MWF language*
WH_1 XP WH_2 … V

(20) VO *MWF language*
WH_1 WH_2 XP … V

The prediction seems to be borne out in e.g. Latin, an OV/V-final language with no MWF, which allows for the equivalent of (19) but not (20), as shown in (21):

(21) *Latin*
a. Quis hoc quando faciet?
who.NOM that.ACC when make.FUT.3SG
'Who will make that when?'
b. *Quis quando hoc faciet?
Who.NOM when that.ACC make.FUT.3SG

On the other hand, in a truly MWF language (20) is expected to be fine. Additionally, a language of the Bulgarian type is also differentiated by ruling out (19). The fact that, in ROf, (22) is the only grammatical option confirms the prediction that the MWF in ROf is not an artefact of OV, but rather an instantiation of true multiple *wh*-movement.

(22) *ROf*
a. *Tinan esi doxna endžes?
who.ACC.HUM you.NOM what.ACC bring.PAST.2SG
b. (Esi) tinan doxna (esi) endžes?
you.NOM who.ACC.HUM what.ACC you.NOM bring.PAST.2SG
'What did you bring to whom?'

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explore this here in any detail (for a discussion of word order and its interaction with information structure, see Sitaridou & Kaltsa 2014 and Neocleous in prep. for TPG and ROf, respectively).

(i) *ROf* (Michelioudakis & Sitaridou 2012: 216–217)
a. škilon exo.
dog.ACC have.1SG
'I have a dog.'
b. O Mehmetis tin Aiše psomin eðotšen.
the.NOM Mehmet.NOM the.ACC Aiše.ACC bread.ACC give.PAST.3SG
'Mehmet gave bread to Aiše.'
c. Tu zu to ɣlitšin pola aɣapo.
the.GEN animal.GEN the.NOM milk.NOM much like.1SG
'I very much like the milk of the cow.'

Second, in ROf, even D-linked *wh*-phrases have to be fronted (23) in the same way as non-D-linked *wh*-phrases do (22), as the ungrammaticality of an *in situ* D-linked *wh*-phrase indicates in (23b):

(23) *ROf*

a. Pion fai$_i$ pios epitšen = æ$_i$?
which.ACC food.ACC who.NOM make.PAST.3SG = it
'Who made what food?'

b. *pios epitšen pion fai?
who.NOM make.PAST.3SG which.ACC food.ACC

c. Pion fai pion patši epitše?
which.ACC food.ACC which.NOM woman.NOM make.PAST.3SG
'Which woman made what food?'

Third, in ROf when any one of the *wh*-phrases is D-linked/referential, it has to appear in the leftmost position. A D-linked *wh*-phrase may also license/co-occur with a co-indexed (resumptive) clitic, even in short matrix questions (23a), just like (other) base-generated XPs, e.g. CLLD topics, and unlike non-referential/non-D-linked *wh*-phrases – consider (24):

(24) *ROf*

a. Background:
Aðatšeka pola faia in, pola patšiðæ i
here many.ACC food.NOM be.3PL many women.NOM be.3PL
'There are many dishes here, many women are here.'

b. Question:
Pion fai$_i$ (= D-linked) pios (= D-linked in the context) epitšen = æ$_i$?
which.ACC food.ACC who.NOM make.PAST.3SG = it
'Who made what food?'

c. Answer:
To xavitšin epika eɣo,
the.NOM pudding.ACC make.PAST.1SG I.NOM
to kartoflin epitšen i Aiše,
the.ACC potato.ACC make.PAST.3SG the.NOM Ayşe.NOM
to seker-pare epitšen i Miriam.
the.ACC cake.ACC make.PAST.3SG the.NOM Miriam.NOM
'I made the pudding, Aiše made the potato dish, Miriam made the cake.'

Fourth, *echo* questions too require *wh*-movement (25); therefore, there appears to be no *wh-in-situ* in ROf at all.

(25) Context A: 'Mehmet loves Ayşe.'
ROf

a. Doxna ipes? Pios tinan aɣapai?
who.NOM who.ACC love.3SG
'Who loves whom?' (ok on both default and echo interpretation)

b. *Doxna ipes? Pios aɣapai tinan?
who.NOM love.3SG who.ACC.HUM
'Who loves whom?' (*on both default and echo interpretation)

Context B: 'Ayşe brought milk to Mehmet.'

c. Tinan doxna endžen? Kala utš ekusa.
who.ACC what.ACC bring.PAST.3SG well NEG hear.PAST.1SG
'What did (s)he bring to whom? I didn't hear well enough.'
(ok on both default and echo interpretation)

Fifth, with regard to Superiority effects in ROf, these are only sensitive to D-linking. More specifically, when all fronted *wh*-phrases are non-D-linked, *wh*-fronting is strictly order preserving, as shown in (26):

(26) *ROf*

a. Pios tinan pote efilise?
who.NOM who.ACC.HUM when kiss.PAST.3SG
'Who kissed whom and when?'

b. *Tinan > pios
who.ACC.HUM > who.NOM

c. *Pote > pios
when > who.NOM

d. *Pote > tinan
when > who.ACC.HUM

e. *doxna > tinan?
what.ACC > who.ACC/DAT.HUM

Interestingly, as (26) shows, ROf exhibits Superiority effects even between the second highest and other lower *wh*-phrases. Moreover, in ROf, *echo wh*-phrases also exhibit Superiority effects, as shown in (27):

(27) Context: 'Mehmet brought many cows to Ayşe.'
ROf

a. Q: Tinan doxna endžes? Kala utš ekusa.
who.ACC.HUM what.ACC bring.PAST.2SG well NEG hear.PAST.1SG
'What did you bring to whom? I didn't hear well enough.'

b. Q: *Doxna tinan endžes? Kala utš ekusa.
what.ACC who.ACC bring.PAST.2SG well NEG hear.PAST.1SG

Furthermore, (28) and (29) illustrate the possibility of having Superiority effects in embedded and long-distance environments respectively in ROf (see also (36b) below for short questions with overt C), which is compatible with Bošković's tacit assumption that a language may lack a strong [+*wh*] in C (and, therefore, obligatory fronting/Superiority) in short-distance/null C matrix questions (like French/Serbo-Croatian) and have such a strong [+*wh*] C in overt C, embedded and long-distance contexts, but not vice-versa, i.e., obligatory fronting/Superiority in null C/short matrix questions also entails such effects in the latter contexts.

(28) Embedded questions
ROf

a. As terume pios tinan iðe.
HORT.PRT see.1PL who.NOM who.ACC.HUM see.PAST.3SG
'Let us see who saw whom.'

b. Eɣo tši ksero pios tinan endže.
I.NOM NEG know.1SG who.NOM who.ACC.HUM bring.PAST.3SG
'I don't know who brought whom.'

c. *Eɣo tši ksero tinan pios endže.
I.NOM NEG know.1SG who.ACC who.NOM bring.PAST.3SG
'I don't know who brought whom.'

d. Eɣo tši ksero pion kitapin pion patši
I.NOM NEG know.1SG what.ACC book.ACC which girl.NOM
endže. (D-linked)
bring.PAST.3SG
'I don't know which girl brought which book.'

(29) Long distance (multiple) *wh*-questions
ROf
Tinan pote ipes iðes?
who.ACC.HUM when say.PAST.2SG see.PAST.2SG
'Whom did you say you saw when?'

Finally, when more than one/all fronted *wh*-phrases are D-linked (in which case they obligatorily give rise to pair-list readings), then Superiority effects are suspended/cancelled altogether – consider (23c), (24b), and (28d) above. On the contrary a genuinely/aggressively non-D-linked *wh*-element can never be the leftmost fronted phrase (30):

(30) *ROf*
a. Pion peðan doxna endžes?
which.ACC boy.ACC what.ACC bring.PAST.2SG
'What did you bring to which boy?'
b. *Doxna {pion peðan / pote} endžes?
what.ACC which.ACC boy.ACC when bring.PAST.2SG

3.2 Nano-variation in Pontic Greek wh-fronting

Turning our attention now to nano-variation within the Pontic Greek varieties, namely ROf and TPG (see Michelioudakis & Sitaridou 2012 for other Romeyka varieties; and Sitaridou 2014 for a phylogenetic tree of the Pontic Greek language group), we note, first, that there are strongly grammaticalised [+/–human] restrictions in ROf (31) and (33), whereas these are absent from TPG (32) and (34). In the latter, the *p*-series and the *t/d*-series mainly mark case distinctions (*p*-: nominative, *t/d*-: accusative, in animates), not [+/–human], as in the former:

(31) *ROf*
a. Tinan aɣapas?
who.ACC.HUM love.2SG
'Whom do you love?'
b. –Aɣapo ton tširi=m.
love.1SG the.ACC father.ACC=my
'I love my father.'

(32) *TPG*
a. –Tinan aɣapas?
who.ACC love.2SG
'Whom do you love?'
b. –Ton kiri=m aɣapo.
the.ACC father.ACC=my love.1SG
'I love my father.'

(33) *ROf*
a. –Pion aɣapas?
what.ACC love.2SG
'What do you love?'
b. –Aɣapo ta za.
love.1SG the.ACC animals.ACC
'I love the animals.'

(34) *TPG*

a. –Tinan aɣapas?
what.ACC.HUM love.2SG
'What do you love?'

b. –Ta vuðæ aɣapo.
the.ACC cows.ACC love.1SG
'I love cows.'

For a more detailed summary of the distribution and reshuffling of [+/–human]/[+/–animate] distinctions in the Pontic Greek varieties, also including genuinely non-D-linked elements, and abstracting away from the (minimal) differences between singular and plural, consider Table 3 (the differences between the two varieties with respect to the distribution of *p-* and *t-* are marked in bold). This picture is also consistent with [+/–human] restrictions found in the Pontic Greek Case system (see also Drettas 1997).

Pontic Greek Variety	Case	+Human	–Human	–Animate	Non-D-linked
ROf	**Nom**	pios/tš	pion	do	–
	Acc	tinan	pion	do	doxna/doɣna
	Gen	tinos	tinos	pion	–
TPG	**Nom**	pios	Pios	do	do
	Acc	tinan	tinan	do	do
	Gen	tinos	tinos	pion	do/pion

Table 3: ±human/±animate distinctions in *wh*-elements across Pontic Greek varieties.

Second, in ROf we observe the presence of the Turkish interrogative particle *mI* (though without vowel harmony) in ROf in: (i) indirect questions (35a) where however it seems to be optional, as shown in (35b) (see Dawkins 1910: 127, 287; 1916: 624; Papadopoulos 1955: 172; 1961: 45; Tombaidis 1988: 67 for Pontic Greek; and Bağriaçik 2013 for Cappadocian); (ii) direct questions of total ignorance, as shown in (35c–c'). Crucially, this interrogative particle is completely absent from TPG (36):

(35) *ROf*

a. –Esi ekseris mi pios tinan aɣapai?
you.NOM know.2SG INTER.PRT who.NOM who.ACC.HUM love.3SG
'Do you know who loves whom?'

b. Esi ekseris pios tinan endže?
you.NOM know.2SG who.NOM who.ACC.HUM bring.PAST.3SG
'Do you know who brought whom?'

c. O Alis tin Aiše aɣapa mi?
the.NOM Alis.NOM the.ACC Ayše.ACC love.3SG INTER.PRT
'Does Alis love Ayše?'

c'. Tšain mi aɣapas?
tea.ACC INTER.PRT love.2SG
'Do you like tea?'

d. *Pios tinan aɣapai mi?
who.NOM who.ACC.HUM love.3SG INTER.PRT
'Who loves whom?'

(36) *TPG*

a. Esi ekseris pios tinan aɣapa?
you.NOM know.2SG who.NOM who.ACC.HUM love.3SG
'Do you know who loves whom?'

b. O Yuras aɣapa tin Anasta?
the.NOM Yuras.NOM love.3SG the.ACC Anasta.ACC
'Does Yuras love Anasta?'

Third, although TPG exhibits MWF in most contexts, it also allows optional *in situ* placement of the lower *wh*-phrase (37) and, therefore, contrasts with ROf where MWF is always obligatory. The optionality, albeit *prima facie* striking, is most likely a case of competing grammars, namely a TPG grammar with systematic MWF and a SMG without one. The existence of competing grammars seems to receive confirmation from other works (Michelioudakis & Sitaridou 2012; Sitaridou & Kaltsa 2014) which reached the conclusion that the TPG informants' judgments were severely affected by SMG, indicating that we are dealing either with heritage speakers (in the sense of Silva-Corvalán 2003) of TPG or with attrited TPG-speakers because of interference of SMG. However, it appears that MWF in TPG is an option only when there is at most one *wh*-word of the *t/d*-series, i.e. when the rest or all of them are of the *p*-series.

(37) *TPG*

a. Pios tinan efilise?
who.NOM who.ACC kiss.PAST.3SG
'Who kissed whom?'

b. Pios efilise tinan?
who.NOM kiss.PAST.3SG who.ACC
'Who kissed whom?'

c. Pios me/mo tinan erθen?
who.NOM with who.ACC/with who.ACC come.PAST.3SG
'Who came with whom?'

d. Pios erθen me/mo tinan?
who.NOM come.PAST.3SG with who.ACC/with who.ACC
'Who came with whom?'

Furthermore, when any of the rest is non-D-linked (hence not from the *p*-series, in which only the nominative form can be non-D-linked), it has to be replaced by a form also used as a non-interrogative indefinite pronoun, in fact like *wh*-words in Mandarin (cf. Huang 1982) and *wh*-words in Classical Greek (cf. Mathieu & Sitaridou 2005, i.a.) and in ROf as in (38). So, for instance, the relevant form in (38a) is: (i) marked with a *ka-* morpheme preceding the interrogative pronoun (*ka* + *tinan*), arguably lack a strong [wh]-feature, and thus may only appear *in situ*. Thus, in (38) any optionality is cancelled and instead *wh-in situ* is the only option for the prepositional indirect object *wh*-phrase. This sharply contrasts with ROf where MWF trivially obtains in the same context (as seen in (17) above); (ii) a prepositional indirect object rather than an accusative form, cf. *tinan* 'whom' which is the form one would expect in ROf. This is because ROf does not allow prepositional indirect objects, unlike TPG (see Michelioudakis 2011; Michelioudakis & Sitaridou 2012).

(38) *TPG*

a. Do endžes se katinan?
what.ACC bring.PAST.2SG to someone.ACC
'What did you bring to whom?'

b. *Do se katinan endžes?
what.ACC to someone.ACC bring.PAST.2SG

c. *Se katinan endžes do?
to someone.ACC bring.PAST.2SG what.ACC

Also, in the absence of non-nominative *p*-words that do not take NP complements, it seems that TPG may employ demonstrative pronouns as substitutes for D-linked NP-less *wh*-phrases, as in (39c) (for the link between demonstratives and *wh*-elements, see Diessel 2003). The same holds for ROf, as shown in (39f). However: (i) TPG allows them only *in situ* (39b) whereas in ROf they have to be preverbal; and (ii) in line with the syntax of double-object constructions TPG allows indirect object PPs, the underlying c-command relationship being direct object > PP (Michelioudakis 2011), but like ROf it also has accusative indirect objects, even though again *tinan* is not allowed in the presence of another non-D-linked accusative: so, we observe that *tinan* 'whom' is not preferred as the accusative case-marked indirect object (39a) or inside a PP c-commanded by a non-D-linked direct object (39b), and, instead, may be replaced by *aton* 'him' (39c), when non-linked, a strategy also compatible with doubling (39e), cf. (resumptive) clitic doubling with D-linked *wh*-phrases in ROf; and (iii) in TPG in multiple *wh*-questioning of a double object, i.e. double accusative, construction, *do* is replaced by *kat* ('something') as shown in (39d).

(39) *TPG*

a. *Do endžen tinan?
what.ACC bring.PAST.3SG who.ACC

b. *Pios kat' endžen se tinan?
who.NOM something.ACC bring.PAST.3SG to who.ACC

c. Do endžes aton?
what.ACC bring.PAST.2SG him
'What did you bring to which one of them?'

d. Pios kat' endžen aton (= D-linked)?
who.NOM something.ACC bring.PAST.3SG him
'Who brought what to whom (= D-linked)?'

e. Aton pios eferen = aton (= D-linked)?
who.ACC who.NOM bring.PAST.3SG = him.CL[4]
'Who brought whom/which one of them (= D-linked)?'

ROf

f. Atenan/atonan doxna eðotšes?
her/him what.ACC give.PAST.2SG
'What did you give to whom?'

Crucially, *tinan* 'whom' becomes possible again in TPG when there is a *wh*-element of the *p*-series, such as another D-linked *wh*-phrase as in (40a), whereas, in its D-linked form, it usually goes back to the prepositional form (*se pion peðan* 'to which boy' rather than *pion peðan* 'which boy') – compare (40b) and the barely grammatical (40c); interestingly the bare (= pronominal) D-linked form is fine in the IO-DO order in (40e).

(40) *TPG*

a. Pion fain tinan eðeces?
which.ACC food.ACC who.ACC give.PAST.2SG
'What food did you give to whom?'

b. Pion fain se pion peðan eðeces?
which.ACC food.ACC to which.ACC boy.ACC give.PAST.2SG
'What food did you give to which boy?'

[4] For an analysis of the pronomimal *–aton* as a weak or (en)clitic pronoun, see Michelioudakis and Sitaridou 2012, and Chatzikyriakidis 2010.

c. ?Pion fain pion patšin eðeces?
which.ACC food.ACC which.ACC woman.ACC give.PAST.2SG
'What food did you give to which woman?'
d. Pion patši pion fain eðeces?
which.ACC girl.ACC which.ACC food.ACC give.PAST.2SG
'What food did you give to which girl?'
e. Pios kat' engen aton (=D-linked)?
who.NOM something.ACC bring.PAST.3SG him
'Who brought what for whom (=D-linked)?'

Regarding D-linked *wh*-phrases of the *p*-series potentially taking NP complements, we observe that in TPG, when *pios*, the subject interrogative pronoun (which may be either D-linked or non-D-linked), co-occurs with a D-linked *wh*-phrase, only *pios* 'who' moves, whereas the D-linked *wh*-phrase stays *in situ* (41c)– which as already said is possible due to interference of the SMG pattern:

(41) *TPG*
a. Aðaceka pola faia in, pola ɣariðes in.
here many.NOM foods.NOM be.3PL many.NOM women.NOM be.3PL
'Here there are many foods, there are many women.'
b. ?Pion fain pios epiken?
which.ACC food.ACC who.NOM make.PAST.3SG
c. Pios epiken pion fain?
who.NOM make.PAST.3SG which.ACC food.ACC
'Who made what food?'
d. To xavits epik=ato eɣo, to kartoflin
the.ACC pudding.ACC make.PAST.1SG=it.ACC I.NOM the.ACC potato.ACC
epicen=ato i Paresa, to pirox epicen=ato
make.PAST.3SG=it.ACC the.NOM Paresa.NOM the dumpling.ACC made.3SG
i Kleona.
the.NOM Kleona.NOM
'I made the pudding, Paresa made the potato dish, Kleona made the dumpling.'

Also, when there are two D-linked *wh*-phrases in TPG: (i) a subject *wh*-D-linked phrase always precedes any other D-linked phrase (42a); (ii) they both have to be obligatorily fronted (42a–c); and (iii) exhibit weak superiority effects (42b):

(42) *TPG*
a. Pios ɣari pion fain epicen?
who.NOM woman.NOM which.ACC food.ACC make.PAST.3SG
'Which woman made what food?'
b. ?Pion fain pion patšin eðeces?
which.ACC food.ACC which.ACC woman.ACC give.PAST.2SG
'What food did you give to which woman?'
c. Pion patši pion fain eðeces?
which.ACC woman.ACC which.ACC food.ACC give.PAST.2SG
'What food did you give to which woman?'

Moreover, a direct object D-linked *wh*-phrase always precedes a bare non-D-linked *wh*-phrase (43a) or prepositional indirect object D-linked *wh*-phrase (43b).

(43) *TPG*

a. Pion fain tinan eðeces?
which.ACC food.ACC who.ACC give.PAST.2SG
'What food did you give to whom?'

b. Pion fain se pion peðan eðeces?
which.ACC food.ACC to who.ACC boy.ACC give.PAST.2SG
'What food did you give to which boy?'

Finally, bare non-D-linked *wh*-words of the *t/d*-series may only precede bare D-linked *wh*-words but are always preceded by *wh* + NP phrases with *p*-words (44):

(44) *TPG*

a. Do endžes aton (= D-linked)?
what.ACC bring.PAST.2SG him
'What did you bring to whom (= D-linked)?'

b. Pios peðas do endžen?
which.NOM boy.NOM what.ACC bring.PAST.3SG
'Which boy brought what?'

c. *Do pios peðas endžen?
what.ACC who.ACC boy.ACC bring.PAST.3SG

To sum up, as far as superiority/ordering effects are concerned, TPG appears to exhibit strong superiority effects when both/all *wh*-phrases are non-D-linked, while in the presence of a D-linked phrase with a *p*-word the following patterns seem to hold: (i) strong superiority effects if a D-linked phrase co-occurs with a bare/non-complemented *wh*-word of the *p*-series, namely *pios* 'who'; (ii) superiority is suspended with two (or more) *wh* + NP phrases, like in ROf and, in fact, SMG; (iii) when co-occurring with non-D-linked phrases of the *t/d*-series, phrases with *p*-words always precede. More generally, it was shown that although both TPG and ROf exhibit MWF superficially, the former shows a considerable degree of optionality, possibly due to contact with SMG. In the analysis which follows we mainly focus on the ROf data, while the way certain distinctions and patterns got reshuffled in TPG may shed further light on what seems to constitute a distinct and consistent type in the typology of multiple questions.

4 Recasting the existing MWF typology

In this section we present our proposal which consists of: (i) the postulation of a fourth type of a MWF language given that ROf is different from all other MWF languages as well as of fourth non-MWF one, namely SMG; (ii) deriving the fourth type from the interaction of focus with *wh*-syntax.

4.1 A fourth type

As a first step we need to establish whether ROf can fit under the existing MWF typology or whether ROf is different from other known types of MWF. To assess this, consider Table 4 which presents the properties for each type of known MWF languages as well as what we have already demonstrated for ROf in section 3.1:

According to Table 4, it becomes clear that, although Bulgarian would be the closest MWF language to which ROf aligns (45)–(46), still ROf does not pattern perfectly with Bulgarian because of two differences. First, in ROf, a D-linked *wh*-phrase can move even above non-D-linked *wh*-subject, e.g. a *pios*-subject (47), whereas the same is not possible over a *koj*-subject in Bulgarian (see Krapova 2002; Jaeger 2004), as shown in (48):

Properties	Russian	Serbo-Croatian	Bulgarian	Romeyka
Superiority with Short-distance matrix, null C	No	No	Yes	Yes
Superiority with Long-distance/ Embedded/ Overt C	No	Yes	Yes	Yes
Superiority with second-third etc. *wh*-phrases	No	No	No	Yes
Obligatory fronting of D-linked *wh*-phrases	No	No	No	Yes
Single-pair readings	Yes	Yes	No	Yes
Superiority with single-pair readings	No	No	N/A	Yes

Table 4: Romeyka against the existing MWF typology.

(45) *Bulgarian*
*Kakvo koj kupuva
what who.NOM buy.3SG
'Who buys what?'

(46) *ROf*
*Tinan pios efilise?
who.ACC.HUM who.NOM kissed.3SG
'Who kissed whom?'

(47) *ROf*
a. pion fai$_i$ pios epitšen = æ$_i$?
which food who.NOM made.3SG = it
'Who made what food?'
b. *pios pion fai epitšen?
who.NOM which food.ACC made.3SG

(48) *Bulgarian* (Krapova & Cinque 2008)
a.*?Koja studentka koj šte izpita?
which student who will examine.3SG
b. Koj koja studentka šte izpita?
who which student will examine.3SG
'Who will examine which student?'

Second, like other MWF languages, ROf also allows single pair readings, but unlike many of these languages (e.g. Serbo-Croatian, Russian, Polish, Romanian, see Bošković 2002), these readings (like all constructions with exclusively non-D-linked *wh*-phrases) are characterised by strict Superiority effects ((49) and (50) vs. (51)).

(49) Context:
ROf [+Superiority, +single-pair]
Eɣo ekusa is kat' aɣorasen
I.NOM hear.PAST.1SG one something.ACC buy.PAST.3SG
ama utš eporesa evrini {pios doxna}
but NEG can.PAST.1SG find.out.INF {who what}
ROf [-Superiority, +single-pair]
/{*doxna pios} aɣorasen
/{*what who} buy.PAST.3SG
'I heard someone bought something but I couldn't find out who bought what.'

(50) *Polish* [–Superiority, +single-pair] (from Bošković 2002)
a. Kto co kupił?
who what buy.PAST.3SG
'Who bought what?'
b. Co kto kupił?
what who buy.PAST.3SG
'What was bought and by who?'

(51) *Romanian* [+Superiority, –single-pair] (from Bošković 2002)
a. Cine ce a cumpărat?
who what have.3SG buy.PAST.3SG
'Who bought what?'
b. * Ce cine a cumpărat?
what who have.3SG buy.PAST.3SG
'What was bought and by who?'

Given these differences, the theoretical assumptions that derive MWF of the Bulgarian type, namely movement of one, the highest, *wh*-phrase to Spec-C followed by (potentially multiple/unordered) focus movement, would make at least two wrong predictions in the case of ROf. Therefore, ROf indeed seems to instantiate a distinct type of MWF. Crucially though, such a solution appears to be challenging for the existing typology since the postulation of another MWF type would create a gap in the otherwise symmetric pairing between MWF and their non-MWF counterparts. It follows that the crucial question is whether ROf can be found to correspond to any known non-MWF language, since such a finding would offer further motivation for expanding the existing MWF typology. We argue that there is such a language: ROf, in fact, correlates with SMG. In what follows we show that SMG is not like any other non-MWF languages, for instance English, and that, while multiple questions with more than two *wh*-phrases in ROf differ from those of other MWF languages, in fact they match the behaviour of their counterparts in SMG. Our arguments are as follows.

First, in SMG, Superiority is sensitive to D-linking and (see also Anagnostopoulou 2003 for the original observation), whereas in English this is not the case (52d–e) and (53d–e):

(52) a. Context A: There was a murder and inspector Montalbano wants his assistant to find out who witnessed the incident and what they saw.
SMG
b. Q: Maθe: pjos iðe ti?
learn.IMP who.NOM see.PAST.3SG what.ACC
c. * Maθe: ti iðe pços?
learn.IMP what.ACC see.PAST.3SG who.NOM
'Find out who saw what.'
d. Who saw what?
e. * What did who see?

(53) a. Context B: Mary, Jane and Bill were asked to cook one dish each for a dinner party. So, we ended up having lasagne, mousaka and Beijing duck. Everything was great, but I am wondering:
(D-linked)
b. Q: Telika pços majiepse ti?
finally who.NOM cook.PAST.3SG what.ACC

c. Telika ti majirepse pços?
finally what.ACC cook.PAST.3SG who.NOM
'In the end, who cooked what?
d. Finally, who cooked what?
e. *Finally, what did who cook?

Second, in SMG, an '*in situ*' *wh*-element is not really *in situ*. As Sinopoulou (2008) convincingly shows, the *in situ wh*-phrases in Greek multiple questions precede all vP-internal constituents regardless of D-linking, as shown in (54)–(56):

(54) *SMG*
Pote aɣorase (?*o Yanis) ti (o Janis)?
when buy.PAST.3SG the.NOM Yanis.NOM what.ACC the.NOM Janis.NOM
'When did Yanis buy what?'

(55) *SMG*
Pote doulepse (?*i Anna) pu (i Anna)?
when work.PAST.3SG the.NOM Anna.NOM where the.NOM Anna.NOM
'When did Anna work where?'

(56) *SMG*
Pços iðe (?*tin tenia) pu (tin tenia)?
who.NOM watch.PAST.3SG the.ACC movie.ACC where the.ACC movie.ACC
'Where did who watch the movie?'

Crucially, in English we observe that the low *wh*-phrase has to follow all vP-internal constituents, as shown in (57):

(57) Who saw (*where) the movie (where)?

Third, like ROf, SMG exhibits Superiority effects even beyond the second highest *wh*-phrase (58) (see Şener 2006; 2010 for similar effects in Turkish):

(58) *SMG*
a. Pços aɣorase ti pu?
who.NOM buy.PAST.3SG what.ACC where
'Who bought what where?'
b. ?*Pços aɣorase pu ti?
who.NOM buy.PAST.3SG where what.ACC
'Who bought where what?'

Examples like (59) show that ROf aligns with SMG (58):

(59) *ROf*
Pios doxna putšeka aɣorase?
who.NOM what.ACC where.there buy.PAST.3SG
'Who bought where what?'

Therefore, on the basis of the above argumentation, SMG and ROf may constitute a fourth non-MWF/MWF pair given that neither SMG is like English nor is ROf like Bulgarian. According to Bošković (2002), MWF languages exhibit Superiority effects, where the corresponding non-MWF languages require *wh*-movement. If we disregard the precise target of what Bošković calls '*wh*-movement' (i.e. whether this is a unique $C_{[+wh]}$ position or not), then there is a clear parallelism between SMG and ROf: (i) in SMG, all *wh*-phrases necessarily move, even echoic ones (which, at most, are moved to the left periphery);

in ROf, all *wh*-phrases are fronted, even echoic ones (25); (ii) in SMG, Superiority is sensitive to D-linking, i.e. D-linked *wh*-phrases in multiple questions tend to stay low, no matter how high their base position is; in ROf, D-linked *wh*-phrases are fronted, but are not subject to Superiority; (iii) single-pair questions in SMG require fronting of the highest *wh*-phrase; likewise, in ROf single-pair questions obey Superiority. This would lead us to revise the existing *wh*-typology, as shown in Table 5, so that it includes a fourth pair, namely ROf-SMG. Their equivalence lies in that: (a) nothing is really left *in situ;* and (b) all *wh*-movement is sensitive to Superiority, except when a *wh*-phrase is D-linked:

Non-MWF	**MWF**
Chinese	Russian
French	Serbo-Croatian
English	Bulgarian
SMG	Romeyka

Table 5: Four types of *wh*-languages.

More specifically, we put forward the proposal that in both dialectal groups, namely SMG and Pontic Greek, all phrases which are inherently (narrowly) focused necessarily move to designated peripheral positions. Sinopoulou's (2008) analysis relies on the assumption that '*in situ*' *wh*-phrases actually move to the low/vP-periphery (see Belletti 2004), in fact, to the same position that postverbal foci move to (60):

(60) SMG
Filise (TON YANI) i Maria (*TON JANI)
kiss.PAST.3SG the.ACC Yanis.ACC the.NOM Maria.NOM the.ACC Yanis.ACC
'Maria kissed YANIS.'

An important prediction of our analysis is then that in ROf the Focus position in the low periphery above the low vP should be unavailable. The prediction is indeed borne out for ROf (for the same claim in Pontic Greek see Sitaridou & Kaltsa 2014). First, consider the unavailability of focus below the verb in ROf (61), i.e. anywhere but the leftmost position:

(61) ROf
Efilese (*tin Aiše) o Alis
kiss.PAST.3SG the.ACC Ayşe.ACC the.NOM Alis.NOM
(*tin Aiše).
the.ACC Ayşe.ACC
'Alis kissed Ayşe.'

Second, consider some of the diagnostics in (62) and (63):

(62) ROf
a. – Pios erθe?
who.NOM come.PAST.3SG
'Who came?'
ROf
b. – O Mehmetis erθe.
the.NOM Mehmetis.NOM come.PAST3.SG
'Mehmetis came.'
ROf – for a few speakers only

b'. – Erθe o Mehmetis.
come.PAST.3SG the.NOM Mehmetis.NOM
'Mehmetis came.'
SMG

c. – Irθe o Mehmet.
come.PAST.3SG the.NOM Mehmet.NOM
'Mehmet came.'

(63) *ROf*

a. – Opse pios epie?
yesterday who.NOM leave.PAST.3SG
'Who left yesterday?'
ROf

b. – Opse o aðelfo=m epie.
yesterday the.NOM brother.NOM=my leave.PAST.3SG
'Yesterday my brother left.'
SMG

c. – Xθes efije o aðelfos mu.
yesterday leave.PAST.3SG the.NOM brother.NOM my
'Yesterday my brother left.'

If the existence/activation of the low periphery is indeed subject to parametric variation, then a crucial difference between SMG and ROf/TPG is the availability of a vP-periphery in the former but not in the latter.

4.2 Focus and wh*-syntax in the fourth type*

The patterns observed challenge Bošković's (2002; 2007) account superficially, but do not contradict the main insights and the essence of his analysis. On the contrary, the proposal we put forth is a natural extension of this line of thought. Let us first briefly present Bošković's original proposal, especially his (2007) technical implementation. For Bošković, what differentiates MWF with Superiority from MWF without Superiority is the availability of movement to Spec-C in the former but not in the latter. All movement of *wh*-phrases that is not movement to Spec-C is focus-movement. Thus, while C is an Attract-1 head, in Bošković's terms, which attracts just the highest *wh*-phrase, Focus is an Attract-all head attracting all *wh*-phrases available to the same position, hence no specific order of movements 'is preferred by Economy' (Bošković 2007: 6). Furthermore, adopting Hagstrom's (1998) semantics of questions, Bošković (2007) assumes that single-pair (SP) readings with two *wh*-phrases obtain when both of them are in the scope of a Q morpheme, an existential quantifier over choice functions, which is merged right below CP. Movement to Spec-C across Q in this position gives rise to a Relativised Minimality violation (64).

(64) a. [SP reading]
*WH_i C Q [t_i wh]

b. [PL reading]
WH_i C [t_i wh + Q]
test

In cases of movement to Spec-C, then, SP readings are blocked and the interrogative interpretation is made available through merging Q directly with a *wh*-phrase not moving to Spec-C, giving rise to pair-list (PL) readings only. An empirical generalisation following from this, then, is that MWF with Superiority effects should always be incompatible with SP readings, and this is exactly why our findings are apparently paradoxical with respect to this sort of analysis.

The ROf data do not contradict the idea that Superiority is associated with an Attract-1 head, they only challenge the idea that C may be the only such head. We propose that languages of the fourth type in the typology of multiple questions are characterised by the availability of two Focus heads, rather than one, the higher of which (at least) has an Attract-1 feature. ROf and SMG (i) pattern together by sharing an extra focus head attracting certain types of focused elements, most notably new information foci, and (ii) differ in placing it in the high and the low periphery respectively. The availability of new information focus in the left periphery, possibly being the left peripheral projection that immediately dominates TP, has been independently shown to be the case in TPG (see Sitaridou & Kaltsa 2014) so it may well be so in the case of its closest cognate, namely ROf (see also Neocleous, in prep.). While new-info Focus in ROf/TPG is arguably lower than the Attract-1 Foc^0 which attracts the highest *wh*-phrase, new-info Focus in SMG is arguably the same head that attracts *wh*-phrases to the vP-periphery (see above).

Note that apart from the higher of the two Focus-related heads, it is also likely that the new-info Focus head too has an Attract-1 feature. In the case of SMG at least, Superiority effects arise even between the second and the third *wh*-phrase (65) indicating that, of the non-left-peripheral *wh*-phrases, one is attracted by low Focus, while the other one is probably left *in situ* (66). If new-info Focus is responsible for this Superiority effect, then it is probably the highest projection of the vP-periphery and arguably the left periphery of ROf/TPG is the mirror image of the SMG vP-periphery.

(65) *SMG*

a. Pços filise pça(n) pote?
who.NOM kiss.PAST.3SG who.FEM.ACC when
'Who kissed whom when?'

b. *Pços filise pote pça(n)?
who.NOM kiss.PAST.3SG when who.FEM.ACC

(66) Pçon iðe pu (*pote) o Yanis (?pote)?
who.ACC see.PAST.3SG where when the.NOM Yanis.NOM when
'Who did John see where (and) when?'

The availability (in different positions) of an additional Attract-1 Focus head in both ROf and SMG is the first main tenet of our proposal, the other two being (a) *wh*-fronting as Focus-movement in both languages, but also (b) the availability of *wh*-movement to Spec-C in matrix questions in ROf but not in SMG. We will discuss and motivate these additional assumptions in turn.

Like in ROf (and unlike in English), in SMG too, *wh*-fronting in multiple questions does not necessarily result in pair-list interpretations, but is also compatible with single-pair readings, as the use of a multiple question in a context such as the one in (67) suggests:

(67) Context: I am the manager in a store in a small village where the sales are going down the hill and therefore I monitor them closely. I popped in the loo but I caught someone out of the corner of my eye exiting the shop and holding a bag, but I was unable to recognise him even though I know everyone in the village. So, I approach the shop assistant and ask:
SMG
Ti sinevi? Pços aɣorase ti?
what.ACC happen.PAST.3SG who.NOM buy.PAST.3SG what.ACC
'What happened? Who bought what?'

This is in fact compatible with the proposal put forth in Tsimpli (1995) and Alexopoulou & Baltazani (2012: 22–23) that "the *wh*-item in direct questions moves like a focused item, i.e. it undergoes focus-movement, rather than *wh*-movement" with "the latter taking place only in indirect questions". Evidence for this distinction comes from the fact that in matrix/direct questions the *wh*-item is the only focused element, hence the only element that can be associated with sentential stress, while in indirect questions there can also be another focused item, e.g. the rightmost constituent *Eleni* 'Helen' in (68), and sentential stress is aligned with it.[5]

(68) *SMG* (from Alexopoulou & Baltazani 2012: 22–23)

a. Direct question:
me PÇON$_{F1}$ xorepse i Eleni /*i ELENI] ~$_1$ CC
with who.ACC dance.PAST.3SG the.NOM Eleni.NOM the.NOM Eleni.NOM
'Who did Eleni dance with?'

b. Indirect question:
Rotisa [me pçon$_{F1}$ xorepse$_{F1}$ i ELENI$_{F1}$] ~$_1$ CC
I-asked with who.ACC danced.3SG the Eleni.NOM
'I asked who Eleni danced with.'

If we assume that, like SMG, ROf possesses a new-info Focus projection for Focus-movement of *wh*-phrases, alongside (and below) the Attract-1(leftmost) Focus head we proposed above, then we straightforwardly derive multiple fronting with Superiority effects, but still potentially in the scope of Q (cf. 64), i.e. compatible with a single-pair interpretation. ROf simply places in its left periphery the two Focus projections that host *wh*-items in SMG.

In Tsimpli's (1995) original analysis, in direct questions the *wh*-item moves to the Specifier of a Focus Phrase (FP) at the left periphery while indirect questions involve ordinary *wh*-movement to Spec-CP. While we take the first half of the proposal to be necessarily true, as it also matches the interpretational facts illustrated in (67), we take (68b) to suggest that *wh*-phrases *may* move to Spec-CP in indirect questions, while this is impossible in direct ones. Nevertheless, single-pair interpretations are also available in indirect questions, as e.g. the question in (67) can easily be embedded, presupposing the same context as above, and banning the presence of another focused phrase within the embedded CP (69).

(69) *SMG*
Ton rotisa [pços aɣorase ti]
and ask.PAST.1SG who.NOM bring.PAST.3SG what.ACC
'I asked him who bought what.'

Therefore, indirect questions in SMG only activate the Spec-CP position when sentential focus is aligned with a lower constituent. Notably, in this case, the stressed constituent cannot undergo Focus-movement (70),[6] which also explains the unavailability of multiple *wh*-fronting in indirect questions in SMG.

[5] CC stands for Büring's (2008) "Context Connect", an operator which links the focused element (that bears the same index) to an antecedent which is a member of the set of propositions/alternatives triggered by focus. In sentences with multiple (/second occurrence) focus, it indicates which focused element gives rise to alternatives that define the appropriate context for such an utterance (only utterances which entail a member of the set of alternatives are appropriate context).

[6] According to Roussou (2000), focalization is also possible to the left of a ([+wh]) C; this is marginally more acceptable than (69), but interestingly enough it apparently constitutes one of those few cases that

(70) *SMG*

*rotisa [me pçon$_{F1}$ i ELENI$_{F1}$ xorepse$_{F1}$] ~$_1$ CC
ask.PAST.1SG with who.ACC the.NOM Eleni.NOM dance.PAST.3SG
'I asked who Eleni danced with.'

We now turn to the properties of C$_{[+wh]}$ in ROf, which lead us to assume that *wh*-movement to Spec-C is possible, though not obligatory, even beyond indirect *wh*-questions. We first discuss how ROf is like SMG as far as indirect questions are concerned. Recall that in ROf, but not in TPG, interrogatives may feature an optional *mI* morpheme. We tentatively take this to be a fusional morpheme realising a [+wh] C head packaged with Hagstrom's Q morpheme. We observe that *mI* is optional in indirect questions and then compatible with single pair readings, as it surfaces to the left of both *wh*-phrases and therefore scopes over them both. While it is optional in embedded interrogatives, it is obligatory in direct/matrix questions of total ignorance. It is clearly a phonological clitic, as it always requires a phonological host to its left. In embedded interrogatives this can be the matrix verb as in (71a), while in matrix questions it attaches to anything moved into the left periphery (e.g., 71b), with the exception of *wh*-phrases. If our hypothesis about *mI* realizing C+Q is on the right track, then the fact that it is never crossed by a *wh*-phrase is correctly ruled out as a Relativised Minimality violation, as in (64a).

(71) *ROf*

a. Esi ekseris mi pios tinan aɣapai.
You know.2SG INTER.PRT who.SG.NOM who.SG.ACC loves
'You know who loves whom.'

b. Tšain mi aɣapas?
tea.ACC INTER.PRT love.2SG
'Do you like tea?'

Given that *mI* is obligatory in order to form yes/no questions, it is clear that C is present and active in direct questions in ROf, and we think that it is in principle available in direct *wh*-questions too. *Wh*-phrases, then, unlike in SMG, may move to Spec-C, but do not have to, as the availability of single pair readings indicates. Independent evidence for the availability of *wh*-movement to Spec-C seems to come from the fact that ROf allows for *wh*-(sub)extraction out of DPs and stranding of the restriction of a *wh*-phrase (72) (which is impossible in SMG, see Mathieu & Sitaridou 2004); the extracted PP must be in Spec-CP, if Bošković (2007: 6) is right in speculating that "the restriction of a *wh*-phrase cannot be stranded under non-*wh*-fronting, i.e. focus movement, so that [such examples] then must involve real *wh*-movement".[7]

(72) *ROf*

a. [Aso pion xorion]$_i$ θelis [leftokaræ t$_i$]?
from.the.ACC which.ACC village.ACC want.2SG hazelnut.ACC.PL
'From which village do you want hazelnuts?'

favour/improve only under cliticisation of the dislocated phrase (i) (see Skopeteas 2014 for a more precise description of the relevant contexts). Therefore, this position cannot be a landing position for multiple *wh*-fronting either, as *wh*-movement is in general incompatible with cliticisation, with the exception of certain *wh*-topics, under certain discourse conditions which are not met in the case of pre-C focalization.

(i) *SMG*

??Rotisa [ti MARIA pços ?* (tin) iðe]
I asked the Mary.ACC who.NOM her.ACC.CL saw.3SG
'I asked who saw MARY.'

[7] Note that, if this is correct, then the implication is that *wh*-movement to Spec-CP must be available alongside multiple Focus-fronting also in the Slavic languages that allow MWF with single pair readings (and without Superiority) and left-branch extractions at the same time. Presumably, this can be formalised in terms of the strength of the [+wh] feature in C. As an anonymous reviewer points out, "the possibility of sluicing can [also] be taken as a confirmation of this, see Stjepanović (1999) in this respect", while Stjepanović (2010) discusses "interesting interactions between left-branch extraction and the availability of different readings in questions".

b. [Aso pion memlecetin]$_i$ θelis/eçis [araban t$_i$]?
from.the.ACC which.ACC country.ACC want.2SG/have.2SG car.ACC
'From which country do you want/have a car?'

Then, we have a straightforward way to account for Superiority effects beyond the first two fronted *wh*-phrases in ROf (27a). When this happens the highest two *wh*-phrases are attracted by two Attract-1 heads, namely a [+wh] C and the highest Focus head.. The former head guarantees that the highest *wh*-phrase will surface in the leftmost position, while the latter guarantees that the highest of the remaining *wh*-phrases will surface in the second position. To recapitulate, the three core analytical claims that account for ROf and SMG as a pair in a potential typology of MWF/non-MWF pairs are the following (summarised in Table 6):

(a) they both have a Focus head attracting new information foci and *wh*-phrases; in ROf it is part of the CP-periphery, while in SMG it is in the low/vP-periphery;
(b) in SMG, *wh*-fronting is focus-fronting; this Focus projection exists in ROf too, as an Attract-1 head, alongside the aforementioned (new information) Focus head;
(c) *wh*-fronting can be *wh*-movement to Spec-CP in embedded questions but not in matrix/direct questions in SMG; in ROf, *wh*-movement is possible but not obligatory in both types of interrogative clauses.

	ROf	**SMG**
New information/Attract-1 Focus	CP-periphery	Low periphery
wh-fronting as focus fronting	Yes	Yes
wh-movement to Spec-CP	Possible	Possible in indirect questions only

Table 6: The fourth MWF type and its non-MWF counterpart.

Schematically, then, a partial representation of the left periphery of ROf is as in (73) (see also Grohmann 2003 for two focus positions in the CP-periphery), which essentially matches the representation of the left periphery as independently proposed in Sitaridou & Kaltsa (2014: 23) for TPG[8]:

(73) $[_{CP}\ C_{[+Q=mi]/[+wh]=\text{Attract-1}}\ [_{\text{FocusP}}\ \text{Foc}^0{}_{\text{Attract-1}}\ [_{\text{FocusP}}\ \text{Foc}^0{}_{[\text{new info}]}\ \ldots$

As for the asymmetry between non-D-linked and D-linked *wh*-phrases with regards to Superiority (see 25–26, as well as (29d) above), it would be reasonable to argue that D-linked *wh*-phrases are in fact *wh*-topics (in the spirit of Grohmann 2006), which simply target

[8] Sitaridou & Kaltsa (2014: 23) propose the following hierarchy of projections for the left periphery of TPG: TopicP … ContrastP … (TopicP) … InfoFocP … TP. There is suggestive evidence that in ROf too new information foci and contrastive elements, e.g. contrastive topics, can co-occur in the left periphery, with the latter preceding the former (and with contrastive foci competing for the same position as contrastive topics). So, e.g. in (i) the subjects are contrastive topics and objects are new information foci, and they are both preverbal (i.e. pre-TP), with the former preceding the latter. In (ii), where objects are old information and contrastive, while subjects are new information foci, objects precede subjects:

(i) (Neocleous in prep.: 14)
Q: {*What did Alis and Mehmetis buy?*}
[aˈʎis]$_{\text{C-Top}}$ [ˈenan bonˈtʰoʎin]$_{\text{I-Foc}}$ eˈpiren,
Alis.NOM a.ACC trousers.ACC buy.PAST.3SG
[o mehˈmetis]$_{\text{C-Top}}$ [ˈenan gaˈzaçin]$_{\text{I-Foc}}$ eˈpiren.
the.NOM Mehmetis.NOM a.ACC vest.ACC buy.PAST.3SG
'Alis bought trousers, Mehmetis bought a vest.'

(ii) (Neocleous in prep.: 14)
Q: {Who bought the trousers and the vest?}
[to ponˈtʰoʎin]$_{\text{C-Top}}$ [aˈʎis]$_{\text{I-Foc}}$ eˈpiren,
the.ACC trousers.ACC Alis.NOM buy.PAST.3SG
aˈma [to kaˈzaçin]$_{\text{C-Top}}$ [o mehˈmetis]$_{\text{I-Foc}}$ eˈpiren.
but the.ACC vest.ACC the.NOM Mehmetis.NOM buy.PAST.3SG

different peripheral positions, namely Topic positions, which are known to be possible above Focus projections, in both peripheries. Such a Topic position would be an Attract-all head, allowing for movement of any D-linked *wh*-phrases in any order, i.e. without any Superiority effects (74). Compelling evidence from this comes from the fact that D-linked *wh*-phrases in ROf license resumptive clitics even in short-distance matrix questions (cf. (23a), (24b) and (47a)).

(74) $[_{CP}\ C_{[+Q/[+wh]=Attract\text{-}1}\ [_{TopicP}\ Topic_{Attract\text{-}all}\ [_{FocusP}\ Foc^{0}{}_{Attract\text{-}1}\ [_{FocusP}\ Foc^{0}{}_{[new\ info]}\cdots$

Note that even in SMG, when a *wh*-phrase is clearly D-linked, although ungrammatical in most cases (75a), clitic resumption is possible or even favoured "in particular contexts, e.g. quiz questions, rhetorical questions, etc." (Skopeteas 2014: 8), cf. (75b-c).

(75) *SMG* (from Skopeteas 2014: 8)

a. PÇON (*ton) sinadise o Yanis?
who.ACC him.CL meet.PAST.3SG the Yanis.NOM
'Who did Janis meet?'

b. ?ðes afta ta vivlia. Pes = mu,
look.IMPER.2SG this.ACC.PL the.ACC book.ACC.PL tell.IMPER.2SG = me
pço apo afta to aporiptis edelos?
which.ACC of them it.ACC.CL reject.2SG completely
'Look at these books. Tell me, which one would you refuse to read?'

c. (retrieved from the web, 11.4.2012 in Skopeteas 2014: 9)
PÇON IPURɣO$_i$ ton$_i$ adipaθi akoma ce o kaθreptis?
who.ACC minister.ACC him.CL dislike.3SG even and the.NOM mirror.NOM
'Which minister is such that even the mirror dislikes him?'

So, as already noted, ROf is a MWF language in which both non-D-linked and D-linked (and, in fact, even echoic) *wh*-phrases are obligatorily fronted. Even though this is not to be found in MWF languages of the Slavic type, Basque also exhibits a strikingly similar behaviour with respect to D-linked and echoic *wh*-phrases (Reglero 2003; 2004). In fact, in Basque *wh*-topics occupy the leftmost position, and among them "the highest *wh*-phrase is attracted first" (Reglero 2004: 29), while any *wh*-foci would have to appear below with no Superiority effects. Reglero also proposes a head with a [Topic] feature attracting *wh*-topics, though she assigns an Attract-1 property to it, to capture the ordering facts. This same head carries an Attract-all discourse feature, which then attracts both *wh*-topics and *wh*-foci in any order. This pattern clearly parallels the ROf pattern we attempted to derive above and, at the same time, is its reverse: in ROf what we could call *wh*-foci, in Reglero's terms, are strictly ordered/move in an order-preserving fashion, while *wh*-topis are freely ordered. This was captured as the result of an Attract-1 Focus$_{new\ info}$ head attracting the highest *wh*-focus and an Attract-all Topic head. It seems reasonable to assume that this Attract-1 Focus$_{new\ info}$ head is only available in VO languages, such as ROf and SMG, while focus-movement of new information foci is probably not (need not be) an option in consistently and overtly OV languages, i.e. in languages where preverbal complements are unmarked, such as Basque. Then this straightforwardly predicts that Basque may afford to have an Attract-1 Topic feature, but not an Attract-1 discourse feature for any other *wh*-phrase.

Finally, separating an Attract-all Topic projection from an Attract-1 [+wh] C has the interesting consequence of making even the TPG facts fall into place, with only one additional assumption, putting aside cases of *in situ*, which are clearly either due to SMG interference or continuation of the ancestral state, i.e. Hellenistic or Medieval Greek. In

ROf, all D-linked *wh*-phrases/*wh*-topics must precede non-D-linked ones, in any order, as a result of an Attract-all Topic head above the two Focus projections. In TPG, however, even though Superiority effects are also suspended with more than one D-linked phrase, in the presence of a non-D-linked *wh*-phrase alongside (at least) one D-linked phrase, apparent Superiority effects arise, as we saw in the end of section 3.2 above. In fact, given the reshuffling of the morphological paradigm in TPG, it is only non-D-linked *wh*-items of the *p*-series that must precede D-linked *wh*-phrases. These facts cannot of course be captured in terms of just a head responsible for Superiority, namely an Attract-1 Focus, below Topic. Arguably, whatever precedes D-linked *wh*-phrases is in Spec-CP. Therefore, TPG has preserved *wh*-movement to Spec-CP in direct questions, as in ROf, the difference being that it obligatorily attracts *wh*-items of the *p*-series. Recall that in ROf *p*-items are used for *wh* + NP phrases, otherwise /p/ is a marker of [-human]. In TPG, outside [wh + NP] phrases, the *t/p* distinction corresponds to case distinctions only and does not distinguish [+human] from [–human]. The *t* series is morphologically and etymologically closer to indefinite pronouns, which may also be used as *wh*-items under focalisation. Thus, by losing its association with [–human], */p-/* may have been reanalysed as a purely interrogative/+wh marker, which can only be checked under overt movement to a [+wh] C, when not D-linked. Under this additional assumption, TPG has an underlying representation of its left periphery (see also Sitaridou & Kaltsa 2014), which is identical to the one of ROf (73).

In sum, everything that differentiates TPG from ROf is ultimately derivable from a reanalysis affecting the features of a subset of the *wh*-paradigm, rather than the features of any functional heads. Also, another point of variation concerns the lexicalisation of C[+Q]. The fact that all variation is about individual lexical items and not even intentionally definable sets/classes of lexical items justifies our characterisation of the variation observed as 'nano-variation' (compatible with the definition of 'nano-parametric' variation in Roberts 2012).

5 Conclusion

In this article we have discussed the formation of *wh*-questions in different little-discussed varieties of Greek, for which we have shown that there is significant micro- and nano-variation. In particular, we discussed Pontic Greek varieties, especially Romeyka, which exhibit MWF, in sharp contrast to SMG. On the basis of strong empirical evidence from Romeyka, it was claimed that Bošković's (2002) typology has to be expanded to a fourth pair, namely SMG/Romeyka (and TPG to varying degrees), and we proposed a constrained theory to account for the observed patterns. To account for the differences between the two members of the pair, we put forth the potentially far-reaching proposal that the availability of peripheral positions and their activation in the left or low periphery may be a point of parametric variation. Then, we proposed that, still complying with Bošković's (2007) theory of Attract-1/all, certain Focus heads can be Attract-1, thus deriving the compatibility of Superiority with single pair readings. Finally, we have presented some speculations about a potential correlation between word order/head directionality in the clausal domain and the kind of information structure-related head (e.g. Topic vs. Focus) that can take on an Attract-1 feature.

List of Abbreviations

1 = first person, 2 = second person, 3 = third person, ACC = accusative case, CL = clitic, DAT = dative case, FEM = feminine, FUT = future tense, GEN = genitive case, HORT = hortative, HUM = human, IMP = imperative, INF = infinitive, INTER = inter-

rogative, MWF = multiple *wh*-fronting, NEG = negation marker, NOM = nominative case, PAST = past tense, PL = plural number, PNP = perfective aspect, nonpast tense, PRT = particle, ROF = Romeyka of Of, SG = singular number, SMG = Standard Modern Greek, SUBJ = subjunctive, TPG = Thessaloniki Pontic Greek

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Competing Interests

The authors declare that they have no competing interests.

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