Floating Quantifiers in Tatar

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The paper concerns the distribution and the structure of Tatar floating quantifiers. There are three types of floating quantifiers in Tatar. Whereas the adjectival construction does not exhibit floating, the two others, which I argue to be derived from a partitive DP, can float. Another important question discussed in the paper is whether Tatar floating quantifiers are created under A or A'-movement.

1. Introduction

The discussion about the nature of floating quantifiers[1] is usually centered around the question whether FQs are derived by Q stranding or whether they are adverbials semantically connected to one of the arguments. First approach was proposed by (Sportiche 1988) and (Miyagawa 1989) and developed in (Shlonsky 1991, Bošković 2004) and many others. According to (Sportiche 1988) Qs are DP adjuncts left behind the moved DP:

(1) $[_{DP}]_i \dots [_{DP} Q\ t_i]$

(2)   The children$_i$ (all t_i) would (all t_i) have (all t_i) been (all t_i) doing that. (Kayne 1975)

Alternative approach assumes that FQs are adverbial adjuncts, see, for instance, (Bobaljik 1995, Doetjes 1997 and Brisson 1998). (Doetjes 1997) argues that adverbial QPs contain an empty noun phrase, which must (locally) bind the trace of the moved DP:

(3) $[_{QP} Q\ [_{DP} pro]]$

(4) $[_{XP} QP_i \dots [_{XP} \dots t_i \dots]]$

In this paper I consider FQ in Tatar and try to incorporate them in the theory of QF. First I'll address the main properties of FQ in Tatar, then I'll analyze their internal structure and finally we'll see whether Tatar conform to the predictions made for FQ in the syntactic theory.

2. Quantifier phrase in Tatar

Let me consider in brief the main properties of floating quantifiers in Tatar.

2.1. Constructions with quantificational noun phrases in Tatar

There are three ways to use quantifiers in Tatar:

(5) a. beten   bärän-(när)-**ne**   **AQ**
          all   ram-PL-ACC

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[1] List of abbreviations: Q(P) – quantifier (phrase), FQ – Floating Quantifiers, QF – Quantifier Float, AQ – Adjectival Quantifier, GQ – Genitive Quantifier, DCQ – Double Case Quantifier, RC – Relative Clause, SC – Small Clause, WCO – Weak Cross Over.

b.	bärän-när-**neŋ**	beten-**e-se-n**	**GQ**
	ram-PL-GEN	all-**3-3-ACC**	

c.	bärän-när-**ne**	beten-**e-se-n**	**DCQ**
	ram-PL-**ACC**	all-**3-3-ACC**	
	'all (the) rams'		

In the first case, (5.a), Qs resemble adjectives (and are placed before them, but after the possessor and RC). I'll call them adjectival quantifiers (AQs). In cases like (5.b) the quantifier follows the quantified genitive DP and is marked with possessive affixes just like the head of possessives does (Genitive Quantifier). Third type of constructions, (5.c), is formed via preposing a quantified DP to the quantifier, both case-marked (Double Case Quantifier). In the latter case the quantifier also bears the morpheme complex -*ese*, which presumably consists of the two 3rd person possessive affixes.

2.2. Floating

Floating is possible only with GQ and DCQ, not with AQ:

(6)	a.	*zufär	bärän-när-ne	kičä	beten	suj-dy
		Zufar	ram-PL-ACC	yesterday	all	slaughter-PST

	b.	zufär	bärän-när-neŋ	kičä	beten-ese-n	suj-dy
		Zufar	ram-PL-GEN	yesterday	all-3-ACC	slaughter-PST

	c.	zufär	**bärän-när-ne**	kičä	**beten-ese-n**	suj-dy
		Zufar	ram-PL-ACC	yesterday	all-3-ACC	slaughter-PST
		'Yesterday Zufar slaughtered all (the) rams.'				

2.3. Number

The plural markers are not preferred with ordinary numerical noun phrases (AQs).[2] On the contrary, they are obligatory on the quantified DP in GQ and DCQ constructions:

(7)	a.	ike	malaj	/	$^{??}$malaj-lar		**AQ**
		two	boy		boy-PL		

	b.	malaj-lar-nyŋ	/	$^{??}$malaj-nyŋ	ike-se	**GQ**
		boy-PL-GEN		boy-GEN	two.3-3	

	c.	malaj-lar	/	$^{??}$malaj	ike-se	**DCQ**
		boy-PL		boy	two.3-3	
		'two boys'				

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[2] Not only the "pure" quantifiers, as in European languages, but also numerals can float in Tatar. There seems to be no difference in the distribution of numerals and other quantifiers (for example, *barysy, beten* – 'all') in QF constructions.

2.4. GQ and DCQ vs. possessives

In GQ and DCQ the complex morpheme *-e-se* can not be omitted:

(8) a. zufär   bärän-när-neŋ   beten-**e**-**se**-nä   /*beten-**e**-nä   rizyk   bir-de
       Zufar   ram-PL-GEN   every-**3**-**3**-DAT   *every-**3**-DAT   fodder   give-PST

   b. zufär   bärän-när-gä   beten-**e**-**se**-nä   /*beten-**e**-nä   rizyk   bir-de
       Zufar   ram-PL-DAT   every-**3**-**3**-DAT   *every-**3**-DAT   fodder   give-PST
       'Zufar gave fodder to all rams.'

The presence of the possessive morpheme on the head nominal in possessive noun phrases is also obligatory, but there must be only one affix:

(9)   bala-nyŋ   barmag-**y**   /*barmag   /* barmag-**y**-**sy**
        child-GEN   finger-**3**   *finger   *finger-**3**-**3**
        'child's finger'

As is clear from the examples above, the first affix on Q is not indeed a possessive morpheme. If it were, we'd have *ike-se-se* instead of *ike-se*. I'll further gloss it as -E.

Moreover, in possessive noun phrases possessors may loose genitive marker, but DPs in GQ may not:

(10)   bala   barmag-y
        child   finger-3
        'child's finger'

(11)   *bärän-när   beten-e-se
        ram-PL   every-**E**-**3**
        'all (of the) rams'

2.5. DP First, then – quantifier

In GQ and DCQ quantifiers must follow the quantified DPs:

(12) a. *zufär   beten-e-se-nä   bärän-när-neŋ   rizyk   bir-de
        Zufar   every-E-3-DAT   ram-PL-GEN   fodder   give-PST

   b. *zufär   beten-e-se-nä   bärän-när-gä   rizyk   bir-de
        Zufar   every-E-3-DAT   ram-PL-DAT   fodder   give-PST
        'Zufar gave fodder to all rams.'

2.6. Unmarked direct objects

GQ and DCQ can not stand in the so-called unmarked accusative, i.e. they can never loose the accusative marker, as many other (=non-quantified) noun phrases can do, cf.:

(13)   zufär   bärän-när(-ne)   suj-dy
        Zufar   ram-PL(-ACC)   slaughter-PST
        'Zufar slaughtered (the) rams.'

(14) a. zufär   bärän-när-neŋ   beten-e-se*(-n)   suj-dy
        Zufar   ram-PL-GEN   all-E-3(-ACC)   slaughter-PST

b. zufär   bärän-när-   beten-e-se*(-n)   suj-dy
    Zufar   ram-PL-ACC   all-E-3(-ACC)   slaughter-PST
    'Zufar slaughtered all (the) rams.'

One may wonder whether Tatar confirms the proposal of (Bošković 2004) that quantifiers can not be stranded in theta-positions and (Ôno 2005) that FQs appear in case-licensing positions. However, my answer for the question will be much more language-specific.

2.7. Pronouns

Pronouns allow only for GQ or DCQ but not for AQ:

(15) a. *beten a-lar   ü-gä   kajt-ty-lar   **AQ**
       all   he-PL   house-DAT   come-PST-PL

     b. a-lar-nyŋ   beten-e-se   ü-gä   kajt-ty-lar   **GQ**
       he-PL-GEN   all-E-3   house-DAT   come-PST-PL

     c. a-lar   beten-e-se   ü-gä   kajt-ty-lar   **DCQ**
       he-PL   all-E-3   house-DAT   come-PST-PL
     'All (of) them came back home.'

2.8. Locality

FQ may not be left in the embedded clause when the "host" DP moves to the matrix clause:[3]

(16) a. *kyčyk-lar-nyŋ   katy   beten-ese   erä   bašla-dy-lar
     dog-PL-GEN   loudly   all-E-3   bark   start-PST-PL

     a.' √kyčyk-lar-nyŋ   beten-ese   katy   erä   bašla-dy-lar
     dog-PL-GEN   all-E-3   loudly   bark   start-PST-PL

     b. *kyčyk-lar   katy   beten-ese   erä   bašla-dy-lar
     dog-PL   loudly   all-E-3   bark   start-PST-PL

     b.' √kyčyk-lar   beten-ese   katy   erä   bašla-dy-lar
     dog-PL   all-E-3   loudly   bark   start-PST-PL
     'All (the) dogs started to bark loudly.'

It is also worth noting that GQ can be embedded inside a PP, whereas DCQ can not:

(17) a. zufär   bärän-när-neŋ   kičä   beten-ese   janyna   bas-ty
    Zufar   ram-PL-GEN   yest.   all   towards   approach-PST

     b. *zufär kičä   bärän-när   beten-ese   janyna   bas-ty
     Zufar yest.   ram-PL   all   towards   approach-PST
     'Yesterday Zufar came to all (of the) rams.'

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[3] This is true not only for the bare imperfectives, as in the example below, but also for infinitives, nominalizations etc.

2.9. Interpretation

AQ has both non-specific (preferred) and specific reading. GQ has the salient definite interpretation, they are often translated with the elative construction ('of / among the rams three…'). The semantic properties of DCQ resemble that of GQ.

2.10. Summary of properties of Tatar QPs

Tatar constructions with quantifiers have the following properties: QF is possible only with GQ and DCQ but not with AQ; the quantified phrase in GQ and DCQ is always in plural; unlike possessors, GQs can not loose the genitive marker and must bear, as well as DCQ, two (instead of one) possessive affixes on the head (quantifier); the order quantified – quantifier can not be reversed; FQs can not drop the accusative marker; only GQ and DCQ constructions are possible with pronouns; the quantified noun phrase can not be extracted out of the embedded clause without the quantifier; GQ but not DCQ can be used with postpositions; GQ and DCQ have definite interpretation whereas AQ allows for the non-specific reading as well.

3. Derivation of genitive and double case quantifiers in Tatar

I develop partitive double-DP analysis, proposed for Japanese QPs with genitives in (Sauerland and Yatsushiro 2005). Basing on the proposal made for English partitives in (Jackendoff 1977), they argue that noun phrases with the genitive marker (either on the nominal or on the classifier) arise to the partitive double-DP constructions:
(18)   all / three ~~books~~ of the books (Jackendoff 1977)

(19)   subete   /   san-satu ~~hon~~-no   hon
         all   three-CL book-GEN   book
         'all / three books' (Sauerland and Yatsushiro 2005)

I adopt this proposal for Tatar in a slightly modified manner. I'll argue that: i) AQ is derived as a single DP; ii) GQ is derived in Jackendoff's fashion; iii) derivation of DCQ proceeds that of GQ but the superset DP occupies the SC subject position above the matrix DP.
I assume that Qs are DP-internal adjuncts, namely, nP-adjuncts.[4] In GQ and DCQ superset-DP is generated as a specifier of the subset-DP. In these two types of QP, internal nP is replaced with the (anaphoric) pronoun, phonologically realized as -*e*.[5] Marker -*se* occupies D (head) position.
(20)   [DP   beten   [nP   bärän]]   **AQ Structure**
         'all rams'

(21)   bärän-när   beten   bärän-(när)   **Underlying Structure**
         [DP [DP SUPERSET] Q   [nP SUBSET]]

(22) a. [DP [DP bärän-när]   beten   [nP ~~bärän (när)~~] D]

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[4] Although it is not crucial for the current paper, I'll address to DP-internal nominal level in Tatar as a small nP, not NP as is generally assumed.
[5] See, for instance, (Hestvik 1992), (Pereltsvaig 2005) for the argumentation of existence of different types of pronouns (DP, NP, N, D etc).

b. [DP [DP bärän-när]   beten   [nP e]   -se]

c. [DP [DP bärän-när-neŋ]+def   beten   [nP e]   -se]   → **GQ**
   'all of the rams'

(23) a. [DP [DP bärän-när]   beten   [nP e]   -se]

b. [SC [DP [DP bärän-när]   beten   [nP e]   -se]]

c. [SC [DP bärän-när-**case**]+top [DP t   beten   [nP e]   -se]]-**case** → **DCQ**
   'the rams all'

4. Tatar floating quantifiers in light of the proposed analysis

4.1. No floating with AQs

This directly follows from the fact that the split of the single DP ([DP Q [nP]] configuration) is more ungrammatical, than scrambling of the possessor out of the double-DP ([DP [DP] D]). Indeed, split in possessive genitive DPs is much better then in noun phrases with adjectives:

(24) a. ᵛmalaj-lar-nyŋ   kičä   xäl-lär-e   bet-te
        boy-PL-GEN   yesterday   force-PL-3   end-PST
     'Yesterday boys' forces (were) exhausted.'

b. *ak   kičä   at-lar   kil-de
   white   yesterday   horse-PL   come-PST
   'Yesterday white horses came.'

4.2. Number marking on nominals

Whereas in AQ constructions plural affixes are not obligatory of even not allowed, GQ or DCQ without plural markers on nominals are ungrammatical. The double partitive analysis can easily capture this: every object in the superset is a subject to the mental choice of a speaker, hence the superset must consist of individuals, thus the individualizing plural marker is needed.

4.3. Possessives and -*e* pronoun

After merging in Spec (of the matrix) DP, the superset noun phrase agrees with D (-*se* marker on the quantifier) that results in the genitive case affix, if the DP is definite.

In contrast to FQ constructions, genitive case in possessives can be omitted. The reason here is that possessors are merged lower than Spec, DP and may remain in their base-generated position, see (Grashchenkov 2005). This is not the case with GQ, which is merged in Spec, DP.

Note, that "inverted genitive" constructions are found in Turkic not only with Qs, cf:

(25) zufär   agač-lar-**nyŋ**   bijek-**e**-n   utyr-ty
     Zufar   tree-PL-GEN   high-3-ACC   plant-PST
     'Zufar planted the (most) high tree (among the trees).'

These constructions are also derived from the double-DP partitives with the only difference: it is not the *-e* pronoun, but the adjective *bijek,* 'high', stands for nP here:

(26) [agač-nyŋ   [bijek   ~~agač~~]-e]
      tree-GEN   high   tree-3
      'the (most) high (among) the trees'

When they need to be topicalized, the superset DPs may not receive genitive markers and move further to a SC-"subject" position. I adopt here the views of SC as a "bare" constituent formed by two DPs without any functional head inside, see (Pereltsvaig 2005).

The superset DPs moved to the subject of SC (the remnant double DP partitive serves the SC predicate) are outside the D probe domain and hence receive no genitive. Both the subject and the predicate of SC receive (the same) case assigned by the external context due to: i) the absence of SC-internal case-assigners; ii) case filter.

Note that double case constructions are (marginally) attested with Tatar possessors:

(27) razina   čynajak-**ny**   abyj-nyk-y-**n**   vat-ty
      Razina   cup-ACC   brother-GEN-3-ACC   broke-PST
      'Razina broke brother's cup.'

I suppose that examples like this also arise to the plain SC structures. In this case we are faced with the possessum raising to SC subject (nyŋ + y → nyky):

(28) [DP abyj-nyŋ   čynajak-y]   →   [SC [čynajak-ny]i [abyj -nyŋ-**t**i-y-n]]
      brother-GEN   cup-3   cup-ACC   [brother-GEN-3]-ACC
      '(The) cup is husband's'   '(the) cup, the husbands' one'

I have no other evidence of double case constructions in Turkic, but these two seem to me instances of SC-topics.

-e is an anaphor which must be c-commanded, and thus could not precede its antecedent. The ban on the order quantifier-quantified directly follows. The locality of QF can be explained in the same manner: the assumption that *-e* is a local anaphor seems quite natural.

The idea that the (empty) pronoun is involved in QF is not ad hoc: confer the analysis of French *chacun d'eux* as a [Q [DP], (Doetjes 1997), and the structure of Hebrew FQ constructions in (Shlonsky 1991):

(29) ha-yeladim   yaṣnu   kul-am   /   *kol
      the-children   slept   all-[3MPL]   *all
      'The children all slept.' (Shlonsky 1991)

4.4. No QF with the unmarked direct objects

Constraint on the unmarked direct object results from two facts. First, the superset DPs in GQ and DCQ constructions are definite and thus must bear accusative marker, (Enç 1991). Second, no case marker follows from the absence of the DP-shell in the noun phrase structure, but it's not the case in double-DP analysis developed here (see above).

4.5. Personal pronouns and affixes

As I argued, Tatar quantifiers are DP-internal adjuncts. The absence of the AQ construction with personal pronouns may be explained as the restriction for Qs to be adjoined to DPs.

Moreover, 1-2nd singular possessive affixes are not allowed on Qs, and plural affixes have not possessive meaning:

(30)   eč-ebez   /   eč-egez
        three-1.PL   three-2.PL
        three of us   three of your
        *three ours   *three yours

I suppose that 1-2nd person affixes are Ds. There is certainly no DP internal structure in this case. Qs are merged with D heads, but, as we supposed, in order to quantify over some previously mentioned noun phrase, they must be adjoined to nP.

It is confirmed by the fact that Qs with personal affixes are prohibited under ellipsis:

(31)   (minem) beten   at-lar-ym   matur   ä
        I.GEN   all   horse-Pl-1SG   beautiful   and
        sineŋ   beten(-e-se)   /   *beten-**eŋ**   juk
        you.GEN   all-E-3   all-2.SG   not
        'All my horses are beautiful and (horses of) yours are not.'

Here *beten-eŋ* does not contain nP, which would be coreferent with its DP-antecedent.[6]

4.6. GQ vs. DCQ

There is a slight difference between the two types of FQs in Tatar. DCQs in general are less ungrammatical than GQs. Thus, DCQs are better in floating over both subject and adverb as well as in case when the quantifiers are left on the right of the verb:

(32) a. [?]bärän-när-neŋ   zufär   kičä   beten-ese-nä   rizyk   bir-de
         ram-PL-GEN   Zufar   yesterday   all-E-3-DAT   fodder   give-PST
      b. [√]bärän-när-gä   zufär   kičä   beten-ese-nä   rizyk   bir-de
         ram-PL-DAT   Zufar   yesterday   all-E-3-DAT   fodder   give-PST
         'Yesterday Zufar gave fodder to all (of / the) rams.'

(33) a. [*]zufär   bärän-när-neŋ   kičä   suj-dy   beten-e-se-n
         Zufar   ram-PL-GEN   yesterday   slaughter-PST   all-E-3-ACC
      b. ^{??}zufär   bärän-när-ne   kičä   suj-dy   beten-e-se-n
         Zufar   ram-PL-ACC   yesterday   slaughter-PST   all-E-3-ACC
         'Yesterday Zufar slaughtered all (of / the) rams.'

This follows from the structure of each type of Tatar FQ: extraction out of DP is worse than the extraction from the plain SC subject position.

4.6.1. Postpositions

The most obvious discrepancy between the two types of FQ is that GQs but not DCQs can be used with postpositions (see also (17) above):

(34) a. zufär   bärän-när-neŋ   beten-ese-nä   taba   kit-te
         Zufar   ram-PL-GEN   all-DAT   to   come-PST

      b. *zufär   bärän-när-gä   beten-ese-nä   taba   kit-te
         Zufar   ram-PL-DAT   all-DAT   to   come-PST
         'Zufar came to all (of the) rams.'

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[6] In the same time "eliminated" noun phrase can be represented here with *-ese*, see the example below.

It is the distributional properties of each type of FQs that come to play here: DPs, but not SCs can be used inside a PP.

4.6.2. Subjects and SCs

Relatively high degree of the ungrammaticality arises also in DCQ subjects, both with unergatives and unaccusatives:

(35) b. ^{??}malaj-lar   eč-e-se   žyrla-dy(-lar)   /   kil-de(-lär)
       boy-PL   three-E-3   sing-PST-PL   come-PST-PL
       'Three boys sang / came.' (collectively or distributively)

DCQs are bad in the subject position since SCs in general are used vP-internally:

(36) a. I drove my car / came home drunk.
    b. *I drunk drove my car / came home.

At the same time, Tatar quantifiers in FQ constructions should bear case features and hence must move to Spec, IP, that is not the option for SCs.

4.7. Scope and specificity

Consider the example below. Why 'two' in the subject position can not scope over 'three'?

(37)   ike   malaj   kitab-lar-nyŋ / kitab-lar-ny eč-e-se-n   uky-dy-lar (3>2,*2>3)
       two   boy   book-PL-GEN / book-PL-ACC three-E-3-ACC   read-PST-PL
       'Two boys read three books.'

We argued that in GQ the superset (genitive) DP has prominent definite interpretation. This kind of reading is shared with the subset (quantifying) noun phrase via definiteness inheritance. Thus, QP 'three books' is definite and stands for a whole entity, which can not be distributed among readers. I think that the argumentation along the same lines may be extended to the DCQ constructions as well.

5. A brief look at the typology of FQ

As I suppose, both GQ and DCQ constructions in Tatar originate as DP, but in the latter case this DP is merged inside the plain headless SC. However, the SC approach to FQ is not new, for instance, it has been proposed for Korean double case FQs in (Kim 2004).
    In Korean either the whole QP, or both QP and its DP-associate receive case affixes:[7]

(38) a. hakseng-dul-i   chek-seke-lul   /   chek-ul-seke   ilk-ess-ta
       student-PL-NOM   book-3.CL-ACC   book-ACC-3.CL   read-PST-DECL
       'The students read three books.'

    c. hakseng-dul-i   **chek-ul**   **seke-lul**   bo-ass -ta
       student-PL-NOM   book-ACC   3.CL-ACC   see-PST-DECL
       'The students, (as for) books, they read three (of them).' (Kim 2005)

Korean DCQs resemble Tatar ones in that they have wider distribution than other FQs:

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[7] There is also a genitive constructions with quantifiers in Korean, but I'll put this aside.

(39) haksayngh-i   ecey   wayn-ul   sey-myengh-*(i) massi-ess-ta
      student-NOM   yesterday   wine-ACC   3-CL-NOM   drink-PST-DECL
      'Three students drank wine yesterday.' (Kim 2004)

    It is generally assumed that Korean DCQs do not compose single DP, see (Kim 2004, Kim 2005, Fitzpatrick 2005). My analysis agrees with the previous ones, but there is a significant difference: in my view, Tatar DCQs do form single DP on some stage of derivation.
    Japanese display the following paradigm of QP:

(40) a. hon-o   san-satu   b. hon   san-satu-o
        book-ACC   three-CL   book   three-CL-ACC

   c. san-satu   hon-o   d. **hon-no**   **san-satu-o**
        three-CL   book-ACC   book-GEN   three-CL-ACC
     (Sauerland and Yatsushiro 2005)

    As could be seen from the example above, Japanese also has the genitive construction with quantifiers. Indeed, it was argued that Japanese FQs are originated as one DP.
    Then, as was supposed by Justin Fitzpatrick in (Fitzpatrick 2005), both adnominal and adverbial quantifiers exist in natural language. Some languages have only adnominal FQs, others – only adverbial, and sometimes both types of FQs exist in a language. Adnominal FQs are associated with A' and adverbial – with A-moved DPs.
    As was shown in (Fitzpatrick 2005), Japanese has adnominal FQs which display A'-properties. Korean DP-Case_..._Q constructions are also treated as adnominal A'-moved FQs. At the same time, it was argued, following (Ko 2005), that Korean double case constructions with quantifiers are adverbials, created under A-movement.
    One of the arguments in favour of the A'-nature of Japanese FQ, is that WCO in Japanese can not be eliminated by QF:

(41) *?Donna gakusei$_1$-o   rainen   [pro$_1$ osieta   sensei]-ga
        which student-ACC   next.year   taught   teacher]-NOM
      t   san-nin   yatou   no?
               3-CL   hire   Q
      'Which three students$_1$ will the teacher who taught them$_1$ hire next year?' (Fitzpatrick 2005)

    West Ulster English, contrary to standard English, QF allows for wh-extraction:
(42) What did he say ($\sqrt{}$all) that he wanted ($\sqrt{}$all)? (McCloskey 2000)

    Thus, the conclusion made in (McCloskey 2000) was that QF in West Ulster English is A'. In the next section I'll show that Tatar FQs exhibit A'-properties as well.

6. A'-nature of Tatar FQs

The current analysis suggests that QF in Tatar is a result of extraction of the quantified DP from a quantifying "matrix" DP. This movement is not forced by case checking: in GQs the genitive case on the quantified is obtained inside DP, in DCQ both the removed and the remnant parts of the quantificational expression get (the same) case values before movement.

6.1. Wh-movement with FQs

Indeed, wh-movement with FQs in Tatar is grammatical:

(43) a. kem-när-neŋ   kičä   ike-se   kil-de
        who-PL-GEN   yesterday   two.3-3   come-PST
    b. kem-när   kičä   ike-se   kil-de
        who-PL   yesterday   two.3-3   come-PST
        'Who all came?'

(44) a. (kem-när-neŋ)   Zufar   (kem-när-neŋ)   beten-e-se-n   kür-de?
        who-PL-GEN   Zufar   who-PL-GEN   all-E-3-ACC   see-PST

    b. (kem-när-ne)   Zufar   (kem-när-ne)   beten-e-se-n   kür-de?
        who-PL-ACC   Zufar   who-PL-ACC   all-E-3-ACC   see-PST
        'Whom did Zufar see all?'[8]

6.2. Weak cross over in Tatar

Whereas A'-nature was attributed to adnominal FQs, adverbial FQs were argued to be A-moved. Why Tatar DCQ do not exhibit A-properties?

It was argued, see (Doetjes 1997, Fitzpatrick 2005), that A-movement with adverbial FQs is illegal since adverbial floating quantifiers always contain pro that leads to ungrammaticality due to WCO. WCO appears only if the raising of the associate DP is A':

(45) DP_i … $[_{QP}\ pro_i]$ … t_i $\sqrt{}$A-movement, *A'-movement

However, under the proposed analysis, this illegal configuration does not arise in Tatar. If we suppose that not only adnominal GQs but also small clause DCQs are originated in the theta-positions, no WCO effect should be observed:

(46) a. DP_i … $[_{DP}\ t_i]_k$ … t_k **GQ**
    b. DP_i … $[_{SC}\ t_i\ [_{DP}\ t_i]]_k$ … t_k **DCQ**

Moreover, to my knowledge, WCO is not attested in Tatar:

(47) $\sqrt{}$kajsy   malaj-ny$_i$ a-nyŋ$_i$ äni-se t_i kür-de?
        which   boy-ACC   he-GEN   mother-3   see-PST
       *Which boy$_i$ did his$_i$ mother see?'

Making the quantifier float does not raise WCO as well:

(48) a. kajsy   bala-lar-nyŋ$_i$ a-lar-neŋ$_i$ äni-se   ike-se-n   kür-gän?
        which   child-PL-GEN   he-PL-GEN   mother   two.3-3-ACC   see-PFCT
    b. kajsy   bala-lar-ny$_i$ a-lar-neŋ$_i$ äni-se   ike-se-n   kür-gän?
        which   child-PL-ACC   he-PL-GEN   mother   two.3-3-ACC   see-PFCT
        '*Of which boys$_i$ did their$_i$ mother see two?'

7. Conclusion

Adjectival constructions with quantifiers in Tatar display no floating. Quantifier float is allowed with DP-associates in genitive or in double case constructions. Ordinary quantifiers

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[8] Both translations are bad in standard English, but ok in WUE, see (McCloskey 2000).

are DP-internal adjuncts, floating constructions are derived from the partitive double-DPs. Thus, floating quantifiers in Tatar are adnominal, A'-moved and are created by quantifier stranding.

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