# The Subject Participle in Armenian and Turkish and the Relativization Acccessibility Hierarchy

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## 1. INTRODUCTION

Haspelmath (2008) observes that syntactic rules in one language often correspond to functionally-motivated tendencies in others. Two areas where we find such a pattern are the assignment of subject properties, such as case and agreement, and accessibility to relativization, both of which in some languages and constructions are associated with syntactic rules, in others, with tendencies that can be attributed to processing preferences or cognitive factors more generally. I propose that these are ultimately related, i.e. that the subject preference in relativization, the most robustly attested part of the Relativization Accessibility Hierarchy, can be understood with reference to the cognitive basis of subjecthood in conjunction with the function of restrictive relative clauses, in which the relativized element intrinsically has topic status. It is likely that the Accessibility Hierarchy effects in general can be understood in similar terms.[1] However, here we will focus on subjects, and on two concrete case studies, the use of so-called 'subject' participles to relativize non-subjects in modern spoken Armenian and in Turkish. These two languages, which have been in intense contact, show superficially similar patterns, but closer investigation reveals that the motivation in each case is quite different, so that they may be considered separate instances of the interaction between the tendency for assignment of subject properties to cognitively salient elements and the cognitively-based preference for SRCs hinging on the intrinsically topical status of the relativized element.

The Relativization Accessibility Hierarchy of Keenan & Comrie (1977) was originally articulated as follows, based on evidence from 50 languages:

> SU > DO > IO > OBL > GEN > OCOMP
> Keenan & Comrie (1977: 66)

Modified forms have since been produced by other authors, the only consistent part of which is Subject > DO > Other.

It manifests itself in several ways, notably textual frequency and the distribution of different relativization strategies within the same language, which must occupy a continuous section of the hierarchy. The basic generalization is that less complex and explicit forms are associated with higher roles, more complex and explicit ones for lower roles, implying that relative clauses in which the relativized element has a 'higher' role are likely to be easier to process. This is also implied by the fact that they are generally more frequent in texts. In some languages, accessibility to relativization is associated with syntactic rules: relativization in general, or particular constructions, are restricted to subjects only, subjects and DO only, etc. Here we will discuss examples of a construction that is associated with the highest role of all, the 'subject participle'. But first of all, in order to understand the operation of these

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[1] See Dalrymple & Nikolaeva (2011) for discussion of DO as secondary topic, etc. Basing these effects on the interaction between topicality and grammatical relations could explain certain irregularities that are unexpected if the hierarchy reflects processing preferences based purely on syntactic grammatical relations, as proposed by Hawkins (2004) and others (apparent absence of AH effects in languages such as Chinese, role of animacy in extremely variable accessibility of direct objects, etc.).

constructions, and the subject preference in general, it will be useful to consider exactly what is meant by 'subject'.

## 2. SUBJECTHOOD AND ACCESSIBILITY TO RELATIVIZATION

In morphosyntactic terms, the subject of a clause may be described as the element that takes 'subject' case, occupies 'subject' position, and/or triggers 'subject' agreement in verbs, though there is no one property that is either necessary or sufficient for an element to be considered a 'subject' (Keenan 1976). Roughly speaking, it can be described as the syntactically most prominent argument.

Generally, each verb assigns 'subject' role to the argument with a particular thematic role. Semantically-based hierarchies have been made of roles that are most to least likely to be articulated as syntactic subject, such as that shown below, from Dik (1978) (note that in other versions, such as that of Bresnan & Kanerva (1989), Instrument is placed above Patient; the only consistent element is that Agent is at the top). This can be interpreted as a hierarchy of thematic roles in terms of cognitive prominence/salience:

Agent > Patient > Recipient > Beneficiary > Instrument

In some languages, such as Chinese, which has no case or agreement, it has been argued that 'syntactic subject', i.e. thematic subject, is not a relevant concept (LaPolla 1993). While this is debatable, what is certain is that in Chinese syntax, thematic subject has a much lower functional load than topic, what the statement is considered to be 'about', i.e. the pragmatically most prominent element, regardless of its thematic role (it need not even have one), as discussed in Li & Thompson (1976). Topicality is another type of cognitive salience, and another key property associated with subject status. In some circumstances, topicality can override thematic status in the assignment of syntactic subject properties, as seen in this example (1) from Old Turkic, discussed by Haig (1998: 65), where a topical possessor is assigned nominative ('subject') case, rather than expected genitive:

(1) *ol      tüzün  är    äsrök-i              adın-t-ı*
    that    noble  man   drunkenness-poss3    pass.away-pst-3s
    'That noble man's drunkenness passed away' OR
    'That noble man, his drunkenness passed away'

Topic status is primarily determined by discourse factors, but the inherent semantic properties of the element in question are also important, with elements that are inherently more salient (e.g. 1st person, human, animate) being more likely to have topic status. The Silverstein Hierarchy is a hierarchy of salience, showing the types of elements that are more likely to have topic status (this includes both discourse and inherent semantic factors):

1st person pronoun > 2nd person pronoun > 3rd person anaphor > 3rd person demonstrative > proper name > kin term > human / animate NP > concrete object > container > location > perceivable > abstract

In some languages, 'subject' properties such as case and agreement are assigned based on the relative position of elements on this hierarchy, for example to 1st or 2nd person pronoun in preference to 3rd person referents, or animate referents in preference to inanimate ones. However, in those (most) languages that have a thematically-based syntactic subject (usually marked by case, position and/or agreement), there is a general tendency for topics to be articulated as syntactic subject, hence the existence of constructions such as passive, which promote topical elements that are not thematic subject to syntactic subject status. In some languages, such as Malagasy and many Philippine languages, this is obligatory: a variety of

passive-like constructions exist promoting topics of essentially any thematic role to subject (agreement trigger) status, while retaining syntactic information about their thematic role (see Pearson 2005 etc.). But even apart from such syntactic mechanisms, there seems to be a universal tendency for discourse topics and/or referentially prominent elements to be articulated as syntactic subject (see Mak et al. 2002), which can also be achieved through choice of different verbs or constructions, for example 'receive' rather than 'give' for topical IO.

How are these facts linked to relativization accessibility?

The relativized element inherently has topic status within RC, as RC, due to its function, is always a statement 'about' the relativized element (Kuno 1976: 420). Thus there will be a general tendency for this to be articulated as syntactic subject (Mak et al. 2002). This will be obligatory in languages with a Malagasy-type mechanism, where relativization is restricted to agreement-trigger topic 'subjects', but will be weak or non-existent in Chinese (see Hsiao & Gibson 2003 and references therein for evidence that Chinese lacks a subject preference in relativization, although this is disputed by others, e.g. Hsu et al. 2009). It will be stronger when the relativized element is inherently referentially prominent, e.g. animate, especially if it is referentially the most prominent element in the clause (Mak et al. 2002) (when it is inanimate or when there is another element in the clause that is more referentially prominent, e.g. a pronoun, it will tend to be articulated as DO rather than a more peripheral object-like role, see Dalrymple & Nikolaeva 2011 for evidence for DO as a syntactic role associated with secondary topics).

Thus it can be seen that the cognitive basis of subject status rests on 3 different types of prominence:

Thematic prominence (agent > other)

Discourse prominence ('aboutness')

Referential prominence (animacy etc.)

There is a tendency for these to be correlated. Presumably, when they are, the construction conforms to experience-based expectations and is easier to process and understand. This is the motivation for the subject preference in RCs, and probably the Relativization Accessibility Hierarchy in general: the relativized element is inherently topic of RC, i.e. it has discourse prominence, so there will be a tendency to articulate it as syntactic subject. This tendency will be weaker or stronger depending on the syntactic properties of the language, i.e. how closely syntactic subject status is linked to topic status (strong in Malagasy, weak in Chinese). It will be stronger if the element is referentially (e.g. animate) and/or thematically (e.g. agent) prominent. The properties of the construction in question are also likely to be relevant.

3. ARMENIAN

In Classical Armenian, relativization involved the use of finite relative clauses. In the modern language, however, participial relative clauses involving nominalized verb forms are also used, the result of novel syntactic patterns applied to existing verbal nouns (Donabédian 2017: 32). As well as taking the full range of nominal morphology, the participles in question also have crucial verbal characteristics, including the ability to express valency-changing and passive morphology, as well as bound morphological expression of negation, to govern the full range of arguments and adjuncts, case-marked as they would be in a finite clause, and to be modified by adverbs of manner. These properties are shared by Turkic verbal nouns used

in relativization (Haig 1998: 34), and it is possible that contact with Turkic languages promoted the development of participial relativization in Armenian.

Participial RCs, unlike their finite counterparts, lack a means for expressing the role of the relativized element within RC, and thus may be considered simpler and less explicit constructions. Thus it is to be expected that they are generally associated with roles at the top of the Relativization Accessibility Hierarchy (Jahukyan 1974: 552 states that they may only be used when the relativized element has the role of subject or DO in RC, though as we shall see, this is only a tendency, not a rigid rule). There are two main participles used in relativization in Armenian, the 'resultative participle' in -*ats* (2), originally an adjective denoting a property resulting from an action, most frequently used to relativize elements with patient role, and the 'subject participle' in -*oɣ* (3), the usage of which will be discussed in some detail here.

(2)    *Yes*        *nuyn*    *k'o*       *asatsn*         *em*       *asum*
      1SG.NOM    same    2SG.GEN    say.P.PART.DEF    be.PRES.1SG   say.PART
      'I say the same thing that you said'
      (Abeghyan 1912:289)

(3)    *P'ariz ekoɣ*       *mart'ə*
      Paris    come.PART    person.DEF
      'the person who comes/came to Paris'
      (Creissels 2005: 10)

The Armenian subject participle was originally an agent noun, and, in the literary language, is strictly confined to relativizing subjects, though not necessarily agentive ones. However, in colloquial spoken language, it may under some circumstances be used to relativize non-subjects. Here we shall investigate the conditions under which this is possible, and what is implied about accessibility to relativization when a form associated with 'high' roles is used to relativize lower ones.

In order to investigate relativization accessibility in Armenian, questions were specifically constructed to elicit relative constructions, where the speaker needs to use a clausal construction to identify the referent in question, e.g.:

      Q:      There are three sisters. One went to bed at 10 o'clock, one went to bed at 12 o'clock, and one went to bed at 2 o'clock. What time did each one get up?

      A:      The one who went to bed at 10 o'clock got up at...

These were used in interviews with native speaker consultants to elicit relative constructions in which the relativized element has different grammatical relations in the relative clause, e.g. subject, as seen above, but also direct and indirect object, possessor of subject and object, and various kinds of obliques. Sound recordings of the interviews were made and analysed, with the results entered in a database which now contains 1837 relative constructions. Unless otherwise stated, Armenian data presented here comes from this source.

In the database, there are 56 instances where the subject participle is used to relativize non-subjects out of 479 uses of SP (12% of SP RCs relativize non-subjects). Note that context is crucial for the use of such forms; in isolation, these would naturally be interpreted as SRCs: (6) 'the one who bit a mosquito', (7) 'your country that works', (8) 'the one who gave water'.

However, the context provided by the questions makes it clear to which participant the participle refers, thus the speaker is able to use these forms without the risk of ambiguity.

The characteristics of these non-subjects relativized with SP are exactly what we would expect of prime candidates for the assignment of subject properties ("promotion to subject") as described in the introduction: SP is used for non-subjects when they are THE MOST prominent element in the clause, which generally occurs in cases when the syntactic subject is lacking in prominence. There are no examples in the corpus with overt, specific, human subject. The subjects of the SP non-subject RCs attested in the corpus have the following properties:

Very often possessee, often inalienable (4), but not necessarily (5):

(4)     *Gǝluxǝ*          *ts'avoɣǝ*
        head.DEF          hurt.PART.DEF
        'The one whose head hurts'

(5)     *zažigalken*     *p'ǝč'ats'oɣǝ*          *kǝnaye*          *vor*  *spiška*
        lighter.DEF     break.PART.DEF          look.3SG.PRES          COMP match
        *kǝtni*
        find.3SG.SUBJ
        'The one whose lighter is broken looks for a match'
        (Gyumri)

Referentially non-prominent, e.g. inanimate or hardly animate (stone, mosquito):

(6)     *motsak*          *kǝtsoɣin*                    *al,*   *araɣ*  *en*          *k'ǝsǝm*
        mosquito          bite.PART.DAT.DEF PT,       vodka   be.3PL.PRES  bite.PART
        'The one who a mosquito bit (who was bitten by a mosquito), they rub with vodka'
        (Agulis: Paraka)

Non-specific/generic: there is even one example of a pronoun:

(7)     *amenayndebǝs*          *k'u*          *ašxatoɣ*          *yergirǝn*          *e*
        in any case          2SG.GEN          work.PART          country.DEF          be.3SG.PRES
        'In any case, it's the country where you work/one works'
        (Mush: Shirak)

Referentially prominent but omitted because not salient in the context (lacking discourse prominence):

(8)     *jur*  *tǝvoɣn*                    *asum*          *a*          *kyank'ǝt*          *yerkar*
        water  give.PART.DEF          say.PART          be.3SG.PRES  life.AGR2          long
        *lini,*          *tsaravǝs*          *hagets'av*
         be.3SG.SUBJ thirst.AGR1    be.quenched.3SG.AOR
        'The one who I gave water (who was given water as opposed to something else) says "May your life be long, my thirst has been quenched"'
        (Ararat: Aratashen)

In addition to the non-salience of the subject, the relativized element itself must be either inherently referentially prominent (animate) and/or thematically prominent; the only examples of the use of the subject participle for inanimate non-subjects involve

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instrumentals, which could be understood as having some agentive characteristics (note the high position of instrumental on Bresnan & Kanerva's (1989) thematic hierarchy):

(9)  *tsaɣik*       *nəkaroɣ*       *kərič'ən*
     Flower       draw.PART    pen
     'The pen with which I drew a flower/the pen that drew a flower'
     (Mush: Vardenik)

Note that there is no prohibition on the use of SP to relativize elements with patient role, as long as these are animate, and the subject is non-salient (see example (6) and numerous others). Neither is it prohibited from relativizing inanimate elements, as long as they are subjects:

(10)  *heto*   *patmakan*   *nəšanakuts'yun*              *unets'oɣ*
      then   historical    significance                have.PART
      *menk'*        *xač'k'arer*     *unenk'*
      1PL.NOM     cross-stone.PL have.1PL.PRES
      'then we have cross-stones which have historical significance'
      (Khoy: Qaraglukh)

The use of the subject participle for non-subjects is most common when the relativized element is possessor of subject. Givón (2001: 193) observes that the assignment of subject properties to possessor of subject is common in the languages of the world, especially when the possessor is human, as seen with the nominative possessor in example (1), and the fact that in some languages, such as Aleut, subject agreement may be with the possessor, rather than the syntactic subject (Dalrymple & Nikolaeva 2011: 97). This is not unexpected given the fact that the primary function of possessive constructions is often to contribute information about the possessor, i.e. it is the possessor that is the topic, rather than the possessed subject. This is most pronounced when we are dealing with an inalienable possession, such as a body part, which cannot even be conceptualized without reference to the possessor. Thus the statement 'John's head hurts' would under most circumstances be interpreted as a statement 'about' John, rather than his head. However, the same often applies even with alienable possessions, as shown by the frequency of constructions in which the possessor is articulated as subject even when there is no direct syntactic means of doing so in the language in question, for example 'John had his phone stolen' for 'John's phone was stolen' in English. The use of the subject participle in this context can thus be seen as an example of 'promotion to subject' of topical possessors which has many parallels in the languages of the world.

However, in principle, it seems to be possible to use the subject participle to relativize practically any grammatical relation (with the possible exception of adpositional object) given the above conditions, as shown by evidence from the corpus:

Possessor of subject: 22 examples (20% of all RCs with this grammatical relation use SP)

Possessor of object: 5 examples + 1 ambiguous (approximately 10%)

Instrumental: 3 examples (8%)

DO: 21 examples (all animate) (4% of all DO RCs, 6% of all animate DO RCs)

IO (dative argument of ditransitive): 2 examples (4%)

Locative: 1 example

Ablative: 1 possible but ambiguous example

Thus it is possible to interpret the use of the Armenian subject participle to relativize non-subjects as an instance of 'promotion to subject', i.e. of the assignment of morphological/syntactic subject properties (here, the use of a verb form generally associated with subjects) to the cognitively most prominent element in the clause, even if it is not the syntactic subject. All the types of cognitive prominence associated with subjecthood seem to be relevant here: discourse prominence (topicality, or lack thereof of syntactic subject), referential prominence (animacy), and semantic prominence (agentivity). 'Promotion to subject' phenomena, whereby the relativized element, i.e. topic of RC, is articulated as syntactic subject regardless of its thematic role, are an important category of manifestations of the 'subject preference' in relativization that is probably the most robustly attested of the phenomena associated with the Relativization Accessibility Hierarchy.

4. TURKISH

In Turkish, as in other Turkic languages, relativization mainly involves the use of verbal nouns (participles) that have very similar properties to those found in Armenian: as well as taking the full range of nominal morphology, the participles in question also have crucial verbal characteristics, including the ability to express valency-changing and passive morphology, as well as bound morphological expression of negation, to govern the full range of arguments and adjuncts, case-marked as they would be in a finite clause, and to be modified by adverbs of manner. However, unlike in Armenian, finite relativization is not and does not seem to have ever been widespread in these languages; participial relativization has always been the main strategy since the oldest known attestations of this language family (see Erdal 2004).

Participles can be used to relativize any syntactic role; the Accessibility Hierarchy is not manifested by the choice between finite and non-finite strategies as it is in Armenian. However, it is still manifested in the choice of more or less complex and explicit forms, namely, a participle without agreement morphology (for subjects), and a participle that carries subject agreement (possessive) morphology, thus indicating which referent is the subject (for non-subjects). In modern Turkish, the 'subject' participle (-*An*), seen in (11a), cannot take possessive morphology agreeing with the subject (11d), while with the 'non-subject' (-*DIk*) participle, seen in (11c), this is obligatory, and the participle in question is unable to relativize subjects (11b). Subject agreement on the non-subject participle in modern Turkish, being an instance of possessive morphology, is obligatorily associated with genitive case morphology on the subject, as seen in (11c).

(11)  a.  *divan-da*     *otur-**an***         *bayan*

          sofa-LOC      sit-**SR**         lady

          'the lady who is sitting on the sofa'


      b.  *\*divan-da*    *otur-**duk***        *bayan*

          sofa-LOC      sit-**NSR**        lady


      c.  *bayan-ın*     *otur-**duğ**-u*   *divan*

          lady-GEN      sit-**NSR**-3s    sofa

          'the sofa that the lady is sitting on'

(Cagri 2005: 6)

    d.     *bayan-ın       otur-**an**-ı      divan
            lady-GEN     sit-**SR**-3s     sofa
            intended: 'the sofa that the lady is sitting on'

In Turkish, as in Armenian, there are instances where the so-called 'subject' participle can be used to relativize non-subjects. In fact, we have a very similar pattern in terms of the kinds of non-subjects that be relativized with the 'subject' participle: ones with no subject, i.e. impersonal passive (12), or non-topicworthy subject (13) (Haig's (1998) 'semi-subjects'). As discussed by Haig (1998), a variety of factors can play a role in rendering a subject non-topicworthy, including an inherent lack of referential prominence, e.g. if it is inanimate, non-individuated and/or non-specific, and a lack of control over the action described by the verb, which can be linked to the concept of thematic (role) prominence. All these factors apply to the subject in (13), a typical 'semi-subject'. Haig (1998: 181) emphasizes the fact that the key to this phenomenon is not some absolute property of the subjects in question (as proposed by Cagri 2005, claiming that these have NP, not DP status, and for this reason cannot occupy the usual subject position), but the RELATIVE lack of prominence of the subject compared to the relativized element, i.e. what is crucial is that the subject does not have the status of the main topic of the clause. Further evidence for this is that when the subject is focused (not topic), the subject participle can be used to relativize non-subjects even if the subject is in itself cognitively prominent (human, definite, agentive, etc.) in a way that would otherwise render it unacceptable as a 'semi-subject', as seen in (14).

The other type of case where the subject participle is used for non-subjects is when the relativized element is a constituent of a larger subject, most commonly, when it is possessor of subject (15), but also when it is a constituent of a clausal subject. This fits in with the generalization that the relativized element is more topical than the subject: possessors are usually more topical than possessees, as discussed above. The same could be said of participants in clausal subjects as compared to the clausal subject itself.

(12)        *Ankara*         *otobüs-ün-e bin-il-en*             *durak*
               Ankara          bus-CM-DAT board-PASS-**SR**        stop
               'the stop where the Ankara bus is boarded'
               (Cagri 2005: 6)

(13)        *mısır yetiş-en*        *tarla*
               corn   grow-**SR**       field
               'the field where corn grows'
               (Cagri 2005: 30)

(14)    a.     *ineğ-i-ni*             **BU**    ***şöför***        *ez-en*        *köylu*
             cow-AGR-ACC       THIS  DRIVER       run.over-**SR**  peasant
             'the peasant whose cow THIS DRIVER ran over'

        b.     *\*ineğ-i-ni*          *şöför ez-en köylu*
             cow-AGR-ACC       driver run.over-**SR**   peasant
             'the peasant whose cow a driver ran over
             (Cagri 2005: 181)

(15)     *kız-ı*          *kitab-ı*       *getir-en*       *adam*
         girl-POSS-3s  book-ACC     bring-**SR**     man
         'the man whose daughter brought the book'
         (Cagri 2005: 8)

As we see, this is very reminiscent of the Armenian facts, where the subject participle is used when the relativized element is more topical than the subject. However, the motivation is in fact completely different. While in Armenian, the motivation is essentially pragmatic, i.e. that the relativized element is the most topical element in the clause, in Turkish, the motivation is SYNTACTIC. In addition, rather than hinging on the properties of the relativized element, as it does in Armenian, here, the crucial factors are the syntactic properties of the non-topical subject and of the non-subject participle. As previously mentioned, in modern Turkish, the non-subject participle MUST be accompanied by possessive morphology agreeing with the subject, as seen in (11c). The non-topical nature of the subjects in (12)-(15) means that they do not trigger agreement (and are not marked for case), a typical example of non-topical subjects being deprived of morphosyntactic subject properties. Since they do not trigger agreement, the non-subject participle cannot be used, and the subject participle must be used instead. The fact that this is a purely syntactic process is shown by the fact that it applies to all possessee subjects, regardless of their pragmatic status, as there is a syntactic rule that these elements do not received genitive case, and thus cannot trigger agreement on the participle (Haig 1998). Clausal subjects also do not receive genitive case or trigger agreement on the participle. It is possible that these rules are examples of the grammaticalization of pragmatically-based tendencies (the tendency for low topicality of these elements), but in the modern language, they are clearly syntactic in nature.

Nonetheless, participle choice in Turkish can be linked to the Relativization Accessibility Hierarchy, though in a different way from the use of the subject participle in Armenian. Non-subject RCs may be considered to be more difficult to process than subject RCs, as they confound our expectation that the topic (relativized element) will be the syntactic subject. Thus it is useful to have a construction which shows that that the relativized element is not the subject, by indicating which referent the subject is, so that we know that our expectations that the relativized element (topic) will be the subject are confounded. Thus the association of subject agreement morphology, an added complexity, with non-subject roles fits in with what we have proposed about the motivation behind the Relativization Accessibility Hierarchy. Where the construction conforms to expectations, i.e. when the relativized element is the subject, we do not need this extra morphological complexity.

In Old Turkic, the link between participle choice and agreement morphology, hence the Relativization Accessibility Hierarchy, was not absolute; agreement morphology was not obligatory with the non-subject participle (Erdal 2004: 295), so it was possible to use this participle with non-agreement-trigger subjects.

(16)   *täŋri*          *una-ma-dok*         *bir*     *avïnču*
       heaven          approve-NEG-NSP   one     pleasure woman
       'a pleasure woman not approved of by heaven'
       (Erdal 2004: 294)

Also, in many other Turkic languages, subject agreement morphology in relative clauses is attached to the head noun, rather than the participle, so that it is possible to use the 'subject' participle, which cannot itself host such agreement, for non-subjects, even if the subjects trigger agreement. In fact, in many such languages, the originally 'subject participle' *-GAn* (corresponding to *-An* in modern Turkish) has been generalized to relativize any role, as seen

in example (17) from Karachay-Balkar, where it is used for direct object (note subject agreement (possessive) marking on head noun):

(17)  *mana*        *son*     *ber-gen*     *cuvab-ları*
      1SG.DAT     last    give-PART    answer-POSS3PL
      'the last answer they gave me'
      (Doğan 1992: 74)

Here, the manifestation of the Relativization Accessibility Hierarchy is the presence or absence of agreement, not participle choice in itself, which only became directly linked to relativization accessibility in modern Turkish because it came to depend strictly on the presence or absence of subject agreement.

However, it is interesting to speculate that in Old Turkic, where subject properties in general were assigned on a more pragmatic and less rigidly syntactic basis (see possessor construction in example (1) and associated discussion in Haig 1998: 65-67), an Armenian-type pattern of use of the subject participle might have been found (no such thing is suggested by Erdal (2004), where all examples involve syntactic subjects, but the Old Turkic corpus is not very large, and these uses are highly context-dependent and not common in discourse, especially written discourse). The fact that the subject participle became generalized to relativize any role in many Turkic languages (this happened more than once in the history of this language family) implies that there is a tendency for it to spread, and it is logical to suppose that this spread could begin with an Armenian-like extension to topical non-subjects. In this case, the appearance of the pattern in Armenian, where participial relativization in general is a fairly recent development often ascribed to Turkic influence, could plausibly be ascribed to borrowing. However, it is clearly not straightforward borrowing of the modern Turkish pattern, and can be independently motivated by universal tendencies.

## 5. CONCLUSION

The use of 'subject' participles for non-subjects in Armenian and Turkish, though showing superficially similar patterns, may be considered separate and independent instances of the interaction between the tendency for assignment of subject properties to cognitively salient elements and the cognitively-based preference for SRCs hinging on the intrinsically topical status of the relativized element.

The Armenian pattern is a straightforward example of the tendency to assign subject properties to cognitively salient elements. In terms of the Relativization Accessibility Hierarchy effects, it is a direct instance of the tendency to articulate the relativized element as syntactic subject, itself a manifestation of the tendency to assign subject properties to topical elements.

In Turkish, we do not have a case of 'promotion to subject' of cognitively salient elements, but rather a negative manifestation of the same principle, i.e. an example of non-assignment of subject properties to cognitively non-salient elements (lack of subject agreement with non-topical subjects), which affects participle choice due to the morphosyntactic properties of the participles (the subject participle cannot host agreement, the non-subject participle must). The non-assignment of subject properties (case, agreement) to non-topical elements seems to have been grammaticalized in the case of certain categories of elements which are usually non-topical (possessees, clausal subjects). When the subject belongs to one of these non-agreeing categories, regardless of its pragmatic status, the subject participle is always used. The use of the subject participle for non-subjects in Turkish is not in itself associated with the Relativization Accessibility Hierarchy, but involves a principle which is fundamental to the

operation of the latter (association of subject properties with topical elements, here in a negative sense).

The Relativization Accessibility Hierarchy is manifested in Turkish by the use of more explicit forms (those with subject agreement) for non-subject RCs, which could be considered more difficult to process as they confound our expectations that the relativized element (topic) will be the subject. The use of the 'subject' participle for non-subjects is independent of this factor, stemming purely from the morphosyntactic properties of the elements in question.

The Armenian and Turkish data presented above show a superficially similar pattern (subject participle used for non-subjects when the subject itself is non-topical), which would naturally give rise to proposals of language contact, most probably influence of Turkic, in which participial relativization has been the predominant strategy ever since the oldest attestations, on Armenian, where it is a fairly recent development. However, closer examination reveals that the mechanisms behind the patterns are quite different, though ultimately due to the same factor (association of cognitive salience with subject properties) which can plausibly be proposed as being key to the Relativization Accessibility Hierarchy in general.

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