

LOOKING FOR FREE RELATIVES IN TURKISH (AND THE UNEXPECTED PLACES THIS LEADS TO)

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0 Introduction

Free Relatives, like *I ate what(ever) he cooked* have been described in a variety of languages. This paper started out as an investigation of Free Relatives in Turkish. As often happens, it ended up being about a variety of different things.

1 Looking for Free Relatives in Turkish

In Turkish, there are two constructions that look like Free Relatives (FRs), in the sense that they both appear to be headless. I will refer to them as Strategy I and II.

Strategy I FRs, as in (1), have been discussed by Kornfilt (2005). They differ from headed relatives, e.g. (2), in being headless and in the placement of agreement morphemes. They are similar to the headed relatives in that they are both nominalized by *-dik-*, which, predictably, results in their subjects being in the Genitive.

- (1) Sen-in pişir-dik-ler-in-i yi-yeceğ-im.
you-gen. cook-nom.-pl.-2.sg.-acc. eat-fut.-1.sg.
'I will eat "the things" which you cooked.'

¹ This paper could not have been written without the help of Jaklin Kornfilt. For about a month before *WAFI*, Jaklin would answer multiple daily messages about how to say this or that in Turkish and she did so extremely patiently and goodnaturedly, never asking where I was headed nor why my questions were about such disjointed sets of phenomena. My debt to her is very large. I also greatly benefited from discussing different aspects of the paper with Rajesh Bhatt, Kai von Fintel, Roumi Pancheva, Sergei Tatevosov and Maziar Toosarvandani. For additional Turkish data, I would like to thank İsa Kerem Bayırlı, Meltem Keleş, Duygu Özge and Umut Özge.

- (2) sen-in pişir-diğ-in köfte-ler-i yi-yeceğ-im.
 you-gen. cook-nom.-2.sg. meatball-pl.-acc. eat-fut. -1.sg.
 ‘I will eat the meatballs you cooked.’

Kornfilt analyzes sentences like (1) as “Light-headed- Relatives” (Citko 1999), not as true FRs:

- (3) [[[Sen-in t_i pişir-dik-ler-in] Op._i]_j (=i) pro_j (=i)]-i yi-yeceğ-im.
 you-gen. cook-nom.-pl.2.sg. -acc. eat-fut.-1.sg.
 ‘I will eat “the things” which you cooked.’

Now consider the following sentences, which exemplify Strategy II:²

- (4) a. [Yarış-ı kim kazan-ır-sa] prenses-le evlen-ecek.
 [race-acc who win-aor.-cond.] princess-with marry-fut.
 ‘Whoever wins the race will marry the princess.’
 b. Prensese [yarış-ı kim kazan-ır-sa] iş-e al-acak.
 princess [race-acc who win-aor.-cond.] work-dat. take-fut.
 ‘The princess will hire whoever wins the race.’
 c. [Sen ne pişir-di-yse-n] yi-yeceğ-im.
 you what cook-past-cond-2.sg. eat-fut.-1.sg.
 ‘I’ll eat what(ever) you cooked.’
 d. [Sen kim-i seç-er-se -n] iş-e al-ın-acak.
 you who-acc. choose-aor.-cond.-2.sg. work-dat. take-pass.-fut. (3.sg.)
 ‘Whoever you choose will be hired.’

As can be seen above, Strategy II differs from Strategy I in that it has no nominalizing morphology; its subject is in the Nominative, not the Genitive; it contains wh-words; it contains the marker –sA, which is glossed as the conditional marker. (Similar sentences are named “Universal Conditional Clauses” by Göksel and Kerslake, 2005, and are discussed in the chapter on conditionals, presumably because of the marker -sA). Moreover, unlike headed relatives (5) and Strategy I (6), Strategy II does not/cannot carry any Case morphology (7).

- (5) [(Sen-in) pişir-diğ-in herşey*(-i)] yi-yeceğ-im.
 you-gen. cook -nom.-2.sg. everything*(-acc.) eat-fut.-1.sg.
 ‘I will eat everything you cook.’
 (6) Sen-in pişir-dik-ler-in*(-i) yi-yeceğ-im.
 you-gen. cook- nom.-pl.-2.sg.*(-acc.) eat-fut.-1.sg.
 ‘I will eat “the things” which you cooked.’
 (7) Sen ne pişir-ir -se-n(*-i) yi-yeceğ-im.
 you what cook-aor.-cond-2.sg.(*-acc.) eat-fut.-1.sg.
 ‘I will eat whatever you cook.’

² From now on the term “Free Relative” will be coextensive with “FR of Strategy II”.

One might be tempted to think that since the Accusative in Turkish is related to specificity, that maybe Accusative and the FR are incompatible for a semantic reason. Example (5) is meant to show that Accusative does go, in fact, on universally quantified elements, and of course it goes on definites (Enç 1991 a.o.), and since FRs are taken to be one of the two, we cannot attribute the impossibility of Case to a semantic incompatibility.

Furthermore, there is an additional reason to believe that the inability of Case to appear in Strategy II examples is not due to semantic factors. Unlike Accusative Case, Dative is not controlled by any semantic properties of the constituent it appears on and it is not optional:

- (8) Ali*(-**ye**) Topkapı-yı göster-eceğ-im.
 Ali*(-**dat.**)Topkapı-acc. show-fut.-1.sg.
 ‘I will show Topkapı to Ali.’

Yet, the Dative cannot appear on a Strategy II FR:

- (9) Kim-i tavsiye et-ti-yse-n(*-**e**)
 who-acc recommendation do-past-cond.-2.sg(*-**Dat.**)
 (on-a/kendisinin-e) Topkapı-yı göster-di-m.
 he-dat/himself (logophor-dat.) Topkapı-acc show-past-1.sg.
 ‘I showed Topkapı to whomever you recommended.’

So Strategy II FRs do not carry Case-morphology. Yet, their appearance is constrained by the Case-filter. This can be shown by common Case-filter tests. In addition, the following Case test was suggested to me by Jaklin Kornfilt (p.c.). Nouns do not assign Accusative Case:

- (10) *Ali-nin bu roman-ı tercüme-si son derece tuhaf.
 Ali-gen. this novel-acc. translation-3.sg. last degree strange
 Intended: ‘Ali’s translation (of) this novel is very strange.’

A nominalized light verb or auxiliary can bring in Case (11):

- (11) Ali-nin bu roman-ı tercüme **et**-me-si
 Ali-gen. this novel-acc. translation do-non-factive nom.-3.sg.
 son derece tuhaf.
 last degree strange
 ‘That Ali is translating this novel is very strange.’

The same pattern holds for Case on the FR:

- (12) *Ali-nin [sen ne yazar-sa-n] tercüme-si son derece tuhaf.
 Ali-gen. you what write-cond.-2.sg. translation-3.sg. last degree strange
 Intended: ‘Ali’s translation (of) (i.e. translating) whatever you write is very strange.’

- (13) Ali-nin [sen ne yazar-sa-n] tercüme et-me-si
 Ali-gen. you what write-cond.-2.sg. translation do-non-factive nom.3.sg.
 son derece tuhaf.
 last degree strange
 ‘Ali’s translating whatever you write is very strange.’

But if the FR can never carry overt Case, why is it subject to the Case-Filter?

2 A quick check on the range of meanings associated with FRs

The readings that have been reported for FRs in other languages (von Stechow 2000 and much other work) are present in Turkish with Strategy II FRs:

The Bland Definite:

- (14) Dün Ali ne pişir-di-yse-m ye-di.
 yesterday Ali what cook-past-cond.-1.sg. eat-past
 ‘Yesterday Ali ate what I cooked.’ (=He ate the thing(s) I cooked.)

Ignorance:

- (15) Bu makale-yi kim yaz -dı -ysa (also: yaz-mış-sa)
 this article -acc. who write-past-cond. (also: write-past.partcpl.-cond.)
 on-un-la/kendisi-yle tanış-mak isti-yor-um.
 he-dat. with/himself-with meet-infin. want-pres.progr.-1.sg.
 ‘I want to meet (with) whoever wrote this article.’ (=I don’t know who wrote it.)

Indifference:

- (16) Ali oy pusula-sı-nın en baş-ın-da kim var-sa
 Ali ballot form-cmpd.-gen. most head-3.sg.-loc. who exist-cond.
 on-a oy ver-di.
 he-dat. vote give-past
 ‘Ali voted for whoever was/is on top of the ballot form.’
 (=He didn’t care who he voted for; he randomly picked the first person on the list.)

Generalizing:

- (17) Ali ne pişir-ir-se-m ye-r.
 Ali what cook-aor.-cond.-1.sg. eat-aor.
 ‘Ali eats whatever I cook.’ (=Whenever I cook something, he eats it.)

One might wonder whether Turkish FRs are like English plain wh-FRs or *wh-ever* FRs. One would have to conclude that on the basis of the fact that the singular bland definite reading is available, that they are like the plain ones. If it turned out that the bland definite reading is not available, we would need further tests to reach any conclusion about which type of English FR, Strategy II is similar to.

3 The Wh-word in FRs

One of the main questions that has preoccupied the work on FRs, is the nature, position and contribution of the wh-word (Bresnan and Grimshaw 1978, Groos and van Riemsdijk 1979 and much work since). Some languages, like Greek, have a specialized paradigm for FR pronouns, which differs from that for headed relative clauses as well as for interrogatives.³ In other languages, like English, FR pronouns, headed relative pronouns and interrogative pronouns look alike morphologically. Turkish does not have any relative pronouns. So the space of possibilities contains (at least) the following options:

- A. In Turkish, the Wh-words in a FR are a morphological paradigm that is specialized for FRs (as is the case in e.g. Greek) but it just so happens that this specialized paradigm looks like the interrogative paradigm.
- B. In Turkish, the Wh-words in a FR are associated with interrogative semantics.⁴
- C. In Turkish, the Wh-words in a FR and the Wh-words in a question belong to the same category but this category is neither specialized for questions, nor for FRs.

Let's reject option A. One cannot exclude that it is the truth but accidental homophony in syntax/semantics issues should not be our first-choice solution. Option B should also be rejected as there is clearly no interrogative semantics at work here.⁵ This means that we are left with option C: The Wh-words in a FR and the Wh-words in a question belong to the same category but this category is neither specialized for questions, nor for FRs.

3

Relative pronoun FEM, SG, ACC	Interrogative pronoun FEM, SG, ACC	FR pronoun FEM, SG, ACC
tin opían	piá	ópia

⁴ For example, it is a special sort of existential quantifier that needs to be in a syntactically local relation to a Question complementizer/morpheme (Karttunen 1977).

⁵ However, it is worth pointing out that there are proposals according to which some **concessive** adjuncts which look like FRs do, in fact, contain interrogative semantics. These proposals are Izvorski 2000 and Rawlins forthcoming. There are differences between the two proposals but what they share is that a sentence like (i) should be thought of as (ii) or (iii)

i. [Whatever he did], I will still love him

ii. No matter what he did, I will still love him

iii. For every answer to the question 'what did he do', I will still love him

Going back to FRs in argument position, however, it seems quite difficult to think of these as containing interrogative semantics. And they do not for Izvorski and Rawlins either.

This option seems the most likely one, not just because the other ones have been excluded but because in addition, it has some merit of its own. How can we make sense of Option C? It has been proposed for Japanese (and Korean), that Wh-words are “indeterminate pronouns” introducing “Hamblin alternatives”. They participate in the formation of a question, once a higher placed question operator has “captured” them (“Hamblin” semantics; see work by Kuroda, Hagstrom, Shimoyama, Kratzer and Shimoyama, and others). In Japanese, it is not just a question operator that can capture these indeterminate pronouns.

	<i>Who</i>	<i>what</i>	<i>which N</i>	<i>which</i> <i>one</i> _{NONHUM}	<i>which</i> _{DUAL}
Q	dare...ka	nani...ka	dono N...ka	dore...ka	docchi...ka
∀	dare-mo	<gap>	dono N-mo	dore-mo	docchi-mo
∃	dare-ka	nani-ka	dono N-ka	dore-ka	docchi-ka

This is not the case in Turkish. Only one existential quantifier seems to be built on the wh-word (*kimse* 'someone'; *kim*='who'), and no universal one does. However, nothing dictates that if a language uses the Hamblin semantics for interrogatives, it has to use it for every single other paradigm. So it is entirely possible that Wh-words in Turkish introduce alternatives and the sentence needs a higher operator to capture them, but only a few operators do this: possibly only the Question operator and the operator that is involved in FRs.

What might the latter be? This question reduces to one about the nature of FRs in general, namely, are they definites (in which case the alternatives would be captured by an iota operator) or universally quantified (i.e. captured by a universal operator). I will not address this here.

In short, there is no interrogative semantics in Turkish FRs, even though we see what are called “wh-words”. These contribute alternatives.⁶

4 More on the FR internal picture

Now that we have a working hypothesis for the wh-word in a FR, let’s look at Strategy II again:

- (18) [Yarış-ı kim kazan-ır-sa] prenses-le evlen-ecek.
 [race-acc. who win-aor.-cond.] princess-with marry-fut.
 ‘Whoever wins the race will marry the princess.’

The two other properties that we saw is that these FRs, unlike Strategy I, do not contain nominalizing morphology (or a Genitive subject), and that they contain what is called conditional -sA. Let’s look at each in turn.

Why would a FR not contain nominalizing morphology? One possible answer is that we do not need nominalizing morphology because the constituent is already nominal. After all, FRs are

⁶ I am hiding under the rug here the fact that a Hamblin semantics for argument free relatives is a bit of a challenge. The reason is that propositional alternatives do not seem to play a role in the computation of the meaning of free relatives. As discussed in the main text, free relatives are either definite descriptions of entities or universal quantifiers over entities. Such meanings are best made from predicates rather than sets of propositions. Hopefully, further research will provide answers to these concerns. See also Caponigro 2004.

known to have the category of the Wh-word, and if the latter is nominal, the whole FR is nominal as well (Bresnan and Grimshaw 1978, Groos and van Riemsdijk 1981). However, this would not explain why Case morphology cannot appear on it. We will come back to this question once we understand more.⁷

Next we come to the question of what -sA is doing in FRs. As already mentioned, it is glossed as the conditional marker in all the sources that I consulted, though it is not the only marker of conditionality in the language. There is also optional *eğer* which is translated as “in case”, though its status as a prepositional phrase is far from clear to me.

- (19) (Eğer) yağmur yağ-ar-sa sinema-ya gid-eceğ-iz.
 (in case) rain rain-aor.-cond. movies-dat. go-fut.-1.pl.
 ‘(In case) it rains, we will go to the movies.’

But is -sA in FRs the same as -sA in conditionals? Again, it could be a specialized marker just for FRs, homophonous with the conditional marker, but we will again leave this as the least desirable option. What are some other possibilities?

There is one more environment where –sA appears, namely as a contrastive topic marker:

- (20) Ali çok hoş bir insan-dır, Oya-ysa çok sevimsiz-dir.
 Ali very nice a person-is, Oya-sA very unlikeable-is
 ‘Ali is a very nice person; Oya, on the other hand, is very unlikeable.’

Should -sA in FRs be reduced to -sA in contrastive topics or to conditional -sA? There are several reasons to believe that -sA in FRs is not the contrastive topic marker.

For one, the contrastive marker appears only in certain contexts, whereas FR -sA is obligatory. We can see this very clearly when we look at environments where contrastive -sA is not licensed on the object,⁸ yet FR -sA is just fine, in fact, required:

- (21) a. Ali Osman-ı iş-e al-dı;
 Ali Osman-acc. work-dat. take-past-2.sg.
 ‘Ali hired Osman.’

*Ayşe-sA (on the other hand), Oya-sA

- b. Ali Osman-ı iş-e al-dı;
 Ali Osman-acc. work-dat. take-past-2.sg.
 ‘Ali hired Osman.’

Ayşe-yse kim-i tavsiye et-ti-yse-n.
 Ayşe-sA who-acc recommendation do-past-cond.-2.sg.
 ‘Ayşe (on the other hand), whoever you recommended.’

⁷ One might remark that in general, this is a question with broader crosslinguistic scope, as FRs do not carry Case morphology in other languages. However, Turkish has Case on nominalized clauses, so the question arises more accurately here.

⁸ That is, it is not the presence of -sA on the subject that causes the problem. The sentence is fine if -sA on the object is replaced by the Accusative marker.

Moreover, contrastive -sA cannot appear on a focused/new information element:

- (22) A: Kim-i iş-e al-dı-n?
 who-acc. work-dat. take-past-2.sg.
 'Who did you hire?'
 B: *Ali-yi-yse.
 Ali-acc.-sA.

But -sA in a FR is just fine as an answer to a question:

- (23) A: Kim-i iş-e al-dı-n?
 who-acc. work-dat. take-past-2.sg.
 'Whom did you hire?'
 B: Kim-i tavsiye et-ti-yse-n.
 who-acc. recommendation do-past-cond.-2.sg.
 'Whoever you recommended.'

Furthermore, in FRs, -sA is on a finite verb. In its contrastive topic use, -sA can appear on different constituents, but not on the verb. That is, it is not possible to place -sA on a (non-infinitive or not-nominalized) verb if one wants to contrastively mark it (Jaklin Kornfilt, pc). Placing -sA on the verb would make it necessarily a conditional (or Strategy II). In other words, -sA in a FR is not the same -sA as in contrastive topics.

What about relating contrastive topic -sA to conditional -sA?

This is, in fact, the proposal of Haiman (1978), who remarks that in Hua, Tagalog and Turkish, conditionals and topics are marked in the same way. Specifically for Turkish, he says (p. 577):

"The most immediate connection between the syntactic categories of topic and conditional is manifested in those languages where the regular mark of the conditional is also the regular mark of the topic. I know of two languages where this identity holds. If the analysis of topics defended here is accurate, there are doubtless others (...). One such language is Turkish, where the conditional suffix -sA, suffixed to an NP, establishes it as a contrastive topic:

[(24)] Ahmed i -se çok meşgul.
 be if very busy

'As for Ahmed, he's very busy; If it's Ahmed you're interested in, he's very busy.' "

Haiman claims that this is not a coincidence; that there is a deep similarity between conditionals and topics, and he gives the following definitions for the two to bring out their similarities:

Conditionals (p. 583):

"A conditional clause is (perhaps only hypothetically) a part of the knowledge shared by the speaker and his listener. As such, it constitutes the framework which has been selected for the following discourse."

Topics (p. 585):

"The topic represents an entity whose existence is agreed upon by the speaker and his audience. As such, it constitutes the framework which has been selected for the following discourse."

However, it is not obvious that this is correct. We already saw in (29) that topics cannot be new information. On the other hand, conditional antecedents can be new information:

- (25) A: *Hangi şart-lar alt-in-da ban-a piyano-n-u sat-ar-sın?*
 what condition-pl. under-3.sg.-loc. I -dat. piano-2.sg.-acc. sell-aor.-2.sg.
 'Under which conditions will you sell me your piano?'
 B: *Ban-a bir milyon lira ver-ir-se-n*
 I-dat. one million lira give-aor.-cond.-2.sg.
 'if you give me a million liras'

So do we have three -sAs then? One for contrastive topics, one for conditionals and one for FRs?

5 Strategy II FRs = Conditionals? (Answer: No!)

From the above it is clear that if a reduction is possible between any two of the three -sAs, it is the -sA that appears in conditionals and the -sA that appears in FRs that should be assimilated, because they have several things in common. Most notably, the clause/constituent containing -sA can be focused and -sA appears on the verb. So let us return to the question of whether a reduction between FR -sA and conditional -sA can be achieved. To my knowledge, there is no existing proposal in the literature for a conditional semantics for argument FRs and, indeed, a conditional interpretation for FRs in argument position is difficult to imagine. In addition, there are good reasons to believe that Strategy II is not interpreted as a conditional in Turkish:

A. By looking at an example like (26a), one might be tempted to think that given that the paraphrase in (26b) is possible that we are, in fact, dealing with conditionals.

- (26) a. [*sen ne pişir-ir-se-n*] *yi-yeceğ-im.*
 you what cook-aor.-cond-2.sg. eat-fut.-1.sg.
 'I will eat whatever you cook.'
 b. If you cook something, I will eat it.

However, this is only because such examples are generic. We can have these FRs with actualized events, which do not permit a conditional paraphrase:

- (27) a. Ne pişir-di-yse-n ye-di-m.
 what cook-past-cond.-2.sg. eat-past-1.sg.
 ‘I ate what you cooked.’
 b. *If you cooked something, I ate it

B. The FR can be the answer to a question about an individual, which it could not be if it was a conditional antecedent:

- (28) A: Kim-i iş-e al-dı-n?
 who-acc. work-dat. take-past-2.sg.
 ‘Who did you hire?’
 B: Kim-i tavsiye et-ti-yse-n.
 who-acc. recommendation do-past-cond.-2.sg.
 ‘Whoever you recommended.’

C. We saw in (19) that sentences that are uncontroversially conditionals, can take optional *eğer* (“in case”) on the adjunct. If Strategy II FRs were conditionals, one would expect *eğer* to appear there as well, but this is not the case (contrast with (4a)):⁹

- (29) *Eğer yarış-ı kim kazan-ır-sa] prenses-le evlen-ecek.
 in case [race-acc who win-aor.-cond.] princess-with marry-fut.
 Intended: ‘Whoever wins the race, will marry the princess.’

D. The (generic¹⁰) FRs that we have seen so far, are such that *if* they were conditionals, there would be a pronoun in the consequent corresponding to a referent in the antecedent, as in (26) or (30):

- (30) a. [Whoever solves this problem] will get an A on the exam.
 b. If someone solves this problem, s/he will get an A on the exam.

However, for conditionals, there is nothing necessary about having an argument in the consequent corefer or covary with an argument in the antecedent:

- (31) If it rains, we will go to the park.

This means that if our FRs were conditionals, we should be able to create sentences in which the consequent does not contain an argument corresponding to the wh-word in the antecedent. But this is not possible:¹¹

⁹ Thanks to Isa Kerem Bayırlı for discussion of this point.

¹⁰ Because as in (A) above, the non-generic ones anyway do not permit a conditional paraphrase.

¹¹ The choice of ‘someone/everyone, the person’ is so as not to prejudge the question of whether the wh-word would have been interpreted as/captured by an existential, universal, or iota operator.

- (32) *Kim gel-ir-se ben-i uyan-dır!
 who come-aor.-cond(-3) I-acc. wake-caus(-imp)
 Literally: if who comes, wake me up
 Intended: ‘If someone/everyone/the person comes, wake me up!’
- (33) *Bina-da kim-i gör-ür-sen günlerden Perşembe ol-malı.
 building-at who-acc. see-aor.-cond-2sg from days Thursday be-epis.
 Literally: if you see who in the building, it must be Thursday
 Intended: ‘If you see someone/everyone/the person in the building, it must be Thursday.’
- (34) *John 9'dan önce kim-in-le konuş-ur-sa
 John 9-from before who-gen-com speak-aor-cond
 tüm gün aksi ol-ur.
 all day grump be(come)-aor.
 Literally: if John talks to who before 9am, he is grumpy all day
 Intended: ‘If John talks to someone/everyone/the person before 9am, he is grumpy all day.’

The ungrammaticality of the above three sentences is completely consistent with Strategy II being FRs and only FRs, never conditionals.

In summary, in Strategy II, the clause containing -sA is not a conditional adjunct. That is, in Strategy II, -sA does not contribute conditionality.

There is one further possibility to consider, however: FR -sA and conditional -sA are in fact, the same -sA, but -sA is not conditional marker in either. It does appear in conditionals, of course, but it is not a marker of conditionality.

Before we go on to explore what -sA could be if it is not a marker of conditional semantics, let us first address a potential worry. If -sA is not what marks a sentence as a conditional, then there appears nothing in the sentence that does. All other marking is accounted for (and from now on I will be glossing -sA in FRs as “sA”, not as “cond”):

- (35) a. Yağmur yağ-ar-sa sinema-ya gid-eceğ-iz.
 rain rain-aor.-sA movies-dat. go-fut.-1.pl.
 ‘If (in case) it rains, we will go to the movies.’
 b. Baş-ı ağrır-sa her öğrenci aspirin iç -er.
 head-3.sg. hurt-sA every student aspirin drink-aor.
 ‘If he has a headache, every student takes aspirin.’

Is it possible to have a conditional without a specialized marker of conditionality? Yes, this happens all the time, in fact.

In English, without the complementizer *if* (which is not even that specialized, as it appears in embedded interrogatives as well), there are still plenty of other ways to achieve conditional semantics.

Inversion:

(36) Had I known that you were sick, I would have visited you

“Left-Subordinating *and*” (Cullicover and Jackendoff 1999)

- (37) a. She looks at him and he shies away in fear (=if she looks at him, he shies away)
 b. Ignore your homework and you will fail (=if you ignore your work you will fail)

"Comparative Conditionals":

(38) The more he waits, the angrier he gets (=if he waits, he gets angrier)

Infinitive embedding:

(39) To have danced in the park would have been wonderful (=if we had danced in the park, it would have been wonderful)

Free adjunct-cum-modal:

(40) Standing on a chair, he can reach the ceiling (=if he stands on a chair, he can reach the ceiling) (Stump 1985)

So one does not need an “if” to mark a conditional antecedent/adjunct. All one needs from the syntax is a way to access conditional semantics. If the latter is say, quantification over worlds, then all one needs is a way to flag which clause is the restrictor and which the scope of the quantifier over worlds. For example, in (37), this flag could be the fact that the order of conjuncts is fixed (the antecedent would be the first conjunct).

In particular, the Turkish case that we are looking at would be more akin to (36), in that we are dealing with an adjunct, specifically an adjunct without a conditional marker and which, moreover, contains a finite verb. Iatridou and Embick (1994) concluded that while there are V1 adjuncts without an overt complementizer that do not receive conditional interpretation,¹² when the highest verb in V1 adjuncts is finite, they are only interpreted as conditionals (though not necessarily counterfactual conditionals). And if V1 is merely the result of a lack of complementizer in certain languages, then the generalization should be broadened: any adjunct with a finite highest verb without an overt complementizer is interpreted as a conditional.¹³

In short, if we say that -sA does not mark conditional semantics, we will not suddenly find ourselves in a situation where we are desperate for a conditional marker but can't find one.

¹² For example, Italian and English:

i. avendo finito il giornale, iniziò a leggere il libro
 having-prtcp finished-PP the newspaper started-past-1sg to read-inf. the book

'Having finished the newspaper, he started reading the book'

¹³ Since Turkish is verb-final, it is very difficult (maybe even impossible?) to determine whether the verb has undergone movement to (sentence-final) C, as in V1 adjuncts like (36).

The step of dissociating -sA from conditional semantics leaves the path open to finding a common reason for its existence in FRs and conditionals. But if -sA is not a marker of conditionality ever, what is it?

6 Correlatives

I would like to propose the following working hypothesis:

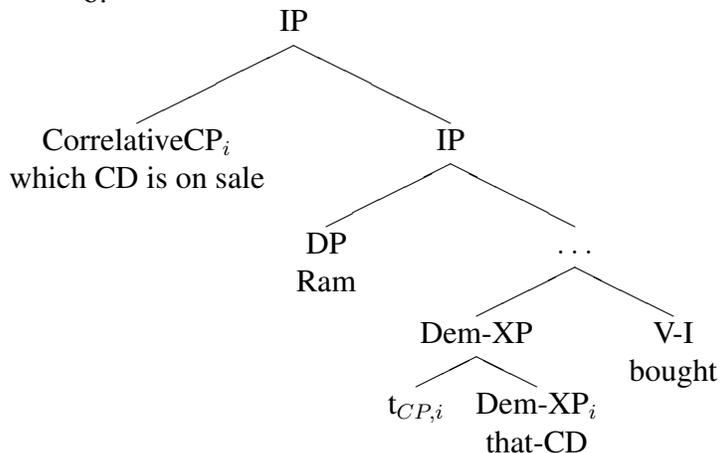
- (41) -sA is a marker of a correlative clause, and the reason that sA appears in conditionals and Strategy II is that both are correlative constructions.

Correlatives are (frequently) left-adjoined relative clauses, with a corresponding proform in the matrix (42a). The language that correlatives have been studied in the most is Hindi. (42b) is a famous example from Dayal (Srivastav) 1991:

- (42) a. [REL-XP_i. . . .] [IP . . . Dem-XP_i. . . .]
 b. [jo laRkii khaRii hai] vo lambii hai
 rel girl standing is that tall is
 Literally: which girl is standing, that is tall
 ‘The girl who is standing is tall.’

And one from Bhatt 2003, including the syntactic representations that show his proposal according to which the relative clause is generated as one constituent with the demonstrative pronoun, and then moves to an IP-adjoined position:

- (43) a. [which CD is on sale] [Ram **that**-CD bought]
 b.



We will not concern ourselves here with any specific proposal for the derivation of correlatives; the above are meant to merely provide the reader with a visual reminder of their appearance.

Are there correlatives in Turkish? In the introduction to the book *Correlatives-Crosslinguistically*, Liptak says the following (p. 10): “Rigid verb final languages like Japanese

or Turkish do not feature correlatives, “loose” head final languages on the other hand do.” Even so, I will argue that Turkish does have correlatives.¹⁴

Conditional syntax of the *if p (then) q* variety¹⁵ has been analyzed as correlatives by a number of people since at least Geis 1970 (see Bhatt and Pancheva 2006 for further references). We will not repeat the arguments here, as they exist in the literature. In short, if -sA is, indeed, a marker of a correlative clause, we would not be surprised to find it in conditionals. Let’s put this working hypothesis in place then.

Recall that the objective was to find a way in which -sA in conditionals plays the same role as in FRs. We are now considering the possibility that sA in conditionals is not a marker of conditionality, but a marker of a correlative clause. This would mean that what we have been calling FRs in Turkish are correlatives. Can we pull this off? In order to do so, we would have to find convincing answers to the following questions: How similar is Strategy II in Turkish to uncontroversial correlatives, like, for example, in Hindi? What are the similarities and differences? And can we explain some of the properties of Strategy II that we saw? Let us address some specific questions along those lines.

In Hindi, a correlative contains a relative pronoun, not an interrogative word. But what if a language does not have relative pronouns? Recall the possibility that we discussed earlier that Turkish Wh-words do not indicate the presence of interrogative semantics but introduce alternatives. Then they can perfectly well play this role in the semantics of a relative clause, the way the relative pronouns do in Hindi.¹⁶

Correlatives have a proform in the matrix, corresponding to the correlative clause. But who says that this proform must be overt? It could very well be *pro*. This is found in Hindi as well (See Srivastav 1991 and Bhatt 2003 that the following contains *pro*):

- (44) [jo lar.ki: khar.i: hai] lambii hai
 rel girl standing.F be.Prs tall.F be.Prs
 ‘[Which girl is standing] is tall.’

The sentences in (3) and others like it could very well have a *pro* proform, in other words. It would, of course, be good if the proform **could** be overt in Turkish. And, in fact, it can. Below are the initial 4 cases we looked at, all with an overt pronoun:

- (45) a. [yariş-ı kim kazan-ır-sa] o prenses-le evlen-ecek.
 [race-acc who win-aor.-sA.] he princess-with marry-fut.
 ‘Whoever wins the race will marry the princess.’
 b. Prensese [yariş-ı kim kazan-ır-sa] on-u iş-e al-acak.
 princess [race-acc. who win-aor.-sA.] he-acc. work-dat. take-fut.
 ‘The princess will hire whoever wins the race.’

¹⁴ At her talk at the International Conference on Turkish Linguistics, September 18-20, 2012, in Ankara, Jaklin Kornfilt presented independent arguments for the existence of correlatives in Turkish.

¹⁵ Recall that there is no designated “conditional syntax”. Several types of syntactic constructions can yield conditional semantics.

¹⁶ Moreover, at least in Polish, the wh-word that is used in correlatives is the same as the one in interrogatives and headed relatives (Citko’s paper in Liptak 2009).

- c. [(sen) ne pişir-di-yse-n] **on-u** yi-yeceğ-im.
 [you what cook-past-sA -2.sg.] it-acc. eat-fut.-1.sg.
 'I'll eat what(ever) you cooked.'¹⁷
- d. [Sen kim-i seç-er-se-n] **o** iş-e al-ın-acak.
 [you who-acc. choose-aor.-sA-2.sg.] he work-dat. take-pass.-fut.(3.sg.)
 'Whoever you choose will be hired.'

Moreover, like in Hindi, the Turkish correlative can appear separated from the proform:

- (46) [yarış-ı kim kazan-dı-ysa] prenses **on-u** iş-e al-dı.
 race -acc. who win -past -sA princess he-acc. work-dat. take-past
 Literally: [who won the race] the princess him hired
 'The princess hired whoever won the race.'

Interestingly (but predictably), a coindexed pronoun is NOT possible with Strategy I. This is exactly what we would expect given Kornfilt's analysis of Strategy I:

- (47) (Sen-in) pişir-dik-ler-in-i (*on-lar-ı) yi-yeceğ-im.
 (you-gen.) cook-nom.-pl.-2.sg.-acc. (* they-pl.-acc.) eat-fut.-1.sg.
 'I will eat "the things" (*them) which you cooked.'

Finally, In Hindi, the proform is a demonstrative. It's not entirely clear to me whether the Turkish proform is a demonstrative or a pronoun. However, even if it is a pronoun, there is no problem. There is nothing that dictates that the overt proform has to be a demonstrative. The semantics that has been proposed for correlatives (see Liptak 2009 for a summary and references) requires of the proform that it be definite. It is far from clear why it should have demonstrative properties in addition. Putting details aside, the main idea about correlatives is that the correlative itself yields an individual, with the matrix clause being the predicate. The proform is what is abstracted over to yield a predicate. So there is no known reason why a pronoun should not be able to function in this role.

We saw that Strategy II clauses are subject to the Case filter. Yet, we also saw that they cannot carry Case morphology. We can now reconcile these two facts: Strategy II constituents cannot carry Case because they are not DPs; they are clauses/IPs (possibly CPs). They are subject to the Case-filter not because they themselves need Case, but because the proform does. That is, environments in which the FR is not in a Case-assigned position are ungrammatical because the proform lacks Case.

We saw that Strategy II comes with a series of readings that are typically associated with FRs. Do we lose this fact if we analyze them as correlatives? No, as we already know from the work of Dayal (1995) and others that such readings are possible with correlatives as well.

Finally, den Dikken (2005) argues there is a certain type of comparative which always appears as correlative even in languages that otherwise do not have productive correlatives, like English. Those exist in Turkish as well, and they contain -sA, putting more support behind the position that this marker appears in correlatives:

¹⁷ Apparently it is dispreferred to use pronouns for inanimate things but stress makes it better. Obviously, this constraint is orthogonal to our purposes.

- (48) Ne kadar fazla iç-ti-yse o kadar fazla bağır-dı.
 what much more drink-past.-sA that much more scream-past.
 ‘The more he drank the more he screamed.’

To summarize then what we have so far:

I. What we have been calling Strategy II FRs are correlatives, associated with a covert or overt proform.

II. -sA is not conditional morphology in Turkish, not even in conditionals.¹⁸

III. What has been called “conditional sA” is a marker of correlativity, and it appears in both Strategy II and conditional *if p, then q* syntax, since both are correlatives.

Before we proceed to the next section, I would like to bring the reader's attention to two questions that would still need to be addressed if the current proposal is correct and one comment regarding the difference between FRs and Correlatives.

The marker -sA appears between the verb+tense and agreement. It is unclear why it would appear there on the present account. However, this question also holds in case one analyzes -sA as a marker of conditionality.

Hindi does not have specialized correlative morphology but Turkish in our proposal does, namely -sA, which appears in all correlatives, including conditionals. To my knowledge, no language has been reported as having a specialized correlative marker. But this worry is slightly misleading. First of all, there are languages with specialized morphology that appear in FRs in the form of FR-designated pronouns, like Greek. Turkish does not have FR-designated pronouns, so it cannot do what Greek does. In fact, it does not have relative pronouns at all, so it cannot do what Hindi does either. The only way to flag a correlative as such, is with a specialized morphological marker. Since Turkish is agglutinative, it is not surprising that this marker appears on the verb. Do we find this pattern in other languages? Caponigro and Polinsky (2011) argue that in Adyghe, relative clauses are marked with an affix on the verb. The cases they are talking about are not correlatives, but the principle is the same: in some languages relative clauses are marked with relative pronouns, in others with affixation on the verb. It should not be surprising that the same holds for correlatives.¹⁹

¹⁸ Another suspicion that -sA is not conditional is that it doesn't follow a common (though by no means absolute) crosslinguistic tendency: in many languages, the marking (m) of a conditional antecedent appears on the complement of counterfactual wish:

i. If p_{m1} , q_{m2}

ii. I want $m2$ that S_{m1}

This isn't so in Turkish:

iii. Daha uzun boy-lu ol-mak iste-r-di-m.
 more long height-with be-infinitive want-aorist-past-1.sg.
 ‘I would wish to be taller.’

iv. Daha uzun boy-lu ol-a-yIm iste-r-di-m.
 more long height-with be-optative-1.sg. want-aor.-past-1.sg.
 ‘I would have liked to have been taller.’

Göksel and Kerslake (2005) have constructions that they call ‘wishes’ in which -sA appears, but they are actually all conditionals proper, they do not contain a bouletic verb.

¹⁹ In addition, we should be looking for a language where correlatives are again described as containing conditional morphology, since by hypothesis, the correlative marker would also appear in conditionals, and therefore could easily be misidentified as a marker of conditionality. Tibetan seems to have morphology that is glossed as

Let us next come to the relations between FRs and Correlatives. We went from calling Strategy II constructions "Free Relatives" to calling them "Correlatives". FRs and Correlatives have several properties in common, and in fact, there are proposals that provide a semantics for correlatives that is built on a semantics for FRs. Both correlatives and FRs built from a nominal FR need to be associated with a Case position, but the reason is different. Nominal FRs need Case because the entire FR is a nominal. On the other hand, Correlatives are relative clause adjuncts and as such they do not need Case but their proform does. The correlative does not stand in an argument position. Syntactically it is a CP which is an adjunct. On the other hand, a FR has the syntactic category of the *wh*-word, so if the latter is DP, the FR is a DP.

There should be several differences that result from the CP-status of correlatives versus DP-status of FRs. However, if Kornfilt (2005) is correct about Strategy I Free Relatives (that they are Light Headed Relatives) and the current proposal about Strategy II is correct (that they are correlatives) this prediction will be very difficult to test in Turkish, as it does not have FRs proper. There is at least one language, though, which demonstrably has both free relatives and correlatives. This language is Polish. In a paper on similarities and differences between FRs, correlatives, headed relatives and questions, Citko (2009) shows that in Polish FRs pattern with headed relatives, while correlatives pattern with questions on a variety of tests, including reconstruction. More work is required to apply similar tests in Turkish, however. In addition to the fact that Turkish does not have (genuine) FRs in argument position, an additional difficulty to applying some of Citko's tests comes from Turkish being a *Wh*-in-situ language, which would make reconstruction tests inapplicable.

7 Case and the proform

So far we have seen that a Strategy II construction can appear in positions in which there is Accusative, Nominative or Dative Case and that a proform can optionally appear overtly, otherwise it is *pro*.

However, with the Ablative and Locative we see a different pattern. In these environments, the overt proform is required.²⁰

- (48) Kim-i beğen-iyor-sa-n ben ***(on-dan)**
 who-acc. admire-pres.prog.-sA.-2.sg. I ***(he-Abl.)**
- çok kork-uyor-um.
 very fear-pres.prog.-1.sg.
 'Whoever you admire, I'm afraid of him.'

"conditional" in correlatives but unfortunately, difficult access to native speakers made it impossible for me to apply crucial tests.

²⁰ Predictably, Strategy I has no problems in this environment. For example the genitive:

- i. yarış-ı kazan-an-ın ödül-ü
 race-acc. win-subj.rel.nomzn.-gen. prize-3.sg.
 'The prize of the one who won'

- (49) Geçen yıl nere-ye git -ti-yse-n ben de
last year where-dat. go-past-sA.-2.sg. I too

***(ora- da)** kal-mak ist-iyor-um.
yonder-loc. stay-infin. want-pres.progr.-1.sg.
'Wherever you went last year, I would like to stay there.'

Why would the overt proform be required in these Cases? Recall that when we see the correlative without an overt proform, we concluded that the proform is *pro*. This means that the environments that can support the construction without an overt proform, are the environments that can license *pro*. Turkish has subject pro-drop, which means that the proform is optional in subject position, as we already saw in (4a) and (4d). Similarly, Accusative can license *pro*:

- (50) A: Ali-yi gör-dü-n mü?
Ali-acc. see-past-2.sg. Q
'Did you see Ali?'

B: Evet gör -dü -m.
yes see-past-1.sg.
'Yes, I saw (him).'

Therefore, we correctly predict that we can have a FR without an overt proform in Accusative assigned positions, as in (4b) and (4c).

As for the Dative, in (8) we already saw a correlative without a proform. The prediction is that *pro* is licensed in the relevant position, and indeed it is:

- (51) A. Ali-ye ne göster-di-n?
Ali-dat. what show-past-2.sg.
'What did you show Ali?'

B. Topkapı-yı göster-di-m
Topkapı-acc. show-past-1.sg.
'I showed (him) Topkapı'²¹

Going to the Genitive, it licenses *pro* in the subject of a nominalized clause:

- (52) Ali *pro* konser-e erken gid-eceğin-i söyle-di.
Ali concert-dat. early go-fut.nom.3.sg.-acc. say-past
'Ali said that he would be going to the concert early.'

- (53) Ali *pro* konser-e erken git-me-m-i söyle-di.
Ali concert-dat. early go-non-f.nom.-1.sg.-acc. say-past
'Ali said that I should go to the concert early.'

²¹ As in English, in the Turkish equivalent of 'I showed Topkapı', the indirect argument can be understood generically, as when the sentence is uttered by a tourist guide. In (51), however, I am told that that understood indirect object is Ali.

This means that we predict that the correlative proform in this environment should also be optional, and this is borne out:

- (54) Kim-i tavsiye et-ti-yse-n (on- un)
 who-acc recommendation do-past-sA2.sg (he- Gen.)
 iş-ten kov-ul-duğ-un-u duy-du-m
 work-Abl. kicked out-pass.-nom.-3.sg.-acc hear-pst.1.sg.
 ‘I heard that whoever you recommended, he was kicked out of work.’

This way of thinking also makes the right predictions for the Ablative and the Locative. These cases do not license *pro*. That is, (55a) and (56a) mean (55b) and (56b) respectively and not (55c) or (56c):

- (55) a. ben çok kork-uyor-um.
 I very fear-pres.prog.-1.sg.
 b. = I am afraid.
 c. ≠ I am afraid of him/her.
- (56) a. ben de kal-mak isti-yor-um.
 I too stay-infin. want-pres.progr.-1.sg.
 b. = I want to stay.
 c. ≠ I want to stay there.

If *pro* is not licensed here, the ungrammaticality of the correlative without the proform follows.

One more argument for the position that the optionality of the proform should be connected to the conditions that license *pro* comes from conjunction.²² It is well known that *pro* cannot be a conjunct on its own (*"pro and Maria"). This predicts that even if we take a Case which licenses *pro* (and thus licenses an optional proform for the correlative), the proform will become obligatory in a conjunction. This is borne out. The Accusative proform is optional, as we saw, since the Accusative can license *pro*. But in a conjunction, the proform must be overt:²³

- (57) Ali-yi ve yazı yarışma-sın-ı kim kazan-ır-sa *(on-u)
 Ali-acc. and writing contest-Cmpd.-acc who win-aor.-cond. 3sg-acc
 iş-e al-acağ-ım.
 work-dat. take-fut.1.sg.
 ‘I will hire Ali and whoever wins the writing contest.’

²² Thanks to Coppe van Urk for discussion of this point. This also raises the question of the missing proform in (28B) (though some speakers weakly prefer it being present). Possibly the difference between (28) and (57) is that answers can be elliptical, as long as they are interpretable but more stringent grammatical constraints apply in conjunction.

²³ The opposite order of the two conjuncts is degraded. No clue why.

Unfortunately, there is a fly in the ointment and that is the Genitive of possession. This apparently does license *pro*:

- (58) Ali *pro* kitab-ın-ı ban-a sat-tı.
 Ali book-3.sg.-acc. I-dat. sell-past
 ‘Ali sold his book to me.’
- (59) Ali *pro* kitab-ım-ı çal-dı.
 Ali book-1.sg.-acc. steal-past
 ‘Ali stole my book.’

This would predict that the proform is optional in the genitive of possession, but it is not:

- (60) yarış-ı kim kazan-ır-sa *(**on-un**) ödül-ü
 race-acc. who win-aor.-sA. *(**he-gen.**) prize-3.sg.
 ‘The prize of whoever wins the race.’

Why the proform is required in this Genitive position remains a mystery for now.

8 Three More Questions

8.1 Multiple correlatives in Turkish?

Hindi has what are called "multi-head correlatives":

- (61) [Rel-XP_i . . . Rel-YP_j . . .] [IP . . . Dem-XP_i . . . Dem-YP_j . . .]
- (62) [jis-ne_i jo_j kar-na: cha:h-a] [us-ne_i vo_j ki-ya] (Bhatt 2003)
 Rel-Erg Rel_{do}-Ger want-Pfv Dem-Erg Dem do-Pfv
 For x, y s.t. x wanted to do y , x did y .
 (Lit. ‘Who wanted to do what, he/she did that.’)

The Turkish speakers I consulted differ on this, however:

- (63) %Kim ne-yi yap-mak iste-di-yse, o on-u yap-tı.
 who what-acc. do-inf. want-past-sA, s/he it-acc. do-past
 Intended: ‘Who wanted to do what, he/she did it.’

Is the non-existence of multi-headed correlatives for some Turkish speakers a problem for the proposal that Turkish has correlatives? Not really. The existing analyses of correlatives provide completely different derivations for single-headed than for multi-headed correlatives, as there are major syntactic differences between the two (See Bhatt 2003; Liptak 2009). So it is not the case that if a language has single-headed correlatives, it automatically follows that it will have multi-headed ones as well. I leave the investigation of multi-headed Turkish correlatives for others.

8.2 Concessive adjuncts

Recall concessive adjuncts. Here is one in Turkish:

- (64) Sen ne yap-ar-sa-n yap,
 you what do-aor.-sA2.sg. do (imper.),
 ben san-a oy ver-eceğ-im.
 I you-dat. vote give-fut.-1.sg.
 Literally: Do what you do, I will vote for you.
 ‘Whatever you do I will vote for you.’

What we see is that the adjunct contains significantly more material than its English counterpart. It is basically headed by an imperative (or optative, for a non-2nd person) verb, whose object is the correlative (cum-proform). If we take this extra material (i.e. the imperative/optative verb) out, and make the sentence look like its English counterpart, it becomes ungrammatical:

- (65) *Sen ne yap-ar-sa-n ~~yap~~
 you what do-aor.-sA-2.sg. ~~do (imper.)~~
 ben san-a oy ver-eceğ-im.
 I you-dat. vote give-fut.-1.sg.
 Literally: what you do, I will vote for you

Why would there be such a significant difference between Turkish and English? There are two questions to address: (A) why is (64) ungrammatical? (B) Why is (63) grammatical?

With respect to question A: (64) is ungrammatical, because what we have is a correlative that is not associated with any position in the matrix. In the good sentences with correlatives that we have seen so far, there was a proform in the matrix that corresponded to the correlative. But in the concessive adjunct, this isn’t the case. A correlative built from a wh-DP which has no organic connection to the matrix is uninterpretable (unlike a conditional correlative).

With respect to question B: This is something that English and other languages also have:

- (66) a. Do whatever you want to, I will vote for you.
 b. Study all you want, you will not pass that exam.
 c. Study 10 hours per day, you will not pass that exam.

And such exist in Turkish too. That is, they do not have to contain a correlative:

- (67) Gün-de on saat çalış, sınav-ı (yine de)
 day-loc. ten hour study (imper.), exam-acc. (again also)
 geç-me-yecek-sin.
 pass -neg.-fut.-2.sg.
 ‘Study 10 hours a day, you won’t pass the exam.’

What we see is an adjunct headed by a verb that is formally imperative. This imperative is not interpreted as a command. That is, it is not part of the meaning of this sentence that the speaker orders the hearer to study as much as s/he wants. The best paraphrases are the following:

- (68) a. Even if you study as much as you want, you will not pass the exam.
 b. Even if you study 10 hours a day, you will not pass the exam.

In other words, the imperative-headed adjunct functions as a conditional adjunct, a restrictor of a quantifier over worlds (see also Dobrushina 2008). First of all, we already saw that you do not need an adjunct introduced by 'if' to achieve conditional semantics. Second, there are other environments where a clause headed by a formally imperative verb becomes a restrictor of a quantifier over worlds, as in (37b) (see von Stechow and Iatridou in progress and references there in for a discussion of such phenomena). The concessive paraphrase ("even if..") provides an additional challenge. I leave that for another occasion.

8.3 Contrastive Topic -sA

The proposal in this paper argued for a reduction of both "Conditional" -sA and "FR" -sA to -sA as a marker of correlativity. The question of whether contrastive topic -sA can be brought into the fold still remains open. One possibility might have been that contrastive topicalization triggers some type of dislocation that is akin to the adjunct status of a correlative. This would predict that contrastive topics might co-occur with a proform. Unfortunately, this is not the case. The issue of the relation between contrastive topic -sA and the other two occurrences of -sA remains completely open.

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