Prenominal ARCs in Japanese and Turkish: less appositive, more adjectival?
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Dedication

In memory of Izar Jongsma.
Acknowledgments

I feel honored that I was able to study Linguistics at the Rijksuniversiteit Groningen (RUG) with a lot of talented professors, along with students who were creating their own views in the linguistics field. The years of dedication to my education have played an important role in shaping me into the person I am today. I have grown during these years, not just because of the education I received, but also because of life happened. These things combined with my faith in God extended a valuable lesson: that it was okay to take your time, as long as you deliver something good in the end. It made me more patient but also more thorough. For these developments, I would like to thank the people closest to me. My parents, who, even when I doubted myself, always believed I could do this and supported me no matter what. The same can be said of my brothers(-in-law) and sisters(-in-law), especially my brother Folkert for he knew what it was like to write a thesis when the research seemed to turn against you. My friends and boyfriend – some of which had a linguistics background as well, but even the ones who did not – often asked me about the progress of my thesis. Just as importantly, they knew when to stop asking questions and to simply re-energize me with their presences.

With respect to my master’s thesis, there are at least three names I want to mention for they delivered substantial portions to the content. First of all, my thanks goes out to Mark de Vries, my supervisor who patiently listened to any obstacles I might have endured during the researching and writing part of my thesis. I appreciated that I could go to him with each and every question, no matter how stupid it appeared. Most of the time, the talks we had gave me the distance to look at the subject afresh. It stimulated new thinking patterns within me that, I think, lead to a better research. Second and third of all, I am indebted to the invaluable data of my informants: Güliz Guniş and Tomoko Ishizuka, respectively the native speaker of Turkish and Japanese. I thank them for their willingness to provide me with data of their native languages and for their patience to answer any of my additional questions.
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1. Introduction

This chapter introduces the subject of my thesis, mainly in the first section. Section 1.2. will provide information on the research method, while 1.3. gives the outlines of what will be attended to in the following chapters.

1.1. Research question
My thesis revolves around the appositive relative clauses (ARCs) in head-final languages, for there was little research done on that side of the subject. Most of the research focuses on the head-initial languages. I enclosed the subject by focusing my attention specifically to two languages: Japanese and Turkish. A lot of researchers strongly believe that prenominal appositive relative clauses do not exist, whereas both Japanese as well as Turkish do seem to have them at their disposal. How can it be the case that the appositive relative clauses in those two head-final languages exist, yet do not exist?
For me, it was clear that, at best only, one of the points of view had to be incorrect – or at least partially incorrect in such a manner that it would not contradict the other theory. After some exploration, I formulated a hypothesis based on my thoughts on the subject so far: prenominal appositive relative clauses in Turkish and Japanese show more resemblances with adjectival behavior than with the behavior of postnominal ARCs. This is in accordance with the reasoning from De Vries (2005;2006) that prenominal ARCs do not exist for they are not appositive in structure, which will be explained into more detail in the second chapter. If proven correct, it also provides an elegant solution to the appearance of prenominal relative clauses in head-final languages: these Japanese and Turkish clauses that look like the postnominal ARCs actually behave more like adjectives.

1.2. Research method
This thesis will offer theoretical and practical information on the subject. It therefore bears resemblances to a comparative literature study. However, I have done my own data research thanks to two willing participants, which will add value of this research. The already existing theories and my newly formulated hypothesis combined with data from Turkish and Japanese will shed light on the subject from another angle, leading to surprising findings.

1.3. Research structure
In a total of four chapters, my hypothesis on this subject will be made more explicit in line of the theories that I oppose or adopt. This segregation of right and wrong arguments is assisted by data either from other researches or from the Japanese and Turkish native speakers I call my participants. Both the second and third chapter examine the background literature in such a manner. The second chapter focuses on eliminating the resemblances of the Turkish and Japanese prenominal ARCs with the postnominal variants, whereas chapter three continues down this path by adding the link with adjectives. The division of my thesis into these two chapters will serve a greater goal, for it develops and expands the argumentation that comes together in the fourth chapter.
2. Prenominal ARCs in Turkish and Japanese

In the first section of this chapter, some of the terminology that is of utmost importance to the appositive relative clauses of head-final and head-initial languages will be explained. Section 2.2. provides with an examination of relative clauses in head-final languages such as Turkish and Japanese. More background literature can be found in the third and fourth section, which will be refuted or adopted by me. The main idea is summarized in 2.5., which also anticipates the content of the chapter hereafter.

2.1. What are ARCs – and RRCs?
Appositive relative clauses, henceforward referred to as ARCs, can be best explained by taking a look at the possible distinctions between the kinds of relative clauses. A relative clause can be semantically restrictive, appositive (also known as non-restrictive) or maximalizing. The first two are basically opposites. Examples demonstrate this perfectly – I added the italic font on the ARC to highlight this element (De Vries 2006:1):

(1) a. (I spoke to) the lecturers that failed the test on didactics. [restrictive]
    b. (I spoke to) the lecturers, who failed the test on didactics. [appositive]
    c. (I spilled) the coffee that there was in the pot. [maximalizing]

The relative clause itself adds meaning to its anchor. In both the a- and b-sentence, the anchor is 'the lecturers'; in the c-sentence, it is 'the coffee'. In (1a), the referent is restricted by the relative clause. It means that the subject only spoke to the group of lecturers who failed the test, not to the ones who passed the same test. In (1b), however, the addition of the relative clause is just that: the subject spoke to every one of the lecturers present, who incidentally all failed that test on didactics. The maximalizing interpretation of the relative clause in (1c) indicates that the whole amount of milk in the can is spilled. For the remainder of this section, I will focus on the first two kinds of relative clauses.

According to the *The Cambridge Grammar of the English Language*, the distinction between appositive and restrictive relative clauses, henceforward RRCs, is marked by prosody and punctuation in English: an ARC is typically preceded by a pause in speech and a comma in writing, whereas a RRC normally is not (Huddleston & Pullum 2002:1058). The reason for the divergent interpretations of either a restrictive or an appositive relative clause comes down to the scope of the determiner or quantifier belonging to the antecedent (De Vries 2006:6). Consider the second example (De Vries 2006:6):

(2) a. All the lecturers that passed the test. [restrictive]
    b. All the lecturers, who passed the test. [appositive]

Assuming that the determiner D can only have range over that part of the sentence which it is c-commanding, this must mean two things. First of all, a RRC has to be inside the scope of D to get its restrictive interpretation – therefore it must be attached below (or as) the sister of the determiner. Second of all, an ARC cannot accomplish this relationship with D, for the relative clause would not get an appositive meaning – it must be outside the scope of the determiner, but close enough to the antecedent to be associated with it. Put simply, the syntactical structure of a RRC and an ARC cannot be completely the same. De Vries (2006:7) proposed the syntactical tree as presented below, which has minimal differences between the restrictive and the appositive variant, yet accounts for the restrictive being in c-commanding relationship with its anchor and the appositive avoiding it:
Zooming in on the ARCs, such a construction can be divided into two parts: an anchor and appositive, as displayed in the somewhat altered example below (from Heringa 2012:1):

The two members together make up a single constituent (De Vries 2006; Griffiths & De Vries 2013; Heringa 2012). The name I have given to the combination of both the anchor and the appositive is an appositival construction. Besides that, I will also make use of the already known terminology 'anchor' and 'appositive' when meaning the referent and the ARC, respectively. To account for the different positions an appositive can be in, the anchor will be used as guidance. An appositive can take a position before or after the anchor, and even in between the anchor if it exists of more than one word, consequently called: pre-anchor, post-anchor and mid-anchor.

2.2. ARCs and RRCs in head-final languages
Here, I specifically focus on the appositive relative clauses in Turkish and Japanese, sometimes involving the restrictive relative clauses as well. Both Turkish and Japanese are SOV languages, which means that they are primarily left-branching, or head-final; i.e. heads are often found at the end of their phrases, with a resulting tendency to have the adjectives before the nouns, to place adpositions after the noun phrases they govern (in other words, to use postpositions) and also, important for this subject, to put relative clauses before their referents (Trips 2002). Of those SOV languages that make use of affixes, many predominantly, or even exclusively – as in the case of Turkish – prefer suffixation to prefixation (Cinque 2001; Erguvanli-Taylan 2002).

1 I will make use of the name 'appositival construction' in my thesis, instead of an appositional construction for that contains an anchor with an apposition, as used in Heringa (2012:1).
As explained above, we now know that head-final languages like Turkish and Japanese retain different structures than the head-initial languages. This brings a certain expectation along for the ordering of the relative clauses with respect to its anchor: it leads to the assumption that in those languages the appositive of the appositional construction comes before the anchor. However, De Vries (2005; 2006) claims that ARCs can never precede their anchors and must follow them linearly, for the two members of an ARC together serve as one constituent. The following is proposed as an implicational universal by De Vries (2005:11):

(5) If a relative clause is semantically appositive, it is syntactically postnominal.

This generalization is made more explicit in his 2006 paper. De Vries (2006:33) hypothesizes that the following is true cross-linguistically:

(6) a. Prenominal non-restrictive appositions do not exist.
    b. Only postnominal relatives can be appositive.

The reason for no pre-anchor ARCs boils down to the specific construction of an appositive relative which involves E-type anaphora, permitting only the post-anchor strategy; which will be discussed in more detail in section 2.4. Despite De Vries's claim, several researchers have suggested that both Japanese and Turkish have ARCs that precede their anchors (Cagri 2005; Griffiths & Gunes 2014; Ishizuka 2008; Larson & Takahashi 2007; Shimoyama 1999). For Turkish, though, I should mention the 'ki'-clause, which is a Persian loan system, since it puts its content after the anchor. This would mean that, whereas Japanese can only place the appositive before the anchor, Turkish has two ways to modify the anchor of the ARC. The first one is by using a non-restrictive nominalized relative clause, where it seems to show some kind of adjectival behavior (Griffiths & Gunes 2014:4), placing the appositive in the pre- or mid-anchor position. The other way is to make use of the 'ki'-clause, which comes after the anchor. See example (8) for the options in Turkish when the ARC modifies a nominal anchor (sentence a' to a'') and a clausal anchor (b), similar to the English data set in (7). To make it easier for the reader to interpret, I have modified the font somewhat: the appositive is in italics, whereas the anchor is in bold face:

(7) a. John ran over to [Mary's car, which was waiting for him].
    b. [John ran over to Mary's car, which was easy for him].

(8) a'. Non-restrictive nominalized relative clause:
    [Turkish]
    Ali Merve-nin o-nu bekle-yen arabasi-na çaprtı.
    Ali Merve-3sg.gen he-acc wait-nom car-3sg.poss-dat run.over.to-pst
    'Ali ran over to Merve's car, which was waiting for him.'

    a''. 'Ki'-clause:
    Ali Merve-3sg.gen car-3sg.poss-dat and he-acc wait-prog-pst run.over.to-pst
    'Ali ran over to Merve's car, which was waiting for him.'

2 Seeing the ARC in a mid-anchor position, in between the possessive and the noun, raises the question whether or not the sentence really has an appositive interpretation. Considering the position of the ARC it seems to be restrictive: Merve's which-was-waiting-for-him car. However, the Turkish informant assured me the relative clause had to be interpreted as an appositive. For more on the genitive phrases of Turkish and also Japanese, I refer the reader to my previous research (2015).
b. ’Ki’-clause:

Ali Merve-nin araba-sı-na çarp-tı [ki bu o-nun için kolay ol-du].
Ali Merve-3sg.gen car-3sg.possdat run.over.to-pst and this him for easy be-pst

’Ali ran over to Merve’s car, which was easy for him.’

However, in my previous research (2015) I found that the ’ki’-clause did not seem to act in accordance with relative clauses. It behaved more similarly to a coordinator. That result was striking and a bit unexpected, for the Turkish participant used this kind of clause in every data set, which differed in modifying either a nominal or a clausal anchor. Therefore, I had at first assumed that ’ki’ initiates both appositive and restrictive relative clauses. An important indication against this assumption came from comparing Turkish to Japanese.

In Japanese, the ARC precedes the anchor, which is the only option in this language. Another characteristic is that Japanese seems to always need a context to differentiate between the appositive and restrictive meaning. With regard to Japanese, “it has been claimed that there are no morphosyntactic or phonological differences between restrictive and non-restrictive relatives” (Heringa 2012:162). A setting is therefore needed to obtain the right interpretation, as can be seen in example (10), which is the translation of the English data set in (9):

(9) a. John stole [Mary’s computer, which crashes all the time].
   b. [John stole Mary’s computer, which got him arrested].

(10) Context: Taro desperately needed a laptop. The only person in the room with a laptop was Hanako.

   a. Taroo-ga itumo kowareru Hanako-no konpyuutaa-o nusun-da. [Japanese]
      Taro-nom always break Hanako-gen computer-acc steal-pst
      ’Taro stole Hanako’s computer, which crashes all the time.’
   b. Not possible.

As can be seen in the a-sentence, the ordering of the appositional construction has the ARC, in italics, before the bold-faced anchor. However, when the appositive has to deal with a clausal anchor, as in (9b), Japanese gives an error: it is not possible for an ARC to precede an anchor that is made up of an entire clause. This is comparable to Turkish, although the latter language has the ’ki’-clause as some sort of back-up. It applies to the restrictive variant of the relative clauses as well, which is not that surprising when taking into account De Vries’s (2002:185) criterion A4:

   (11) A4: Restrictives only modify DPs. Appositives can have any antecedent.

Instead, with the A4-criterion in mind, it is now curious why Japanese would not allow an appositive to modify a clausal anchor. This is an issue I hope to identify by comparing the relationship between the ARC and its anchor to the relationship between the adjective and its noun, which will be described in more details in the chapter three. Nonetheless, whether or not appositives show adjectival behavior, the fact remains that Japanese ARCs (and, as expected, RRCs as well) fail to modify a clausal anchor, whereas Turkish supposedly does modify a clausal anchor by using the ’ki’-clause, see (8b). I noticed a distinctive resemblance between the Turkish ’ki’-clause and the Japanese coordinate clause given as an alternative to (10b).

(12) Taro-ga Hanako-no konpyuutaa-o nusun-de, [sore-de taihos-are-ta]. [Japanese]
Taro-nom Hanako-gen computer-acc steal-Conn, it-by arrest-pass-pst
Intended: 'Taro stole Hanako's computer, which got him arrested'.

It is the closest to the intended meaning of (9b), yet makes use of an overt antecedent (i.e. 'sore') within the content that should have resembled an appositive, but since it does not precede the anchor it cannot be any kind of relative clause, not in Japanese at least. This appears to be the same in Turkish, for the 'ki'-clause shows too much similarities with Japanese phrases that are not relative clauses to dismiss. Take a look at examples (13) and (14), originally (8b):

(13) Ali Merve-nin bilgisayar-ı-nı çal-di, [ki bu o-nun tutuklan-ma-
nom-3sg.poss-dat cause make-pst
'Ali stole Merve's computer, which got him arrested.'

(14) Ali Merve-nin araba-sı-na çarp-tı [ki bu onun için kolay ol-du]
Ali Merve-3s gen car-3sg.poss dat run.over.to-pst and this him for easy be-pst
'Ali ran over to Merve's car, which was easy for him.'

When a clausal anchor is present, both languages seem to need a pronominal referring in the form of an overt antecedent ('bu' in Turkish and 'sore' in Japanese). Therefore, I conclude that the 'ki'-clause should be seen as a coordinate clause, instead of a relative clause. Since neither (12) with the Japanese 'sore' and (13)-(14) with the Turkish 'bu' contain an ARC, I will not dwell on this subject. When excluding the 'ki'-clauses in Turkish, the data of both head-final languages consist only of ARCs that precede their anchors. The question that remains, however, is whether or not these relative clauses in Japanese and Turkish are appositive in the same sense as they are in head-initial languages.

2.3. Theory against prenominal ARCs: not prenominal
As mentioned in the previous section, researchers like De Vries (2005; 2006) believe that ARCs cannot precede their anchor; i.e. not while carrying an appositive interpretation. I speak specifically of 'prenominal' ARCs, for we have seen in 2.2. that the appositives are only able to precede nominal anchors, not clausal ones. This section and the next is dedicated to two of the main theories against the prenominal use of ARCs. Hereinafter, I will shortly describe them.

The first theory focuses on a phonological issue within sentences containing an ARC, whereas the second theory is based on the semantics and syntax of the appositive relative clauses, see 2.4. In both cases, it leads to the assumption that (some of) the data of previous findings in favor of prenominal appositives have been interpreted incorrectly.

Heringa (2012) insists that Japanese, even though it is clearly a head-final language, should be perceived as having postnominal, not prenominal, ARCs. Herina's (2012) argument traces back to the phonological domain within linguistics. First, let us have a look at the difference between a restrictive and a non-restrictive interpretation of relative clauses in Japanese. Consider the examples in (15) taken from Heringa (2012:163), originally from Ishizuka

3 Whereas 'bu' is obligatory in 'ki'-clauses modifying clausal anchor, it may also appear in 'ki'-clauses that modify nominal anchors, but then optionally. This is another suggestion that 'ki' acts as a coordinator.
4 The conclusion of the 'ki'-clause being a coordinate clause was not entirely based on finding an overt antecedent, but it was the decisive evidence for me. I have excluded obvious reasons such as that 'ki' has been translated with 'and' in every example.
but slightly adapted. Again, I have added the italic font to indicate the ARCs, not the RRCs, and bold face for their anchors:

(15) [Restrictive context]

\[
\]

'Ms. Ito has three sons. Last year one became a doctor and two became lawyers.'


That son who became a doctor last year got married.'


(16) [Non-restrictive context]

\[
\text{Ito-san-ni-wa san-nin musuko-ga hito-ri iru. Ito-Ms.-DAT-TOP son-NOM one-CL exist. Ms. Ito has a son.}
\]


Intended: 'That son, who became a doctor last year, got married.'


When the demonstrative (DEM), which is 'sono' in this case, precedes the relative clause (RC), the RC gets a restrictive interpretation. Both the restrictive and the appositive meaning are available when the DEM follows the RC. According to Ishizuka (2008:3), the addition of the demonstrative in the sentence helps to distinguish between the possible interpretations of the clause. In Japanese, the restrictive interpretation is always accessible, whereas the appositive interpretation only appears when the RC also precedes DEM – see the exemplary model below (Ishizuka 2008:3):

\[
(17) \begin{align*}
\text{a. DEM } & [\text{RC NP}] & \text{(Restrictive/ *Non-restrictive)} \\
\text{b. } & [\text{RC DEM NP}] & \text{(Restrictive/ Non-restrictive)} 
\end{align*}
\]

Nonetheless, Heringa puts forward a revolutionary way of thinking by saying that the nominal apposition is in fact the anchor – and the anchor the apposition, which would render the nominal version of the ARC not pronominal but postnominal. He assumes this on the basis of intonation, presented in (18) with a comma. The translation suggests as well that the apposition here follows rather than precedes the anchor (Heringa 2012:171):

(18) a. Kare-wa Aranae, sunawati kumo-ni-wa tai-setu-ga ni-setu aru He-TOP Aranae that.is spiders-at-TOP body-segments-NOM two-segments exist to itto. that said. 'He told that Aranae, that is spiders, have two body segments.'
b. 1973-nen-ni Skylab-wa ni-hiki-no doobutu, sunawati kumo-no Arabella to 1973-year-at Skylab-TOP two-CT-of animal that.is spider-NO Arabella and Anita-o utyuu-ni tureteitta.
Anita-ACC space-to took.
'In 1973, Skylab took two animals, namely the spiders Anita and Arabella into space.'

Note that a nominal apposition, as used by Heringa, is different from the appositives I had defined in the previous sections. Appositions do not consist of a clause, whereas ARCs do. An example from Van Riemsdijk (2006:3) shows that it seems possible to have a relative clause without a head. There is neither an internal nor an external head to be found in the example below. Such headless relative clauses are called 'free relatives'.

(19) You should return what you have finished reading to the library.

Remarkably, this headless relative clause seems to take over the function of a head. The clause that is initiated by 'what' in (19) could be replaced by 'the thing (that)' or 'the book (that)'. Such a free relative (FR) can also be made into the subject of the sentence, see (20).

(20) What you have finished reading, should be returned to the library.

It is important to check whether or not free relatives are a possible explanation of the prenominal use of relative clauses in Japanese and Turkish. For if their ARCs take on the function of a head, they might not be the appositive, but rather the anchor itself. This would reverse the ordering of the appositive construction we had seen so far: instead of prenominal ARCs, Japanese and Turkish would have postnominal ones. Therefore, I have asked my participants to give the interpretation of two slightly altered sentences from their papers (Ishizuka 2008:4-6) or previous data sets. See (21) for the Japanese example and (22) for the Turkish one:

(21) Sakunen isya-ni nat-ta-ga, kekkon-si-ta. [Japanese]
last.year doctor-DAT become-PAST-NOM marriage-do-PAST
* Intended: 'Who became a doctor, got married'.
Actual meaning: '(I) became a doctor, but got married'.

The Japanese relative clause formulated as a free relative does not behave as expected. Instead, it is taken to be like a normal SV-conjunction-V sentence with a dropped topic in the first person, which could also be second or third person, either in singular or plural, when specific contexts are established.

(22) Muhasebeci olarak çalış-an, Merve-nin bilgisayar-ı çaldı [Turkish]
accountant as work-nom Merve-3sg.gen computer-3sg steal-pst
Intended: 'Who works as an accountant, stole Merve's computer'.

The intended meaning from (22) is possible. However, what I have called free relative here, is often analyzed as a 'correlative', following Iatridou's (2013) paper which claims there are no genuine free relatives in Turkish. This claim has also been made by Kornfilt (2005; 2012). She says that Turkish has, rather than genuine headless FRs, relative clauses with a silent pronominal head, which she calls 'Light Headed RCs'. Despite the varying terminology, correlative or light headed RCs, I believe that the Turkish so-called free relatives differ from
genuine FRs due to the presence of definite entities in their semantics. This basically means that Turkish is restricted by a gap, not visible but present still, such as: "(The person) who works as an accountant". Languages with genuine free relatives, on the contrary, refer to definite entities but to quantified or variable ones, like: "Whoever/whomever works as an accountant". All this strongly suggests that Turkish has no free relatives that can take the place of an anchor, but rather, has relative clauses that are in the beginning of the sentence – the same place where ARCs and RRCs are usually also found.

Both the Japanese and Turkish data imply that their prenominal occurrence of relative clauses cannot be explained via free relatives. Differently than Heringa suggested for the Japanese apposition, the appositives in Turkish and Japanese cannot actually be the anchors of the sentence. This was excluded on the basis of a preliminary check that found no genuine free relatives in those languages.

2.4. Theory against prenominal ARCs: not appositive

The second theory is based not on phonology, but on two other domains in linguistics: syntax and semantics. Del Gobbo (2010) postulates that the prenominal ARCs in Chinese have an adjectival relation with their anchor when modifying proper names. Adjectival in the sense that the appositives are integrated with their antecedents (following the distinction made in Cinque 2008), while not being instantiated by E-type anaphora. This explains that the Chinese ARCs are not made up of the specific construction that relative clauses with an appositive interpretation need. According to Del Gobbo (2010), for an ARC to be both semantically and syntactically appositive, it is crucial for it to contain a specific type of relative pronoun. Del Gobbo (2010) concludes that "the nonexistence of relative pronouns in turn makes it impossible for Chinese relative clauses to be non-integrated appositives. The proposed theory leads us to make the following cross-linguistic empirical prediction: no prenominal relative clause can be appositive in the canonical sense, because no E-type pronoun can be licensed in its structure" (Del Gobbo 2010:415).

Following that prediction, if the Turkish and Japanese prenominal relative clauses lack E-type pronouns in their construction, it would mean that these so-called ARCs are in fact not appositive. Let us first have a look at some of the Turkish data, consisting of a relative clause that modifies a proper name.

(23) Ali o-nu geri öp-me-yen Merve-yi öp-tü. [Turkish]
   Ali he-acc back kiss-neg-nom Merve-acc kiss-pst
   'Ali kissed Merve, who did not kiss him back.'

This example shows that Turkish does not have an equivalent for 'who', the E-type pronoun that initiates the ARC in English. (24) provides another insight into this, for even with a nominal anchor that is not entirely made up of a proper name, the relative clauses in Turkish do not make use of evident E-type anaphora: there is no equivalent for 'which'. For more examples, go back and look at the data, (8a), already presented in section 2.2.

(24) Ali Merve-nin daima çök-en bilgisayar-ı-nı çal-di. [Turkish]
   Ali Merve-3sg.gen always crash-nom computer-3sg.poss-acc steal-pst
   'Ali stole Merve's computer, which crashes all the time.'

---

5 The terminology for E-type anaphora originally came from Evans (1977; 1980), two papers I refer the reader to who wants to know more about this, but the meaning seems to have changed over time. The interpretation of E-type anaphora seems to have extended to relative pronouns.
Unfortunately, the same data as in (23) did not work for Japanese, because of the chosen verb. Kissing someone back or returning kisses could not be translated, for Japanese is typically claimed to be a verb framed language (but see: Sugiyama 2005). As a verb framed language, Japanese generally does not use satellite. Since the example in (24) shows similar phenomena as (23), I will hereby extend it to Japanese relative clauses that modify larger nominal anchors, differing between the use of 'which' and 'who':

(25) Taroo-ga (kare-o) mat-tei-ru Hanako-no kuruma-ni kakeyot-ta. [Japanese]
     Taro-nom him-acc wait-asp-prs Hanako-gen car-dat run.over-pst
     'Taro ran over to Hanako's car, which was waiting for him.'

(26) Taroo-wa kaikeisi-tosite-hataraku Hanako-no titioya-to hanasi-ta. [Japanese]
     Taro-top accountant-as-work Hanako-gen father-with talk-pst
     'Taro talked to Hanako's father, who works as an accountant.'

Examples (25) and (26) above do not seem to give any Japanese equivalents of the English 'which' and 'who'. These observations can be paired with Del Gobbo's empirical prediction, leading to the following assumption: the non-existence of relative pronouns indicate that the prenominal relative clauses in Japanese and Turkish can not be appositive in structure. The question that immediately follows from this assumption is: if they are not appositive, then what are they? Del Gobbo (2010:386) deems the relative clauses in Chinese, also prenominal, to be integrated nonrestrictives – following Cinque's distinction. Cinque (1982; 2006; 2008) argues that the Universal Grammar (UG) allows more than one route to non-restrictive modification. He distinguishes two types: integrated relatives, which can be restrictive or appositive, and non-integrated relatives, which can only be appositive. This distinction has been made on the basis of evidence from Italian:

(27) Gianni, che non è venuto a cena, ...
     Gianni that not is come to dinner
     'Gianni, who didn't come to dinner, ...'

(28) Gianni, il quale non è venuto a cena, ...
     Gianni the which not is come to dinner
     'Gianni, who didn't come to dinner, ...'

Cinque specifically points at the differences between ARCs with and without a spelled-out relative pronoun. The spelled-out pronoun here is il quale, 'the which', whereas the relative clause in example (27) is introduced by the complementizer che. According to Cinque (2006; 2008), an interesting typology of ARCs follows from the proposal that two types exist: there may be languages with no appositives (as claimed by Aboh 2005 for Gungbe); languages with both types of appositives (as shown in Italian); languages with only integrated appositives (as is suggested for Chinese, Japanese and Turkish) and finally, languages that display only non-integrated appositives (like English). Cinque (2005;2006) attributed the reason why those two types were not discovered before on the anglo-centricity of the field's history. I personally like the suggestion Cinque makes about different types of appositive relatives. What I wonder about is if it would stop at two types, or if there could be more. Considering Cinque's own critique at the earlier focus on English, I think that it is only reasonable to keep in mind that there may be more types than the ones he found for Italian. After all, the identification of the integrated and non-integrated type does not
necessarily mean that there are no other possible types of appositives in existence. As Del Gobbo had already mentioned, she believed that the Chinese prenominal ARCs had some kind of adjectival relationship with their anchors. I suspect this is also the case for Japanese and Turkish appositives. However, whereas Del Gobbo claims that the ARCs in Chinese are of the integrated type, I am not really sure that is true for Japanese and Turkish. My position on the subject is rather that the prenominal ARCs in Turkish and Japanese show more resemblances with adjectival behavior than with the behavior of postnominal ARCs, which can also be divided into Cinque's types. It seems inadequate to try and place the prenominal ARCs that are not even appositive in structure, according to Del Gobbo (2005;2010) as well as De Vries (2005;2006), into one of two types of appositives.

2.5. Conclusion
Head-final languages like Turkish and Japanese retain different structures than head-initial languages such as English. Despite De Vries's claim that prenominal relative clauses cannot be semantically appositive, other researchers showed data of head-final languages that seem to have prenominal ARCs. The data I collected from Japanese and Turkish consist only of relative clauses that precede their anchors, when excluding the 'ki'-sentences in Turkish. However, looking at some of the theories against prenominal ARCs, I found two things. The first one being: instead of discovering a loophole as to why relative clauses in Japanese and Turkish were placed prenominally, I came across evidence that these prenominal occurrences could not be explained through the use of free relatives. Due to the non-existence of FRs, this must mean that Turkish and Japanese simple have prenominal relative clauses. The second theory outlined a prediction for other head-final languages: the non-existence of relative pronouns indicate that the ARCs in Turkish and Japanese cannot be appositive in structure. I think this is a very likely assumption to make.

Together, these arguments eliminate the resemblances of Japanese and Turkish prenominal ARCs with the postnominal ones: they do not seem to be appositive, but are prenominal. As I have let slip in the previous section, I hypothesize that the prenominal ARCs have more similarities with adjectival behavior than with the behavior of postnominal appositives. Thus far, research has shown that prenominal ARCs are quite different from their postnominal variants. The next chapter will attempt to make a link with adjectives.
3. Adjectival behavior of prenominal ARCs

In this chapter, an alternative idea concerning the 'appositive' relative clauses in two head-final languages will be put forward. In the sections 3.1. and 3.2., theories that submit conditions to the development of my research will be introduced and subjected to closer examination. Section 3.3. makes the adjectival association with prenominal appositive relative clauses in Turkish and Japanese more explicit. The formulated hypothesis is to be tested in 3.4., where data of both head-final languages is represented. The final section, 3.5., provides a conclusion.

3.1. Association with adjectival behavior

Following Larson & Takahashi (2007), my thesis will examine an alternative idea about the appositive relative clauses that precede their anchor. This idea consists of linking the relationship between a relative clause and its anchor with the relationship between an adjective and its noun. “An apparent contrast between the attributive adjectives and relative clauses is that the former show ordering preferences based on their semantic content, whereas the latter do not”, according to Larson & Takahashi (2007:1). In their paper, they suggest that the distinction between adjectives and relative clauses in head-final languages may be less sharp than assumed.

An adjective, as commonly known, may differ in the position it takes with regard to the noun it modifies. Some languages allow only prenominal or postnominal adjectives, others permit both positions to occur. A syntactical representation of the kinds of adjectives shows the difference (Laenzlinger 2000:2):

```
(29)  

D > Adj > N
```

In both cases, the adjective originally stands in front of the noun, which makes the prenominal variant the basic position. In order to get to the postnominal variant, the noun has to move to a position higher up in the syntactical tree. Not only is there a syntactical difference, but also a semantically based distinction, which was already shortly mentioned in the context of Larson & Takahashi (2007). However, Cinque (1994) and Laenzlinger (2000), among others, explain this in more detail. The ordering of adjectives depends on its semantic association with the noun, which translates into the hierarchy below, see (30) and (31). Example (30) includes the adjective that acts as a predicate as well, which is significantly different from the types of attributive adjectives.

```
(30)  D > Adj_{quantity} > Adj_{quality} > Adj_{size} > Adj_{form} > Adj_{color} > Adj_{nation} > Adj_{predicative} > N
```

Master’s thesis by G.A. Jongsma
Subsequently, attributive adjectives of quantity uniformly precede those of quality, size, form, color and nation. This concept of one preceding the other applies to adjectives of size and material composition, which is similar to 'form' in (30) and (31), as well. The reversed order, however, is in principle not possible: the latter cannot precede the former, see (32b), whereas (33) shows that the corresponding relative clauses seem to stack freely. The following examples are taken from Larson & Takahashi (2007:1):

(32) a. the [large] [stone] building  
   b. * the [stone] [large] building

(33) a. the building [that was large] [that was made of stone]  
   b. the building [that was made of stone] [that was large]

Larson & Takahashi believe that this is not the entire story when it concerns the prenominal relative clauses of head-final languages. Neither do I, which is why I set up this research to not only look more deeply at new data from Turkish and Japanese, but also to examine Larson & Takahashi’s reasoning and suggestions in light of other theories. Their paper shows ordering preferences when stacking relative clauses in Japanese, Korean, Chinese and Turkish that vary in expressing stage-level versus individual-level properties – in the sense of Carlson (1977).

The Japanese examples represented in (34) to (36) illustrate this observation made by Larson & Takahashi (2007:2):

(34) Individual-level RCs:
   a. [Tabako-o suu] [sake-o nomu] hito-wa Tanaka-san desu.  
      [tobacco-ACC inhale] [sake-ACC drink] person-TOP T.-COP  
      The person who drinks sake who smokes is Miss Tanaka  
   b. [Sake-o nomu] [tabako-o suu] hito-wa Tanaka-san desu.

(35) Stage-level RCs:
Individual-level RC, stage-level RC:

a. [Watashi-ga kinoo atta] [tabako-o suu] hito-wa Tanaka-san desu.
   [1SG-NOM yesterday met] [tobacco-ACC inhale] person-TOP T.-COP
   'The person who smokes who I met yesterday is Miss Tanaka.'

The most interesting finding is represented in example (36), in which an ordering restriction
seems to arise when the two types of relative clauses are combined. The restriction functions
in such a manner that the individual-level RC must occur closer to the noun than the stage-
level RC. Following from this, the ordering can be represented like this:

(37)  a. s-level > i-level > N
      b. * i-level > s-level > N

Moreover, Loock (2010:102-103) says the following about Carlson's distinction between
individual- and stage-level predicates: "Individual-level predicates describe the permanent
property of an individual, while stage-level predicates describe a temporary characteristic that
corresponds to a stage of the individual's existence." To me, this sounded quite similar to the
types of relative clauses as I got to know them through head-initial languages. An ARC gives
additional information that is often already known, most likely because it describes a
permanent property of its anchor, whereas a RRC provides with information that needs to be
taken into account, for it specifically says something about the current state of its anchor.6

However, although these comparisons seem attractive at first, I am not sure that the restrictive
relative clauses in head-final languages can be considered as displaying adjectival behavior, at
least not to the same degree as I hypothesize appositives do. Therefore, I would like to direct
my attention only to the ARCs in Turkish and Japanese. My thesis will examine the possibility
whether or not an ARC behaves equally to an individual-stage clause – but also if it can be
used as a stage-level clause, for adjectives can represent both kinds. The latter is exemplified
in the sentences of (38), which are assembled from Bolinger (1967):

(38) a. The stars visible (include Capella and Sirius.)
   The visible stars
b. The rivers navigable (include the Nile and the Ganges.)
   The navigable rivers
c. The individuals responsible (were contacted.)
   The responsible individuals
d. The jewels stolen (were on the table.)
   The stolen jewels

A subtle, yet systematic meaning difference is noted in pairs like (38a-d). Those Bolinger
contrasts vary in either stage-level or individual-level adjectives. The difference in English,
Bolinger (1967) postulates, is characterized in the following way: "postnominal adjectives

6 Cinque (2010:xiv) also attributes individual-level together with non-restrictive to the prenominal adjectives,
whereas the postnominal adjectives have both stage-level and restrictive as one of many characteristics.
attribute a temporary property (TP), one true on a particular occasion, whereas prenominal adjectives attribute a characteristic or enduring property (EP), one that holds generally” (Larson & Takahashi 2007:10). Looking at (38a), ‘the stars visible’ is false when the night sky is filled with clouds; however, ‘the visible stars’ can still be true, for Capella and Sirius are intrinsically visible stars, even when they are hidden behind clouds. Despite Bolinger’s statement, the position of the adjective, before or after the noun, does not correlate directly with the temporary and enduring property – properties that are aligned with stage-level and individual-level, respectively. Besides the fact that it is possible to have two non-redundant instances of the same adjective in prenominal and postnominal position, see (39a), it can also occur that these two instances appear in just one position, see (39b). The examples beneath are taken from Larson & Takahashi (2007:10):

(39) a. The visible stars visible include Capella.
   b. The visible visible stars include Capella.

According to Larson & Takahashi (2007:10), “in this second case, we have a clear intuition that the outer adjective attributes the temporary property, and that the inner adjective attributes the enduring property”. Even as a non-native English speaker, I myself find it evident which adjective carries out which property. This innate knowledge is verified by the contrast in (40).

(40) a. The non-visible visible stars include Capella.   Coherent!
   b. # The visible non-visible stars include Capella.   Odd!

Whereas an intrinsically visible star can be temporarily non-visible, it is odd to speak of an intrinsically non-visible star being temporarily visible. This leads to the generalization that the enduring property modifiers, i.e. individual-level adjectives, must be found closer to the noun that the temporary property modifiers, i.e. stage-level adjectives. Example (41) spells this out.

(41) The visible visible stars include Capella.
   s-level  >  i-level  >  N

Taking the connection between the relative clauses and adjectives a step further than Larson & Takahashi (2007), I hypothesize that the ARCs in head-final languages such as Japanese and Turkish show similarities with adjectival behavior and are therefore less comparable to appositives. Chapter two already led to the suggestion that ARCs are only appositive in name, not in structure. If it is the case that the ARCs in Turkish and Japanese follow the same restriction as adjectives do, then this would prove that they are closer in behavior to adjectives than to their appositive variants in head-initial languages. If my hypothesis is right about the prenominal ARCs acting adjectival, it would also explain the occurrences of relative clauses preceding their anchor in many head-final languages – for several researchers have argued against prenominal appositives. This could confirm De Vries’s reasoning that only true instances of appositives succeed their anchor and their restrictive counterparts.

3.2. DEM-restriction on Japanese and Turkish

Before we move on to the data I received from the Turkish and Japanese informants, there is something that has to be accounted for. According to Ishizuka (2008:3), the addition of the demonstrative in the sentence helps to distinguish between the possible interpretations of the clause, as was illustrated in example (17) – repeated here as (42):

(42) The visible visible stars include Capella.
When the demonstrative (DEM) precedes the relative clause (RC), it gets a restrictive interpretation. Both the restrictive and the appositive meaning are available when the DEM follows the RC. Subsequently, this means that the restrictive interpretation in Japanese is always accessible, whereas the appositive only appears when the relative clause also precedes the demonstrative.

Not unexpectedly, this was replicated by the Japanese participant. Here are two examples in which the ARC, in italics, precedes both the demonstrative and the noun, in bold face. A context is given to guide the relative clause towards the appositive interpretation, for in circumstances without DEM the meaning can both be restrictive as well as non-restrictive.

(43) Context: Taro desperately needed a laptop. The only person in the room with a laptop was Hanako.

<table>
<thead>
<tr>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taro-go *ityumakowarerusonokonpyuitaa-ohnusun-da.</td>
</tr>
<tr>
<td>Taro-nom always break that computer-acc steal-pst</td>
</tr>
<tr>
<td>'Taro stole that computer, which crashes all the time.'</td>
</tr>
</tbody>
</table>

(44) Context: Hanako was going to pick Taro up and honked from her car when she arrived at his house. Taro, however, was late.

<table>
<thead>
<tr>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taroo-ga (kare-o)mat-tei-rusonokuruma-ni kakeyot-ta.</td>
</tr>
<tr>
<td>Taro-nom him-acc wait-asp-prs that car-dat run.over-pst</td>
</tr>
<tr>
<td>'Taro ran over to that car, which was waiting for him.'</td>
</tr>
</tbody>
</table>

The more interesting issue is whether or not Turkish acts the same. Does it follow the same restriction as Japanese? Examples (45) and (46) provide us with an answer to that question, see below:

(45) Context: Ali desperately needed a laptop. The only person in the room with a laptop was Merve.

<table>
<thead>
<tr>
<th>Turkish</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Ali daima cok-en o bilgisayar-1 [cal-di]focus</td>
</tr>
<tr>
<td>Ali always crash-nom that computer-acc steal-pst</td>
</tr>
<tr>
<td>'Ali stole that computer, which crashes all the time.'</td>
</tr>
<tr>
<td>b. *Ali o daima cok-en bilgisayar-1 [cal-di]focus</td>
</tr>
<tr>
<td>Ali always crash-nom that computer-acc steal-pst</td>
</tr>
<tr>
<td>Ali always crash-nom that computer-acc steal-pst</td>
</tr>
</tbody>
</table>

(46) Context: Merve was going to pick Ali up and honked from her car when she arrived at his house. Ali, however, was late.

<table>
<thead>
<tr>
<th>Turkish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ali o-nu bekleyen o araba-ya dogru kositu</td>
</tr>
<tr>
<td>Ali he-acc wait-nom that car-dat towards run-pst</td>
</tr>
<tr>
<td>'Ali ran over to that car, which was waiting for him.'</td>
</tr>
</tbody>
</table>

Both examples show that the appositive precedes the entire anchor, which consists of both the demonstrative and the noun. Directing the attention specifically at (45b), it becomes perfectly
clear that Turkish does not permit the ARC to stand between DEM and NP. This is similar to Japanese, where, although such a construction would still be grammatical, it would only lead to the restrictive interpretation. The unacceptable c-sentence points out that the focus can only be on the main verb. I can only speculate why this is the case. Maybe it is because the focus on the anchor would cause too much obstruction between 'Ali' and 'çaldı', though the more obvious reason for it is that the act of stealing is new information, whereas the subject and the object are already mentioned in the context. The appositive, however, functions as an addition to the anchor, not a restriction, which gives me reason to believe that it cannot receive too much emphasis.

The issue of the ARC preceding the demonstrative in Turkish acts in accordance with Japanese. This finding is especially remarkable considering (8a) – repeated here as (47) with the addition of another example (48):

(47) Ali [Merve-nin  daima çök-en  bilgisayar-ı-nı  çal-di.     ]
    [Turkish]
    'Ali stole Merve's computer, which crashes all the time.'

    Ali Merve-3sg.gen accountant as work-nom father-3sg.poss with speak-pst
    'Ali talked to Merve's father, who works as an accountant.'

For every data set with possessive nouns, it is true that the appositive takes a position between two parts of the anchor: the mid-anchor position. The reason why I assume that both of these parts, either to the left or to the right of the ARC, must together be seen as the anchor is due to logical thinking: in (47), the appositive only makes sense when it is directed to both 'Merve's' and 'computer'. It is specifically about Merve's computer that crashes all the time, not just any other computer. The same can be said of (48), in which it is specifically about Merve's father who works as an accountant, not all fathers. Both cases seem to indicate some kind of adjectival behavior in Turkish, as if it expressed something like: 'Merve's always-crashing computer' and 'Merve's as-an-accountant-working father'. Considering this finding, it is quite remarkable that appositives in Turkish are not found between DEM and NP, while this happens all the time with the possessive nouns.

The Turkish informant pointed me towards a paper of Özçelik in which similar findings with reference to the restriction on the demonstrative were discussed. Özçelik (to appear:11-12) concluded that the appositive reading is only possible when the relative clause precedes DEM, which corresponds with my data. He also claims that the restrictive reading can only be obtained when it follows the demonstrative, not having the two possible positions at its disposal as Ishizuka's restriction suggested. However, according to footnote 9 in Özçelik (to appear), there were several reviewers who pointed out that a relative clause preceding DEM could have a restrictive interpretation, that is when it has been placed in a contrastive context. For this reason, I have decided to keep my options open and assume that RRCs in Turkish can take either a position before or after the demonstrative, pre-anchor of mid-anchor, until the data specifically says otherwise. I claim at this moment that Turkish follows the same DEM-restriction as stated for Japanese in (17) and (42).

Concluding, in both head-final languages, the ARC precedes the entire anchor when a demonstrative is present. This includes the demonstrative as well, for I assume that the noun together with DEM makes up the anchor that is to be modified by either an appositive or a restrictive relative clause. After all, these relative clauses specifically inform the reader or listener of THAT noun: not just any computer, but 'that computer'; not just any car, but 'that
car’. In preceding both the noun and the demonstrative, the ARCs in Turkish and Japanese satisfy the DEM-restriction represented by Ishizuka (2008).

3.3. Elaboration on adjectival association

As explained in 3.1., Larson & Takahashi (2007) have found an ordering restriction when two types of relative clauses are combined. The restriction functions in such a manner that the individual-level RC must occur closer to the noun than the stage-level RC. The idea for my thesis is to align these characteristics with the appositive relative clauses. (49) clarifies this in terminology used before – although if prenominal ARCs are not actually appositive in behavior, then the terms 'ARC' and 'anchor' might be confusing, but for now, it will have to do:

(49) s-level > i-level > N equals: s-level ARC > i-level ARC > anchor (?)

This somewhat resembles what Del Gobbo (2005) tried to do. She argued that the distinction between stage-level and individual-level is comparable to the restrictive and descriptive readings of Chinese prenominal relative clauses. Her paper emphasizes that the term 'descriptive' is not the same as 'appositive', leading to the following conclusion in Del Gobbo (2005:288): “I claim that the impossibility for Chinese relative clauses to be truly appositive is ultimately due to the nature of the appositive relative clauses, which (...) are independent sentences (propositions of type t) and instances of E-type anaphora.” As her research progressed, she pushed this claim further to show that Chinese relatives are only appositive in name for they behave adjectival (Del Gobbo 2005:301). This is essentially the same as what I am trying to show for Turkish and Japanese.

Interestingly, just like the Japanese and Turkish relative clauses, the Chinese RCs also give different interpretations when a demonstrative is involved. A relative clause in Chinese is restrictive when it precedes DEM and ambiguous when it follows. This is quite the opposite of what we have seen in section 3.2., where data of Turkish and Japanese suggested that the relative clauses following the demonstrative get only the restrictive interpretation, whereas the ones preceding DEM may receive either a restrictive or an appositive label. The difference is represented in (50):

(50) a. [restrictive RC] DEM [restrictive or descriptive RC] N [Chinese]
    b. [restrictive or appositive RC] DEM [restrictive RC] N [Turkish/Japanese]

As Larson & Takahashi had already concluded in their 2002 paper on Japanese, Del Gobbo produced similar findings for Chinese: the i-level and s-level relative clauses order freely amongst themselves as well, but when they accompany each other, the i-level RC must be closer to the noun. See examples (51) to (53) of Chinese relative clauses, originally from Del Gobbo (2005:297-298) but they also appear in Larson & Takahashi (2007:4-5):

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7 Even though I hypothesize that the ARCs in Japanese and Turkish are only appositive in name, not in their behavior, I justify the use of the DEM-restriction for it distinguished between instances that were recognized as restrictive and appositive relative clauses. Although the latter clauses do not seem to fit in that appositive category anymore, this does not mean that the restriction loses its power over the ARCs. The DEM-restriction simply describes what is found in a language. Instances that we thought were appositives, that looked a lot like appositives, are not suddenly less restricted by the demonstrative now we think we know that they have the wrong name.

Furthermore, I rather think that the DEM-restriction only gives rise to the restrictive reading: when a RC is placed in between the demonstrative and the noun, it is restrictive. When a relative clause is found in any other position, all there can said about it is that it may have no restrictive interpretation, but this does not necessarily mean it is appositive.
(51) **Individual-level RCs**
   a. [Hui shuo Yidaliyu de] [xihuan qu yinyuehui de] ren shi Zhangsan.
      [can speak Italian DE] [like go concerts DE] person is Z.
      'The person who speaks Italian who likes to go to concerts is Zhangsan.'
   b. [Xihuan qu yinyuehui de] [hui shuo Yidaliyu de] ren shi Zhangsan.

(52) **Stage-level RCs**
   a. [Cong Yidali huilai de] [wo zuotian kanjian de] ren shi Lisi.
      [from Italy return DE] [I yesterday meet DE] person is L.
      'The person who returned from Italy who I met yesterday is Lisi.'
   b. [Wo zuotian kanjian de] [cong Yidali huilai de] ren shi Lisi.

(53) **Individual-level RC, stage-level RC**
   a. [Wo zuotian kanjian de] [xihuan qu yinyuehui de] ren shi Lisi.
      [I yesterday meet DE] [like go concerts DE] person is L.
      'The person I met yesterday who likes to go to concerts is Lisi.'
   b. * [Xihuan qu yinyuehui de] [wo zuotian kanjian de] ren shi Lisi.

The only ordering allowed in (53) is the [s-level > i-level > N] one, which is comparable to
[restrictive RC > descriptive RC > N] in Del Gobbo's terminology. The question, of course, is
what happens if there is a demonstrative present. The restriction in (50a) provides us with a
certain expectation: only the RRC can precede the demonstrative, meaning that the equivalent
s-level clause must also be the only one that is able to precede DEM. Consider the Chinese data
in (54), from Del Gobbo (297-298) and Larson & Takahashi (2007:4-5):

(54) **Individual-level RC, stage-level RC, demonstrative**
   a. [Zuotian meiyou lai de] nage [hen xihuan shang ke de] xuesheng jiao Zhangsan.
      [yesterday not come DE] that [very like go class DE] student call Z.
   b. * [Hen xihuan shang ke de] nage [zuotian meiyou lai de] xuesheng jiao Zhangsan.
   c. Nage [zuotian meiyou lai de] [hen xihuan shang ke de] xuesheng jiao Zhangsan.
      that [yesterday not come DE] [very like go class DE] student call Z.
   d. * Nage [hen xihuan shang ke de] [zuotian meiyou lai de] xuesheng jiao Zhangsan.

Whereas the a-b-sentences show that only the s-level clause may precede DEM, affirming the
expectation just posed, the c-d-sentences illustrate another (im)possibility. The s-level clause
is not confined to the position before the demonstrative, for the simple reason that the
restrictive interpretation of a relative clause can also be achieved when it follows DEM, as was
already concluded in (50a). In that position, however, the i-level clause must still be closest to
the noun. The following ordering applies to Chinese:

(55) s-level > DEM > s-level > i-level > N 
    equals:
    restrictive RC > DEM > restrictive RC > descriptive RC > N

Although Del Gobbo (2005) aligned the s-level clause with the RRC and the i-level clause with
the descriptive relative clause, I will be comparing both the stage-level and individual-level
characteristics to ARCs, trying to show that these clauses, even though they are appositive in
name, actually behave similarly to adjectives. Finding out if and how Turkish and Japanese
stack their ARCs, especially in combination with the DEM-restriction, may prove or reject this hypothesis. As I mentioned before, the restriction on the demonstrative in Turkish and Japanese is in contrast with that one in Chinese. In the two head-final languages I will inspect, the relative clause preceding DEM may not only receive a restrictive interpretation but also an appositive one, which is the only position for ARCs to come into existence. This would mean that the appositive relative clause has at least one obstacle to overcome: the demonstrative. Subsequently, the stage-level must become the outer clause, for the individual-level clause is to be closer to the noun, see (56):

(56) a. s-level > i-level > DEM > anchor
    b. * i-level > s-level > DEM > anchor

The remainder of this chapter will be used to present the data I collected of two participants varying in their mother tongue, either Turkish or Japanese, and to explain it into more detail in light of my expectations.

3.4. Data from Japanese and Turkish

I have formulated three data sets in English that were in need of translation. Every example held two relative clauses, both of them meant as clauses with an appositive interpretation. Just like before, the Turkish native speaker had replaced the names 'John' and 'Mary' with 'Ali' and 'Merve', respectively, whereas the Japanese native speaker used the names 'Taro' and 'Hanako' as its counterparts. I will start with presenting the Turkish translation of the first data set, see (57) for the English and (58) for the Turkish examples. It is probably good to mention beforehand that I have left out the data with the ‘ki’-sentences, due to its coordinate function, as was explained in more detail in section 2.2.

(57) Context: John knows only one Mary.
    a. John kidnapped [Mary, who lived next door, who had a party yesterday].
       anchor > i-level > s-level
    b. John kidnapped [Mary, who had a party yesterday, who lived next door].
       anchor > s-level > i-level

    Ali next house-loc live-nom (and) yesterday a party give-nom Merve-acc kidnap-pst
    i-level > s-level > anchor
    Ali yesterday a party give-nom (and) next house-loc live-nom Merve-acc kidnap-pst
    s-level > i-level > anchor

A quick scan of the data above, however, indicates that the ARCs do not show the same ordering preferences, as was shown in Larson & Takahashi’s 2007 paper by using the stage-level and individual level characteristics. Not yet concluding something from it, I would like to continue down this path by adding the demonstrative to the equation. With the same context as in (57), the sentences are a bit more complicated and specific, see below:

(59) Context: John knows only one Mary.
    a. John kidnapped that Mary, who lived next door, who had a party yesterday.
       DEM > anchor > i-level > s-level
    b. John kidnapped that Mary, who had a party yesterday, who lived next door.
DEM > anchor > s-level > i-level

In Turkish, the English (59a-b) sentences were translated into a total of eight possibilities, of which four remained after excluding the sentences with the ki-clauses. Those four are represented in (60). To preserve oversight so that the overall picture is kept clear, the glosses are not included. The only difference between the glosses of (58) and (60) is the addition of the interpretation of 'şu' in the latter examples, which is the demonstrative 'that' in Turkish.

   # i-level > s-level > DEM > anchor
      DEM > i-level > s-level > anchor

   # s-level > i-level > DEM > anchor
      DEM > s-level > i-level > anchor

Not only can be concluded from the data that the demonstrative 'şu' may be placed freely in different positions, before and after the ARCs, Turkish also has no obligations as to how the s-level and i-level clauses are stacked. The expectations I had formulated in the end of the last section, 3.3., seem to be wrong.

Of course, during this research I had appointed certain hypotheses to Turkish that were originally based on Japanese. This is why the Japanese data, for me, will be vital in finding out more about the behavior of appositive relative clauses. Japanese, a language known for its rigidity, provides the following data when it concerned ARCs differing in stage-level and individual-level characteristics. The Japanese translation of the same data set as before can be seen in (61) and (62). What I hope to find is the impossibility of the b-sentence in Japanese, which is, however, possible in English. The b-sentences of both Japanese and English show that the individual-level clause is the farthest away from the anchor, the only difference being in the order of the constituents. An impossibility like that would imply that the behavior of the appositive relative clauses in head-final languages is in fact similar to adjectives.

8 In this data set, as well as the other two sets, some of the excluded sentences contained another coordinator besides 'ki': time and time again, 've' shows up in these examples. The Turkish participant has translated this with 'and'. The data represents an obligatory use of 've' when the first clause is preceded by 'ki' – and in such a manner connects the first appositive with the second one:

Context: Ali knows only one Merve.

   Ali that Merve-acc kidnap-pst ki next house-loc live-prog and yesterday a party give-perf-pst
a'. * Ali su Merve-yi kaçır-dı, ki yan ev-de yaş-iyor, ki dün bir parti ver-miş-ti.
   *Ali kidnapped that Merve, who lived next door *(and) who had a party yesterday.'

   Ali that Merve-acc kidnap-pst ki next house-loc live-prog and yesterday a party give-perf-pst
b'. * Ali su Merve-yi kaçır-dı, ki dün bir parti ver-miş-ti, ki yan ev-de yaş-iyor.
   *Ali kidnapped that Merve, who had a party yesterday *(and) who lived next door.'

As was shown in (58) and (60), the addition of 've' there is not obligatory, although it may act as a coordinator between the two appositive clauses.

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(61) a. Taro-wa [kinoo paati-o sita] [tonari-ni sumu] Hanako-o yuukaisi-ta.
    Taro-top yesterday party-acc did next.door-dat live Hanako-acc kidnap-pst
    s-level > i-level > anchor
b. Taro-wa [tonari-ni sumu] [kinoo paati-o sita] Hanako-o yuukaisi-ta.
    Taro-top next.door-dat live yesterday party-acc did Hanako-acc kidnap-pst
    i-level > s-level > anchor

Just as with the Turkish data, I have left out the glosses in the Japanese examples in (62)
below, for the only deviation from (61) is the addition of 'sono' meaning 'that'. Continuing on
to the Japanese data including the demonstrative:

    s-level > i-level > DEM > anchor
b. Taro-wa [tonari-ni sumu] [kinoo paati-o sita] sono Hanako-o yuukaisi-ta.
    i-level > s-level > DEM > anchor

Summing up the insights from the Japanese data, the only thing that seems to behave
accordingly is 'sono'. The Japanese demonstrative takes its rightful place between the anchor
and the appositive clauses. This satisfies the DEM-restriction posed by Ishizuka (2008). The
preliminary research I have conducted in this chapter – leading to the hypothesis that the
stage-level must become the outer clause, while the individual-level clause is to be closer to
the noun – may also not be valid for the Japanese ARCs. Both (61) and (62) show indifference
to the way the stage-level and individual-level clauses are stacked. I might have to conclude
that Japanese does not seem to follow the expectations, for both possibilities are used: [s-level
> i-level (>DEM) > anchor] as well as [i-level > s-level (>DEM) > anchor].
That same finding was reciprocated by the second data set in Japanese. Data set number three
shows similar indifference to these stacking restrictions, but was omitted due to ambiguous
interpretations. The appearance of both possibilities in stacking s-level and i-level clauses in
such a rigid language as Japanese is quite unexpected, especially considering the previous
findings by Larson & Takahashi (2007) for the same language. In light of these data, I rather
begin to believe that their distinction between the two kinds of clauses might not be correct.
For if it were the i-level and s-level characteristics that made the clauses not order freely when
stacked, my data should have replicated this. The data from Japanese and Turkish, however,
suggest that both types of clauses are equal in dependance to the antecedent and not bothered
by stacking restrictions.

3.5. Conclusion
The stacking restriction of individual-level clauses having to be closer to the noun than the
stage-level clauses, which was extensively described in Larson & Takahashi (2007), does not
seem to hold for my data. Both Turkish and Japanese, known for its rigidness, reproduce
either possibility: [s-level > i-level (>DEM) > anchor] as expected, but also [i-level > s-level
>(DEm) > anchor]. In the Turkish case, the demonstrative may appear before the two relative
clauses as well, raising objections against the finding that it follows the same DEM-restriction
as Japanese. The findings of this paper will be concluded and discussed in the fourth and final chapter.
4. Conclusion and discussion

In this chapter, I complete my thesis with a conclusion in section 4.1. and a discussion in section 4.2. The conclusion recites the findings of previous chapters and makes suggestions for possible explanations. The discussion considers a new piece of evidence, pointing towards questions that have to be accounted for in future research.

4.1. Conclusion

The stacking restriction I suggested for the prenominal ARCs in Turkish and Japanese does not seem to hold when the actual data is involved. Of course, I have only collected data from two participants, yet that does not mean it can be dismissed. It still is a representation of what their native language does with ARCs, albeit on a small scale. However, a possible explanation is that my i-level clauses could have inadvertently received s-level interpretation – or the other way around. These two characteristics are quite subjective and dependable on contexts. I have tried to pin down the contexts as uncompromising as possible, but I cannot foresee what other people think when they read the context. They might associate the subject with someone or something they already know, attributing traits to it that I would rather see as stage-level characteristics instead of individual-level ones.9

Still, if that were the case, one would expect to see a few deviations from the hypothesized restriction, instead of irregularities in every data set. Turkish and Japanese both showed quite persuasively that their languages allow the stacking of i-level and s-level clauses no matter which one precedes the other:10 In light of these findings, I feel that the distinction made by Larson & Takahashi’s 2007 paper cannot be correct. Larson & Takahashi argued that multiple relative clauses in a sentence with the same anchor cannot be freely stacked: the individual-level clause has to be closer to the noun than the stage-level clause, following the stacking restriction that applies to adjectives. Their results, however, may not be due to i-level and s-level characteristics, but rather due to the different readings of a relative clause: either restrictive or non-restrictive.

I will admit this is not ideal, for in the second chapter I conclude that the prenominal ARCs are unlike their postnominal variants. The first clue of the relative clauses in head-final languages being different, is the position they take in proportion to their anchor. The second clue had emerged because of the lack of E-type anaphora, suggesting that prenominal relative clauses cannot be appositive in structure. I still believe that these clues indicate that prenominal ARCs are closer in behavior to adjectives than to postnominal appositives, even though they might not be as similar to adjectival behavior as I originally thought. However, instead of aligning

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9 The difference in interpretation might have to do with the (non-)intersectiveness of the set of things denoted by the anchor and the set of things denoted by the ARC. The intersection of both sets of things, individually denoted by either the anchor or the ARC, is the set of things denoted by the combination of both the anchor and the ARC. For more information, I refer the reader to Peters & Peters (2002) and Zwart (2006).

10 The data in Turkish also showed that the position of a single ARC is not as rigid as it is in Japanese. However, I did find one instance in which the Japanese ARC takes a mid-anchor position, just like Turkish does, see below. Frankly, I do not know why this is the case. Further research is needed.

Context: Taro/Ali would like to buy Hanako/Merve something she really wanted for her birthday. While shopping, he saw her enthusiasm when she was holding an expense dress.

a. **Taro-wa Hanako-ni yoku niau doresu-o kat-ta.** [Japanese]
   Taro-top Hanako-dat well suit dress-acc buy-pst
   'Taro bought Hanako’s dress, which looks great on her'

b. **Merve-nin uzerinde harika gorun-en ebise-si-ni Ali al-di.** [Turkish]
   Merve-3sg.gen on great look-nom dress-3sg.poss-acc Ali buy-pst
   'Ali bought Merve’s dress, which looks great on her.'
'appositive' relative clauses in head-final languages such as Japanese and Turkish with the class of adjectives, I rather think that those prenominal ARCs may be considered an in between kind of category – somewhere in between the true instances of appositives and adjectives.

As I suggested at the end of section 2.4., there might be more types than the ones discovered so far. Cinque has provided us with two types of appositives: integrated relatives, which can be restrictive or appositive, and non-integrated relatives, which can only be appositive. The prenominal only-appositive-in-name relative clauses in this thesis have proven difficult to submit to one category: the free stacking is in contrast with adjectives, whereas the lack of E-type anaphora argues against ARCs. What if there is a third type that combines both classes? Overlapping characteristics are: the prenominal 'appositives' consist of relative clauses and are in that sense similar to the postnominal ones. Without making use of E-type pronouns, however, the Turkish and Japanese ARCs succeed in connecting to their anchors. This suggests that there is some other way of linking these relative clauses with their anchors, possibly quite similar to the relationship between adjectives and their antecedents. In this manner, there might be a spectrum of possibilities between the actual ARCs and adjectives, providing multiple new types, which can explain all the prenominal 'appositive' relative clauses in head-final languages.

4.2. Discussion

To see if my concluding remark of the prenominal ARCs being a new category in between postnominal ARCs and adjectives contains some truth, some further research has to be done. To the eager reader who wants to pursue this, I would like to refer you to Ming & Chen's 2011 paper on the ordering of multiple relative clauses modifying the same head in Chinese. Ming & Chen (2011) challenges Larson & Takahashi's reasoning that the restricted order is due to the distinction between individual-level and stage-level clauses, which originates from the adjectival behavior. They do so by providing data of Chinese stacked adjectives differing in the i-level and s-level characteristics. It shows quite interestingly that this restriction is not repeated by the Chinese adjectives: "the ordering of the adjectives in the A-de-N structure is not subject to any restriction regardless whether they are individual-level adjectives or stage-level adjectives" (Ming & Chen 2011:11). See examples below:

(63) a. meili de congming de na ge xuesheng
    beautiful de smart de that CL student
    'that beautiful and smart student'

b. congming de meili de na ge xuesheng
    smart de beautiful de that CL student
    'that smart and beautiful student'

(64) a. pibei de jichanglulu de na ge xuesheng
    tired de hungry de that CL student
    'that tired and hungry student'

b. jichanglulu de pibei de na ge xuesheng
    hungry de tired de that CL student
    'that hungry and tired student'

(65) a. meili de jichanglulu de na ge xuesheng
    beautiful de hungry de that CL student
    'that beautiful and hungry student'
The adjectives in (63) are both individual-level, whereas the sentences in (64) contain only stage-level adjectives. Example (65) combines both i-level and s-level adjectives, showing that it does not matter which characteristic is closer to the noun. Larson & Takahashi’s theory cannot accommodate the free stacking of Chinese adjectives. This piqued my curiosity, for now I am wondering whether the same applies to Japanese and Turkish adjectives. If the adjectives in those head-final languages do not care for this ordering restriction as well, then the prenominal ARCs in Turkish and Japanese may still be more similar to their adjectives than was concluded in section 4.1.

As I finish up my thesis on the Japanese and Turkish prenominal ‘appositive’ relative clauses, I fear it has raised more new questions than it has answered. However, I would like to see these new questions as progress: we are on the right path to finding the definite answer. I hope to see this research continued, for I believe that new insights combined with already consisting theories will acquire the whole story.
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