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Titel: Types of copular clauses following ki on Old Ottoman Turkish

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Types of copular clauses following *ki* in Old Ottoman Turkish

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The present paper aims to analyse the syntactic and semantic properties of the copular clauses that follow the element *ki*—known to be copied from Persian—in Old Ottoman Turkish. The clauses studied are based on the finite copular markers *-dUr*, *olur* or *ola*. The data comes from two medical texts written around the 14th century in Anatolia. The following questions will be addressed: (i) What syntactic peculiarities do the various copular clauses exhibit? (ii) In what respects do the clauses based on the markers *-dUr*, *olur* and *ola* respectively differ from one another? With respect to certain syntactic positions, it will be argued that the semantic opposition between the present tense (*-dUr/olur* in copular clauses) and the optative mood (*ola* in copular clauses) in Turkish is utilized to mark the distinction between non-restrictive and restrictive relative clauses, a distinction which is important in Persian. Thus, the Turkish optative will be argued to have acquired a further function (subjunctive) in copied restrictive relative clauses.

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1. Introduction

The present article aims to analyse the syntactic and semantic properties of the copular clauses that occur after the junctor *ki*—known to be copied from Persian—and contain the finite copular markers *-dUr*, *olur* or *ola* in Old Ottoman Turkish. Example (1) illustrates the kinds of clauses under investigation:

- (1) *Eftīmūn* *ki* *dūkeli* *dil-de* *ma'rif-dur*,
epithimum JUNCT all language-LOC well-known-DUR.COP
issü-dür, *ķuru-dur*.
hot-DUR.COP dry-DUR.COP
'*Cuscuta epithimum*, which is well-known in all languages, is hot and dry.' (EM 21)

The data comes from two medical texts written around the 14th century in Anatolia, and displays strong syntactic influence from New Persian. The goal of this study is to analyse the syntactic properties of these kinds of copular clauses, and to find out how the functional opposition between the clauses based on *-dUr*, *olur* and *ola* is operationalized.

The following questions will be addressed: (i) What syntactic peculiarities do the various copular clauses exhibit? (ii) In what respects do the clauses based on the markers *-dUr*, *olur* and *ola* respectively differ from one another? With respect to certain syntactic positions, the copular markers *-dUr* and *olur* are preferably found in non-restrictive, descriptive relative clauses while the copular word *ola*, based on the optative mood, typically occurs in restrictive clauses. Thus, the paper will argue that the semantic opposition between the present tense (*-dUr/olur* in copular clauses) and the optative mood (*ola* in copular clauses) in Turkish is utilized to mark a distinction between restrictive and non-restrictive relative clauses, a distinction which is crucial in Persian. Thus, Turkish optative will be argued to have acquired an additional function (subjunctive) in copied restrictive relative clauses.

2. Background, data, transcription and notation

During the rule of the Seljuks in the 13th century in Asia minor, Oghuz Turkic began to develop in its Old Anatolian Turkish variety. After the establishment of the Ottoman state in 1307, it continued as a literary medium in its Old Ottoman Turkish variety until the 16th century. Oghuz Turkic subsequently developed into Middle and Late Ottoman stages until Ottoman was replaced by Modern Turkish in the 20th century (see Johanson 2006).

At the beginning of its establishment as a written literary medium, Oghuz Turkic was subjected to enormous influence from New Persian, after Arabic the second prestigious language of Islam. When adopting and incorporating Persian linguistic structures into their new developing variety, Turkish writers—usually biliterates also capable in New Persian—tried to remain as true to the original as possible (see Johanson 2013a).

The data for the analysis comes from two Old Ottoman Turkish manuscripts written in Arabic script. The first has the title *Edviye-i müfrefe* and was written by İshāq bin Murād in 792 (1397) in Gerede. *Edviye-i müfrefe* (hence EM) is one of the first Turkish books treating a medical subject. It was edited in 2007 by M. Canpolat and Z. Önler. The examples in the paper are taken from this edition. The other medical book investigated is *Müntahab-î şifā* (hence MŞ), written by J̧elālüddin Ḩiz̧ir (Haj̧i Paša) around the second half of the 14th century. The famous scholar J̧elālüddin Ḩiz̧ir wrote his most important medical books in Arabic. *Müntahab-î şifā* is probably a résumé compiled by the author himself from his own Arabic books (cf. Önler 1990: 3–4). Z. Önler edited *Müntahab-î şifā* 1990.¹ Examples are taken from Önler's edition. The reason for choosing these texts is that due to their descriptive contents they are especially rich in copular clauses and provide scores of examples of various native and foreign syntactic patterns. Even if the data only comes from

1 For more information on medical books written in Old Ottoman Turkish, see İhsanoğlu (2008), Károly (2014).

these two manuscripts, the results obtained can probably be viewed as significant for similar stylistic genres in the Old Ottoman Turkish period.

In the transcription of Old Ottoman Turkish examples, the system of the text editions is largely retained, though with the following exceptions: the letters *ş*, *ç*, *c* and *ı* in the edited sources are rendered by the letters *š*, *č*, *j* and *ĩ*, respectively. Modern Turkish examples are given in Standard Turkish orthography. In the transcription of Persian examples, the system used by Dahlén (2010) is applied. Numbers after the abbreviations EM and MŠ indicate the numbers of the pages in the respective text editions.

A dash in front of a morpheme indicates a suffix, e.g. *-(y)A*. Capital letters within suffixes show morphophonemes, while bracketed segments denote the phonemes that are only realized in certain environments. Thus, e.g., the suffix *-(y)A* exhibits four possible allomorphs, *-a*, *-e*, *-ya* and *-ye*, the choice of which depends on the phonemic givens of the previous element. A dash after a lexeme denotes a verbal stem, e.g. *bil-* ‘know’. Asterisks (*) at the beginning of examples indicate that the given example is ungrammatical. Hyphens mark morpheme boundaries.

3. Turkish non-finite subordination and the role of the copied junctor *ki*

The Turkish strategy for clause subordination is nominalization. Turkish relative and complement clauses employ non-finite bound morphemes: participles or infinitives. They are typically prepositive constructions, i.e. are formed according to the left-recursive Turkish syntax, e.g. *öğrenci ol-an kız* [student be-PART girl] ‘the girl who was/is a student’ or *kız-ın öğrenci ol-duğ-un-u bil-iyor-um* [girl-GEN student be-PART-POSS3-ACC know-PRES-1SG] ‘I know that the girl was/is a student’ in Modern Turkish. Functionally, these nominalized clauses in Turkish correspond to the post-positive clauses with finite predicates and free subjunctors—relativizers or complementizers—in some other languages, such as *who*, *which* or *that* in English (see Johanson 1975).

The copular clauses outlined in this paper are formed according to non-Turkic patterns. They follow the copied element *ki* and contain finite copular markers. Below, for practical reasons, I will cautiously refer to them as ‘*ki*-clauses’. The use of this label, however, should in no way be interpreted as meaning the copied *ki* is analysed a priori as a subordinator introducing a clause forming a syntactic unit with it. We have to keep in mind that the status of the clauses inserted by the copied *ki* (i.e. whether or not they are syntactically subordinated to the clauses they follow) is controversial; see Johanson (1975, 1990) on arguments for not assigning a subordinator function to *ki* in Turkish (see also Rehbein 2006). To sum up, the denotation ‘*ki*-clause’ is used in this paper for a clause that follows the copied junctor *ki* without necessarily being a syntactic part of it.

The focus of investigation will be on the syntactic and semantic characteristics of those *ki*-clauses that seem to be similar to relative or complement clauses. Those clauses employing complex junctors, such as *kaçan ki* ‘when’, *tā ki* ‘until’ or *meger*

ki ‘if’, fulfil adverbial or conditional functions. They are outside the topic of this survey.

As previously remarked, our texts are characterized by extensive syntactic copies from New Persian, a characteristic which can be attributed to most other early products in Oghuz Turkic. The biliterate writers took advantage of the possibilities available in both languages. With their growing confidence to write in their own literary language, however, some of the copies, which can be characterized as slavish imitations of foreign patterns, disappeared (see e.g. Römer 1981). In this context, one of the goals is to tentatively compare some features of copies with the features of corresponding structures in Persian (Section 10). Another goal is to pursue the question which types of the copied *ki*-clauses found in the data have vanished and which have survived and are still encountered as living linguistic devices in some stylistic registers/genres in the contemporary language.

Alongside the copied *ki*-clauses, the data provides subordinate clauses formed by Turkish devices (non-finite bound morphemes). Although the main focus will be on the *ki*-clauses, the paper will to a certain extent go into the matter of the complex relation between the copied *ki*-clauses and the non-finite subordinate clauses, as found in the data (Section 11).

4. Form inventory

The data represents a specific stylistic genre and, notwithstanding the richness of the syntactic types, it provides a limited inventory of morphological elements. For instance, with few exceptions, clauses with first and second person subjects do not occur. That means, the copular clauses typically consist of third person subjects and corresponding copular markers. The zero-realization of a copula in the third person singular does not occur either. The verbal clauses are based on predicates taking the suffixes *-(V)r* (the older present form, the so-called aorist) or *-(y)A* (the optative). Figure 1 shows the finite forms used in copular or verbal clauses in the data. Although my main intention is to investigate the opposition between different copular markers in the *ki*-clauses, the relations between these copular markers and the markers used in the main clauses will also be taken into consideration.

Copular clauses	Verbal clauses
<i>ola</i>	<i>-(y)A</i>
<i>-dUr</i>	<i>-(V)r</i>
<i>olur</i>	

Figure 1: Morphemes found in finite copular or verbal clauses in the data

The enclitic copular *-dUr* comes from the East Old Turkic *turur*, which consists of the copular verb *tur-* ‘to be’ and the present form *-(V)r* (abbreviated as R.PRES). The older Oghuz Turkic variant *durur* is not found in the data. The negation is formed by *degüldür* [not-DUR.COP]. The copular word *olur* consists of the verb *ol-* ‘to

be(come)' plus the present form $-(V)r$, while the form *ola* is the optative form of the same copular verb. The negated form *olmaya* [OL.COP-NEG-OPT], and the plural form *olalar* [OL.COP-OPT-3PL], used with third person plural subjects, are attested in the *ki*-clauses as well. Since the copular form *olur* is not often found in the *ki*-clauses, the semantic opposition is mostly denoted by $-dUr$ and *ola*. The copular verb *olur* often occurs in compound verbs with its dynamic meaning, as for instance in *za'if olur*, *zarūret olur*, *mütevellid olur*, *zāhir olur*, etc. (see Section 9). In addition to its dynamic and static copular functions, the verb *ol-* as a rule occurs in various lexical meanings, such as 'to come into existence', 'to happen', etc. Furthermore, the complex forms $-mlš\ ola$ and $-(V)r\ ola$ are also used in the texts. These will be discussed in Section 8.

5. Syntactic configurations

To analyse the functional distribution of the copular markers, we first need to take account of the syntactic appearance of the *ki*-clauses. The following syntactic configurations are found:

- (i) The *ki*-clause occurs within the subject or the object constituent of a clause.
- (ii) The *ki*-clause follows the nominal or verbal predicate of a clause.

The following section deals with the former syntactic configuration and with the functional distribution of the copular markers in its different patterns. Section 7 analyses the roles of the copular markers in the *ki*-clauses that are placed after predicates of initial clauses.

6. The *ki*-clauses within the subject or object constituents of clauses

The *ki*-clauses occurring within the subject or object constituents (S or O) of main clauses are mostly based on the copular marker $-dUr$ or *ola*. That is why I first of all will focus on the opposition between these copular forms. The role of the copular word *olur* will be analysed separately in Section 9. The main clause containing the *ki*-clause can consist of a nominal predicate (predicate noun or adjective) (N.PRE) taking one of the copular forms $-dUr$, *olur* or *ola*. It can also consist of a verbal predicate (V.PRE). Figure 2 illustrates the general structure of this configuration.

$$S/O = \left\{ NP + ki \dots\dots -dUr \text{ or } ola + (NP) \right\} + N.PRE + -dUr \text{ or } olur \text{ or } ola$$

$$S/O = \left\{ NP + ki \dots\dots -dUr \text{ or } ola + (NP) \right\} + V.PRE + -(V)r \text{ or } -(y)A$$

Figure 2: The general structure of the *ki*-clauses occurring within the subject or object constituents

In this syntactic configuration, the *ki*-clauses based on the copular marker $-dUr$ or *ola* function differently. The analysis of the data reveals that the clauses based on the

marker *-dUr* (as well as on *olur*) are often descriptive/non-restrictive relative clauses. They represent appositive clauses, giving additional information about the referent of the head noun. As for the clauses based on the verb *ola*, the optative mood, they are typically restrictive relative clauses. They restrict the extension of the referents of the head nouns and denote selections out of a unit. In other words, the semantic opposition between the present tense (*-dUr/olur* in copular clauses) and the optative mood (*ola* in copular clauses) in Turkish ('basic code') is utilized to mark a distinction between non-restrictive and restrictive relative clauses, a distinction which is important in the 'model code' (Persian) (for the terminology, see Johanson 2002, cf. Johanson 2013a). Thus, we observe that the Turkish optative acquired a further function, as a subjunctive in copied relative clauses.²

Syntactic patterns often found in the data can be classified as follows.

6.1. Pattern 1

In this pattern, the subject of the main copular clause consists of a head noun plus a *ki*-clause that has a nominal predicate taking one of the copular markers *-dUr* or *ola*. This pattern can be formulated as follows:

$$S = \{ NP + ki + N.PRE + -dUr \text{ or } ola \} + N.PRE + -dUr$$

Figure 3: The *ki*-clause within the subject constituent (Pattern 1)

In example (2), which is already presented above, the *ki*-clause contains the nominal predicate *dükeli dilde ma'rüf* [all language-LOC well-known] 'well-known in all languages' and the copular marker *-dUr*. This *ki*-clause provides parenthetical information about the definite head noun *efîmün* 'cuscutea epithimum'. In example (3) the subject of the main copular clause consists of an indefinite head noun, *her kârûre* 'each urine cup', plus a *ki*-clause, which contains the predicate noun, *ağ ya şaru ya kızıl* 'white or yellow or red', and the copular marker *olmaya*, the negated form of *ola*. This *ki*-clause is restrictive. We can paraphrase the sentence as: 'each urine cup that is not white, yellow or red is ill. The white, yellow and red ones are thus not ill'. The difference between the *ki*-clauses in (2) and (3) is of a semantic nature.

- (2) *Efîmün ki dükeli dil-de ma'rüf-dur, issü-dür,*
epithimum JUNCT all language-LOC well-known-DUR.COP hot-DUR.COP

2 The subjunctive use of volitional markers is similar in Indo-European languages (Latin and the Romance languages). The main difference, however, is that the *ki*-based subjunctive constructions in Turkic are syntactically not subordinated (Johanson 2012: 202).

ķuru-dur.

dry-DUR.COP

'*Cuscuta epithimum*, which is well-known in all languages, is hot and dry.' (EM 21)

- (3) *Her ķārũre ki aķ ya řaru ya ķizil ol-ma-ya*
 each urine cup JUNCT white or yellow or red OL.COP-NEG-OPT
yavuz-dur, helāklig-e delil-dũr.
 ill-DUR.COP death-DAT indication-DUR.COP
 'Each urine cup that is not white, yellow or red is ill and is an indication of death.'
 (MŠ 11)

6.2. Pattern 2

This pattern is characterized by a possessive relationship between the head noun of the *ķi*-clause and the noun following the *ķi*-clause. It can be formulated as follows:

$$S = \left\{ \text{NP}^{\text{POSSESSOR}} + \textit{ķi} + \text{N.PRE} + \textit{-dUr} \text{ or } \textit{ola} + \text{NP}^{\text{POSSESSUM}} \right\} + \text{N.PRE} + \textit{-dUr} \text{ or } \textit{olur}$$

Figure 4: The *ķi*-clause within the subject constituent (Pattern 2)

Examples (4–7) illustrate this pattern. In (4) the predicate noun *bahār* 'spring', which takes the copular marker *-dUr* in the *ķi*-clause, describes the head noun *evvelķi fařil* 'the first season'. The noun *evvelķi fařil*, described by the *ķi*-clause, and the noun *ķabĩ'atĩ* [nature-POSS3SG] 'its nature' stand in a possessive relationship. The complex subject, which consists of the possessor element *evvelķi fařil ķi bahār-dur* and the possessed element (possessum) *ķabĩ'atĩ*, is a cleft construction in which the *ķi*-clause is a supplement to the possessor noun. To sum up, the subject of the main copular clause is: *evvelķi fařil ķi bahār-dur ķabĩ'atĩ* 'the nature of the first season of the year, which is spring' [lit. 'the first season of the year, which is spring, its nature']. The predicate of this main clause is: *ķārĩ raķbdur ĩ'tidāl ile-dũr* 'is hot and humid and is moderate'. Consider examples (5–6), which are structurally similar. In (5) the predicate noun *ķiř* 'winter', taking the copular marker *-dUr* in the *ķi*-clause, specifies the referent of the nominal phrase *dördũnķi fařil* 'the fourth season'. In (6) the predicate noun *bũřtānĩdũr* 'is cultivated' specifies the pronominal head *ol*. The cleft construction, consisting of the possessor element *ol ķi bũřtānĩdũr* and the possessum *ķĩdāřĩ*, functions as the subject of the main copular clause.

- (4) *Evvelķi fařil ki bahār-dur ķabĩ'at-ĩ ķārĩ*
 first season JUNCT spring-DUR.COP nature-POSS3 hot
raķb-dur ĩ'tidāl ile-dũr.
 humid-DUR.COP moderate with-DUR.COP
 'The nature of the first season of the year, which is spring, is hot and humid and is moderate.' (MŠ 9)

- (5) *Dördünji faşil ki kış-dur tabi'at-ı bārid ü*
 fourth season JUNCT winter-DUR.COP nature-POSS3 cold and
raḥb-dur an-da balgam ve balgamī maraž-lar
 humid-DUR.COP it-LOC phlegm and phlegmy illness-PL
çoğal-ur.
 increase-R.PRES
 'The nature of the fourth season of the year, which is winter, is cold and humid.
 Phlegm and phlegmy illnesses increase during it.' (MŞ 10)
- (6) *Nohūd: ol ki büstānī-dür ğidā-sī*
 chickpea that JUNCT cultivated-DUR.COP nutritional value-POSS3
yegrek-dür, issü-dür.
 better-DUR.COP hot-DUR.COP
 'The chickpea: that is cultivated, has a better nutritional value and is hot.' (EM 51)

The *ki*-clause in (7), which is syntactically similar to the previous ones, is based on the copular marker *ola*. This *ki*-clause restricts the extension of the head noun *şol maražlar* 'those illnesses', which at the same time is the possessor of the noun *buḥrānī* [peak-POSS3SG] 'its peak'. The complex subject *şol maražlar ki katī tiz ve issi ola buḥrānī* 'the peak of those illnesses that are persistent and painful' [lit. 'those illnesses, that are persistent and painful, their peak'] is a cleft construction. The predicate of the main copular clause is *dördünji gün olur* 'are (occur) on the fourth day'.

- (7) *Şol maraž-lar ki katī tiz ve issi ol-a*
 that illness-PL JUNCT hard acute and hot OL.COP-OPT
buḥrān-ī dördünji gün ol-ur.
 peak-POSS3 fourth day OL.COP-R.PRES
 'Those illnesses that are persistent, acute and hot will reach their peak on the fourth day.' (MŞ 23)

6.3. Pattern 3

The *ki*-clause follows the possessor noun of a possessive construction, and contains the possessum plus a predicate noun. The possessum is the syntactic subject within the *ki*-clause. This pattern can be formulated as follows:

$$S = \left\{ NP^{POSSOR} + ki + NP^{POSSUM} + N.PRE + -dUr \text{ or } ola \right\} + N.PRE + -dUr$$

Figure 5: The *ki*-clause within the subject constituent (Pattern 3)

Consider examples (8–10), which illustrate this pattern. In (8), the subject noun of the *ki*-clause, '*arabja adī* [Arabic name-POSS3SG] 'its Arabic name', is at the same

time the possessum of a possessive construction. The possessor noun of this construction is the head of the *ki*-clause, *yüzerlik* 'peganum harmala'. The predicate noun *harmel* in the *ki*-clause takes the copular form *-dUr*. The whole complex subject in the main clause is: *yüzerlik ki 'arabja adī harmeldür* 'peganum harmala, whose Arabic name is *harmel*' [lit. 'peganum harmala, which its Arabic name is *harmel*']. The adjectives *issü* 'hot' and *ķuru* 'dry' are the predicate adjectives in the main clause. Consider also examples (9–10), which are structurally similar.

- (8) *Yüzerlik ki 'arabja ad-ī harmel-dür,*
 peganum harmala JUNCT Arabic name-POSS3 *harmel-DUR.COP*
issü-dür, ķuru-dur.
 hot-DUR.COP dry-DUR.COP
 'Peganum harmala, which is called *harmel* in Arabic, is hot and dry.' (EM 20)
- (9) *Dilkü üzümü, ki pārsīje ad-ī engür-ī rūbāh ve*
 solanum nigrum JUNCT Persian name-POSS3 *engür-ī rūbāh and*
'arabja 'inebu 's-sa 'leb-dür,
 Arabic 'inebu 's-sa 'leb-DUR.COP
šovuk-dur, ķuru-dur ve ol iki dürlü-dür.
 cold-DUR.COP dry-DUR.COP and that two kind-DUR.COP
 'Solanum nigrum, which is called *engür-ī rūbāh* in Persian and 'inebu 's-sa 'leb in Arabic, is cold and dry. It is found in two different species.' (EM 17)
- (10) *Uruz otī ki pārsīje ad-ī būstān-efrüz-dur, ve*
 plantago major JUNCT Persian name-POSS3 *būstān-efrüz-DUR.COP and*
ħayyü 'l-'ālem daħī dē-r-ler, şovuk-dur, ķuru-dur.
 ħayyü 'l-'ālem also say-R.PRES-3PL cold.DUR.COP dry-DUR.COP
 'Plantago major, which is called *būstān-efrüz* in Persian, and is also called *ħayyü 'l-'ālem*, is cold and dry.' (EM 19)

In the following example, we observe a combination of patterns 2 and 3. The pronominal head noun *ol* is the possessor of the possessive noun *sebebi*, which is the syntactic subject of the *ki*-clause. The *ki*-clause, *ki sebebi şafrādur*, provides appositive information about the pronominal head *ol*. The second possessive noun, 'alāmeti, which follows the *ki*-clause, is within the scope of the entire previous constituent. In other words, the possessive noun 'alāmeti is syntactically the possessum of the complex possessor noun *ol ki sebebi şafrādur*.

- (11) *Ol ki sebeb-i şafrā-dur 'alāmet-i ol-dur ki /.../.*
 that JUNCT reason-POSS3 gall-DUR.COP symptom-POSS3 that-DUR.COP JUNCT
 'The disease, which arises from the gall, its symptoms are /.../.' (EM 57)

6.4. Pattern 4

This pattern contains a dative-marked constituent in a main copular clause. The *ki*-clause immediately follows the dative constituent. As is known, in addition to the two obligatory constituents, subject and predicate, a copular clause may include a further argument that expresses the ‘experiencer’ (E) (Karakoç 2011). This argument is often marked in the dative. The pattern can be formulated as follows:

$$S + E = \left\{ NP + DAT + ki + N.PRE + -dUr \text{ or } ola \right\} + N.PRE + -dUr \text{ or } olur$$

Figure 6: The *ki*-clause within the dative-marked constituent in a copular clause (Pattern 4)

Consider example (12), which illustrates the use of the copular form *-dUr*, and examples (13–14), which illustrate the use of the form *ola*. The complex constituent *şol bedene ki yaramaz hilt çokdur* in (12) is the dative-marked constituent within the main copular clause. In (13) the dative constituent, which contains a *ki*-clause, is: *jiger ağrısına ki ruṭūbetden ola*. Examples (12–14) illustrate syntactically similar structures. In all cases the dative suffix is appended to the head nouns preceding the *ki*-clauses.

- (12) *Geyik eti /.../ şol beden-e ki yaramaz hilt*
 deer meat that body-DAT JUNCT bad body fluids
çok-dur şālih-dür.
 many-DUR.COP beneficial-DUR.COP
 ‘Deer meat is beneficial to the body, which has a lot of bad body fluids.’ (MŠ 26)
- (13) *Fistuk jiger ağrısın-a ki ruṭūbet-den ol-a*
 pistachios lung pain-DAT JUNCT humidity-ABL OL.COP-OPT
müfīd-dür.
 helpful-DUR.COP
 ‘Pistachios are helpful against the lung disease that develops due to humidity.’
 (MŠ 85)
- (14) *Durraĵ eti nākih-ler-e ki za’if ol-a-lar*
 francolin meat the one in recovery-PL-DAT JUNCT weak OL.COP-OPT-3PL
münāsib-dür.
 suitable-DUR.COP
 ‘The francolin meat is suitable to the ones in recovery who are weak. (MŠ 25–26)

6.5. Pattern 5

The main clause in this pattern contains a verbal predicate. The constituent containing the *ki*-clause is an object within the main verbal clause. The following formula can illustrate the structure of this pattern:

$$O = \left\{ NP + CASE + ki + N.PRE + -dUr \text{ or } ola \right\} + V.PRE + -(y)A \text{ or } -(V)r$$

Figure 7: The *ki*-clause within the object constituent in a verbal clause (Pattern 5)

Examples (15–17) show the use of *-dUr*. In (15) the nominal phrase *‘ırkun-nisā*, which is the head of the *ki*-clause, takes the accusative marker, since the whole constituent *‘ırkun-nisāyī ki ayak ağrısıdur* functions as the direct object of the verbal predication *gidere* ‘it may cure’. Example (16) has a similar pattern. The constituent *a ‘zā-yī re ‘ıseyi ki dimāğdur ve yürekdür ve jigerdür* is the direct object of the verbal predication *taḳviyet édeler* ‘they may strengthen’. That is why the head noun *a ‘zā-yī re ‘ıse* ‘the main organs’ carries the accusative marker. In both examples the verbal predicates of the main clauses (*gidere* and *taḳviyet édeler*) are placed after the *ki*-clauses. In example (17), the head noun of the *ki*-clause is the dative object within the main verbal clause. Moreover, the *ki*-clause in this example contains a pronominal subject which directly refers to the head noun.

- (15) *Eger bir direm a-nuñ yemiş-i şuy-ın-dan huḳne ét-se-ler,*
 if one drachma that-GEN fruit-POSS3 juice-POSS3-ABL inject-COND-3PL
‘ırkun-nisā-yī ki ayak ağrısı-dur gider-e.
‘ırkun-nisā-ACC JUNCT foot pain-DUR.COP cure-OPT
 ‘If they inject one drachma from its fruit juice, it can cure *‘ırkun-nisā*, which is a foot pain.’ (EM 20)
- (16) *A ‘zā-yī re ‘ıseyi ki dimāğ-dur ve yürek-dür ve*
 organ-EZF main-ACC JUNCT brain-DUR.COP and heart-DUR.COP and
jiger-dür taḳviyet éd-e-ler.
 lung-DUR.COP strengthen-OPT-3PL
 ‘One may strive to strengthen the main organs, which are the brain, the heart and the lungs.’ (MŠ 22)
- (17) *Eger an-i /.../ ‘ırkun-nisā renjīn-e ki ol bir ağrı-dur /.../*
 if that-ACC ‘ırkun-nisā illness-DAT JUNCT that a pain-DUR.COP
huḳne éd-e-ler.
 inject-OPT-3PL
 ‘If they inject it against the disease *‘ırkun-nisā*, which is a pain /.../.’ (EM 32)

Examples (18–19) illustrate the use of the copular marker *ola* in the given pattern. In (18) the constituent containing the *ki*-clause is the direct object within a verbal clause. Thus, the head noun of the *ki*-clause takes the accusative marker: *ishāli* [diarrhoea-ACC]. The main clause has a verbal predicate based on the present form *-(V)r*. In (19), the head noun, *şol tatlu nesnelerden*, is the last element of a coordination which involves the conjunctive *ve* ‘and’ after each element: *fistukdan ve kozdan ve findukdan ve şol tatlu nesnelerden*. Each element of this coordination takes the abla-

tive marker since the verb *saķin-* ‘avoid’ governs ablative case. The *ki*-clause only restricts the extension of the last element: *şol tatlu nesnelerden*.

- (18) *Işhāl-i ki müzmîn ol-a gider-ür.*
 diarrhoea-ACC JUNCT chronic OL.COP-OPT cure-R.PRES
 ‘It cures chronic diarrhoea.’ (EM 49)
- (19) *Fistuk-dan ve koz-dan ve finduk-dan ve şol tatlu
 pistachios-ABL and walnut-ABL and hazelnut-ABL and that sweet
 nesne-ler-den ki nişesteli ol-a helvâ-lar ve pâlude-ler
 food-PL-ABL JUNCT with starch OL.COP-OPT halvah-PL and jelly-PL
 gibi saķin-a-lar.
 like avoid-OPT-3PL
 ‘One may avoid pistachios, walnuts, hazelnuts and sweet foods such as halvah
 and jelly that are made from starch.’ (MŞ 16)*

6.6. Pattern 6

This syntactic pattern is characterized by the use of a resumptive pronoun. Instead of attaching the case marker to the head noun (as I have presented in the patterns 4 and 5 above) a resumptive pronoun is used. This pronoun takes the case marker, and thus denotes the syntactic role of the previous constituent within the main verbal clause. It can be illustrated as follows:

$$O = \{ NP + ki + N.PRE + -dUr \text{ or } ola \} + R.PRO + CASE + V.PRE + -(y)A \text{ or } -(V)r$$

Figure 8: The *ki*-clause within the object constituent in a verbal clause (Pattern 6)

In example (20) the pronominal head noun *ol* does not carry any case suffix, although its constituent functions as the direct object of the verbal main clause. The pronoun *anî* in accusative, which immediately follows the *ki*-clause, refers to the whole previous constituent. The *ki*-clause is based on the marker *-dUr* and has a descriptive role.

- (20) *Ol ki öldür-iji-dür an-î yè-me-ye-ler.*
 that JUNCT kill-DER-DUR.COP that-ACC eat-NEG-OPT-3PL
 ‘One should not eat that one, which is poisonous.’ (EM 17)

The following example illustrates the use of the copular marker *ola* in this pattern. The *ki*-clause implies a restriction and selects the one sort of the generic unit of *etmek* ‘bread’. We can paraphrase the construction as: ‘Only the bread that is made from laundered wheat is colder than other bread.’ The head noun does not take a case marker. Instead, the syntactic role of the constituent *etmek ki yunmîş buğday-dan ola* is indicated by the dative-marked resumptive pronoun *aña*.

- (21) *Etmek ki yu-n-mış buğday-dan ola aḡ-a*
 bread JUNCT wash-PASS-PART wheat-ABL OL.COP-OPT that-DAT
ḡubz-ı maḡsül de-r-ler.
ḡubz-ı maḡsül say-R.PRES-3PL
- Ḳalan etmek-ler-den şovuk-dur ve ḡıda-sı*
 remain-PART bread-PL-ABL cold-DUR.COP and nutritional value-POSS3
az ol-ur.
 less OL.COP-R.PRES
 'The bread that is made from laundered wheat is called *ḡubz-ı maḡsül*. It is cold compared to other bread and its nutritional value is less.' (EM 19)

7. *ki*-clauses following predicates of initial clauses

In the second configuration, the *ki*-clauses follow the nominal or verbal predicates of other clauses. In this context, the syntactic functions of the inserted *ki*-clauses are rather vaguely marked. Patterns often found in the data are analysed below.

7.1. Pattern 1

In one pattern, the *ki*-clause follows the nominal predicate of an initial copular clause based on the marker *-dUr*. It can be illustrated as follows:

NP + N.PRE + *-dUr* + *ki* + NP + N.PRE + *-dUr* or *ola*

Figure 9: The *ki*-clause after a copular clause (Pattern 1)

The *ki*-clause based on the copular form *-dUr* provides additional information about the statement in the previous copular clause. Consider example (22), where two statements are connected to one another by means of the junctor *ki*. The role of *ki* can be conceived of as a colon or a pause: 'cirrhosis is a disease and this is caused by coldness of the liver'.

- (22) *Istiskā bir ḡastalīḡ-dur ki sebeb-i baḡir*
 cirrhosis a disease-DUR.COP JUNCT reason-POSS3 liver
şovuklığı-dur ve ol üç dürlü-dür.
 coldness-DUR.COP and that three type-DUR.COP
 'Cirrhosis is a disease, which is caused by coldness of the liver, and it has three different types.' (EM 66)

The relation between the *ki*-clause with the form *ola* and the previous copular clause can be conceived of as a complement-like relation. In such examples, the initial clause is typically a specificational copular clause, its predicate being a pronoun. (For the characteristics of specificational copular clauses, see Karakoç 2011.) Con-

sider the use of different types of *ki*-clauses in (23). The first part, *ol ki sebebi şafrādur*, illustrates a pattern discussed above for example (11) in Section 6.3. The rest, ‘*alāmeti oldur ki beñzi şaru ve ağzı aji ola*, has the copular marker *ola*. The possessive noun *beñzi* in the *ki*-clause refers to the ‘patient’.³ Examples (24–25) illustrate the same kind of complement-like relations between the respective clauses.

- (23) *Ol ki sebep-i şafrā-dur ‘alāmet-i ol-dur*
 that JUNCT reason-POSS3 gall-DUR.COP symptom-POSS3 that-DUR.COP
ki beñz-i şaru ve ağz-ı aji ol-a.
 JUNCT face-POSS3 brass and mouth-POSS3 bitter OL.COP-OPT
 ‘The symptoms of that (disease), which arises from the gall, are that the patient has a brass complexion and a bitter taste in the mouth.’ (EM 57)
- (24) *Ve ammā ol ki balgam gālib ol-mak-dan ol-a,*
 and but that JUNCT phlegm superfluous be-INF-ABL OL.COP-OPT
‘alāmet-i ol-dur ki uyku-si çok ol-a
 symptom-POSS3 that-DUR.COP JUNCT sleep-POSS3 much OL.COP-OPT
ve baş-i ağrı-r ol-a.
 and head-POSS3 pain-R.PRES OL.COP-OPT
 ‘The symptoms of that one that is due to the superfluous phlegm are that the patient sleeps a lot and has a headache.’ (EM 57)
- (25) *Ol ki sevdā-dan-dur ‘alāmet-i ol-dur ki*
 that JUNCT black bile-ABL-DUR.COP symptom-POSS3 that-DUR.COP JUNCT
yüz-i-nüj reng-i karasağı ol-a ve
 face-POSS3-GEN colour-POSS3 blackish OL.COP-OPT and
göz-ler-i içeri bat-mış ol-a ve nabz-i
 eye-PL-POSS3 inside sink-P.TER OL.COP-OPT and pulse-POSS3
za’if ol-a ve ağz-ı dad-i ekşi ol-a.
 weak OL.COP-OPT and mouth-POSS3 taste-POSS3 sour OL.COP-OPT
 ‘The symptoms of the one which arises from the black bile are that the patient’s face is blackish, his eyes are sunken, his pulse is weak and he has a bitter taste in his mouth.’ (EM 57)

3 If we transformed the given clause into a subordinate clause in Modern Turkish, the result would be a subject complement clause based on the infinitive in *-mA*: *Benz-in sarı ol-ma-sı ve ağz-ın acı ol-ma-sı (bu-nun) işareti-dir* [face-GEN brass be-INF-POSS3SG and mouth-GEN bitter be-INF-POSS3SG (this-GEN) symptom-POSS3SG-DIR.COP]. Note that the *ki*-clause in our example and the subordinate complement clause in Modern Turkish are thus not argued to be functionally equal. As already pointed out, the inserted *ki*-clause rather marks vague syntactic relations.

7.2. Pattern 2

In this pattern, the initial copular clause, which contains a pronominal predicate, is a specificational copular clause based on *-dUr*. The *ki*-clause placed after the predicate of this clause consists solely of a predicate noun and takes the copular marker *ola*. It does not contain a subject, and the relation between the two clauses cannot be conceived of as a complement-like relation. See the following figure:

NP + N.PRE + *-dUr* + *ki* + N.PRE + *ola*

Figure 10: The *ki*-clause after a copular clause (Pattern 2)

In example (26) the initial specificational copular clause is: *şunun eyüsi oldur* [water-GEN good-POSS3 that-DUR.COP] 'the best water is that'. The predicate of this clause is a pronoun, *ol*, which is the referent of the *ki*-clause, *ki revān ola, tatlu ve şāfī ola*. The *ki*-clause denotes a restriction.⁴ Consider examples (27–29) as well. In (29) the initial specificational copular clause includes a complex subject noun, *havā eyü olmak*, which is itself a complement clause based on the infinitive in *-mAK*.

- (26) *Şu-nuñ eyü-si ol-dur ki revān ol-a tatlu ve şāfī ol-a.*
 water-GEN good-POSS3 that-DUR.COP JUNCT flowing OL.COP-OPT
 sweet and clear OL.COP-OPT
 'The best water is that which flows and is sweet and clear. (MŠ 12)
- (27) *Eyü uyku ol-dur ki muṭṭasıl ol-a kuşku ol-ma-ya.*
 good sleep that-DUR.COP JUNCT uninterrupted OL.COP-OPT uneasy
 OL.COP-NEG-OPT
 'Good sleep is that which is uninterrupted and is not uneasy.' (MŠ 13)
- (28) *Tavuk eyü-si ol-dur ki yumurtla-ma-duk bülüj ol-a.*
 chicken good-POSS3 that-DUR.COP JUNCT lay eggs-NEG-PART
 young chicken OL.COP-OPT
 'A good chicken is one that is young and has not laid eggs.' (MŠ 25)

4 If we were to render the meaning of this clause in a subordinate clause the result would be a headless relative clause based on the participle *-(y)An*, e.g. *Su-yun iyi-si tatlı ve berrak ol-an-ıdır* [water-GEN good-POSS3SG sweet and clear be-PART-POSS3SG-DIR.COP]. Observe the use of the third person possessive suffix, which is attached to the participle: *ol-an-ı* [be-PART-POSS3SG]. This possessive suffix seems to correspond to the anaphoric pronominal predicate *ol*, which is the head of the *ki*-clause.

- (29) *Havā eyü ol-maḵ ol-dur ki mu'tedil ol-a.*
 weather good be-INF that-DUR.COP JUNCT moderate OL.COP-OPT
 'For weather to be good means that it is moderate.' (MŠ 11)

7.3. Pattern 3

In this pattern the initial clause contains a verbal predicate based either on the present form *-(V)r* or on the optative in *-(y)A*. The subsequent *ki*-clause is based on the copular form *-dUr* or *ola*. See Figure (11). The verbal predicate of the previous clause is usually placed before the *ki*-clause. However, even if the *ki*-clause follows the verbal predicate and is not immediately placed after the nominal argument of the initial clause, it is the nominal argument that is in the scope of the *ki*-clause. That is why this pattern can best be analysed as a variant of the pattern presented above in Section 6.5. The main distinction between them is the verbal predicate's placement before or after the *ki*-clause.

S/O + V.PRE + *-(V)r* or *-(y)A* + *ki* + (NP) + N.PRE + *-dUr* or *ola*

Figure 11: The *ki*-clause after a verbal clause (Pattern 3)

In examples (30–32), the *ki*-clauses follow the nominal arguments (*şol kişi* in both cases) and the verbal predicates *gire* 'may go' and *içe* 'may drink', respectively. The *ki*-clauses based on *ola* refer to the arguments (*şol kişi*) and restrict their extension. That means: 'Only that person who is healthy and young' (example 30) and 'only that person whose nature is rather hot' (example 31). In both examples, the *ki*-clause restricts the extension of the head noun *şol kişi* 'that person'. In example (32), the *ki*-clause characterizes the sort of 'headache'. It is important to point out that the copular marker *ola* in this pattern typically implies a static meaning 'to be'.

- (30) *Şovuḵ şu-ya şol kişi gir-e ki tendürüst*
 cold water-DAT that person go in-OPT JUNCT healthy
ol-a ya yigit ol-a koḵa kişi ya oḡlan
 OL.COP-OPT or young OL.COP-OPT old man or child
gir-me-ye.
 go in-NEG-OPT
 'Only a person who is healthy and young may go into cold water. An old person or a child should not go in.' (MŠ 14)
- (31) *Meger şol kişi iç-e ki tabī'at-ī gāyet iṣṣi*
 unless that person drink-OPT JUNCT nature-POSS3 very hot
ol-a ol daḡi iç-se çok iç-me-ye.
 OL.COP-OPT that also drink-COND much drink-NEG-OPT
 'Only the person whose body temperature is very hot may drink (this water). But, even if he drinks it, he should not drink too much.' (MŠ 13)

- (32) *Baş ağrı-si-n gider-ür ki issi-den ol-mış*
 head pain-POSS3-ACC cure-R.PRES JUNCT heat-ABL arise-P.TER
ol-a.
 OL.COP-OPT
 'It cures the headache that is due to the heat.' (EM 49)

In example (33) the *ki*-clause, based on *-dUr*, has a parenthetical function. We observe that the verbal predicate (*yarar*) is placed before the *ki*-clause. The *ki*-clause refers to the dative-marked constituent (*anlara*) and provides a description of it.

- (33) *Ƙuzi eti ve emer oğlaƙ eti /.../ an-lar-a yara-r*
 lamb meat and suck-PART kid meat that-PL-DAT be beneficial-R.PRES
ki aruƙ ve za'if-dür.
 JUNCT thin and weak-DUR.COP
 'Lamb meat and meat of a kid that is still drinking mother's milk are beneficial to people who are thin and weak.' (MŠ 25)

7.4. Pattern 4

This pattern is syntactically similar to the previous one. The main peculiarity of this type, however, is that both the initial clause and the *ki*-clause are only based on optative forms. That is, the copular marker exclusively selected in this type is *ola*. Moreover, the copular verb *ola* mainly appears in a dynamic reading 'to become', which represents an important difference between patterns 3 and 4. The *ki*-clause in this pattern can best be characterized as a purposive clause. See the following figure:

$$S/O + V.PRE + -(y)A + ki + (NP) + N.PRE + ola$$

Figure 12: The *ki*-clause after a verbal clause (Pattern 4)

The clauses in (34–36) all imply purposive readings that can be rendered in English by 'so that' or 'in order to'. The first part of example (34) (*a'zā-yi re 'iseyi ki dimāğ-dur ve yürek-dür ve jigerdür*) has already been analysed above (example 16 in Section 6.5). The rest of this example (*taƙviyet edeler ki za'if olmaya*) illustrates a purposive clause. Observe that the initial verbal predicates of these examples typically contain a third person plural subject marker (i.e. *taƙviyet edeler*, *ƙaynadalar*, *ƙatalar*), implying an impersonal reference. It needs to be remarked that alongside the subjunctive *ke*, the subjunctive *tā* can exhibit a similar use in purposive clauses in Persian (Lazard 1957: 236; Dahlén 2010: 361); on the use of optative in purposive clauses in Ottoman Turkish see Prokosch (1980: 74–83).

- (34) *A'zā-yi re 'ise-yi ki dimāğ-dur ve yürek-dür ve*
 organ-EZF main-ACC JUNCT brain-DUR.COP and heart-DUR.COP and

jiger-dür takviyet ed-e-ler ki za'îf ol-ma-ya.
 lung-DUR.COP strengthen-OPT-3PL JUNCT weak become-NEG-OPT
 'One may strive to strengthen the main organs, which are the brain, the heart and the lungs, in order not to weaken ones health.' (MŞ 22)

- (35) *Şol kadar kaynad-a-lar ki müherrā ol-a.*
 that much boil-OPT-3PL JUNCT properly boil-OPT
 'One should boil it much so that it is properly boiled.' (EM 51)

- (36) *Süd-i kaynad-a-lar biraz sirke kat-a-lar ki süd kesil-e peynir ol-a.*
 milk-ACC boil-OPT-3PL a bit vinegar add-OPT-3PL JUNCT milk
 curdle-OPT cheese become-OPT
 'One should boil the milk and add a bit of vinegar so that the milk curdles and becomes cheese.' (EM 20)

These kinds of *ki*-clauses are still encountered in the modern language: *Bu organı öyle güçlendirmeli ki zayıf düşmesin* [this organ so strengthen-NEG JUNCT weak fall-NEG-OPT], 'One may strive to strengthen this organ, in order not to weaken it', *Sütü kaynatıp biraz sirke katmalı ki kesilip peynir olsun* [milk-ACC boil-CONV a bit vinegar add-NEG JUNCT curdle-CONV cheese become-OPT] 'One should boil the milk and add a bit of vinegar so that it curdles and becomes cheese.' Note that the optative form *-(y)A* in the initial clause is rendered in the modern construction by the necessitative in *-malı*, which has an impersonal reading. The optative *-(y)A* in the *ki*-clause, on the other hand, is rendered by the optative form *-sin*. (For the development of the Turkish optative, see Johanson 2013b.)

8. The complex forms *-mîş ola* and *-(V)r ola*

The data includes examples of *ki*-clauses that have verbal predicates taking the post-terminal form *-mîş* plus the copular form *ola*. There are also a few examples in which the verbal predicate takes the intraterminal form *-(V)r* and the copular marker *ola*. The complex form *-mîş ola* expresses the postterminal viewpoint. These complex forms can be found in different patterns discussed above. In example (37) the first copular verb in the predicate (*olmîş*) has a dynamic meaning, 'become'. The *ki*-clause in this example illustrates the pattern presented in Section 6.4. Example (38) illustrates the use of *-mîş ola* in the pattern analysed in Section 7.3. Example (39) illustrates the complex form *-mîş ola* in the pattern analysed in 7.2. Example (40) shows the use of *-mîş ola* within the syntactic pattern presented in 6.3.

- (37) *Ve kebāb /.../ kişi-ler-e ki kuvvet-leri sâķit*
 and roasted meat person-PL-DAT JUNCT power-POSS3PL weakened

ol-mış ol-a muvāfīk-dur.
 become-P.TER OL.COP-OPT appropriate-DUR.COP
 'And, roasted meat is appropriate for persons whose strength has weakened.'
 (EM 36)

- (38) *Ol kişi-ye iç-ür-e-ler ki ağulu nesne yè-miş*
 that person-DAT drink-CAUS-OPT-3PL JUNCTpoisonous thing eat-P.TER
ol-a.
 OL.COP-OPT
 'They should let the person who has eaten a poisonous food drink it.' (EM18)

- (39) *Yégreg-i ol-dur ki eyü biş-miş ol-a.*
 better-POSS3 that-DUR.COP JUNCT good cook-P.TER OL.COP-OPT
 'The best is the one that has been well cooked.' (EM 19)

- (40) *Eski süji ki iç-in-e issi ot-lar ve gökçek koğu-lar*
 old wine JUNCT inside-POSS3-DAT hot herb-PL and pleasant scent-PL
kat-ıl-mış ol-a /.../ tavuk eti ki üzer-in-e
 add-PASS-P.TER OL.COP-OPT chicken JUNCT above-POSS3-DAT
dārçīnī ve karanful ve besbāse ve za'firān
 cinnamon and clove and myristica fragrance and saffron
ekil-miş ol-a.
 sprinkle-P.TER OL.COP-OPT
 'The old wine to which spices and pleasant scents have been added /.../ the chicken
 on which cinnamon, clove, myristica fragrance and saffron have been sprinkled.'
 (EM 63)

In example (41) the verbal predicate in the *ki*-clause is based on the form *-(V)r ola*. This example shows the use of *-(V)r ola* in a pattern analysed in Section 7.1. The relation between the initial clause, '*alāmeti oldur*', and the *ki*-clause, '*ki uykusī çok ola ve başī ağrır ola*', can best be characterized as a complement-like relation.⁵

- (41) '*Alāmet-i ol-dur ki uyku-sī çok ol-a ve*
 symptom-POSS3 that-DUR.COP JUNCTsleep-POSS3 much OL.COP-OPT and
baş-ı ağrı-r ol-a.
 head-POSS3 pain-R.PRES OL.COP-OPT
 'Its symptoms are that the patient sleeps a lot and has a headache.' (EM 57)

5 This example may be rendered by using non-finite subordinating devices as follows: *uyku-nun çok ol-ma-sı ve baş-ın ağrı-yor ol-ma-sı (bu-nun) işaret-i-dir* [sleep-GEN much be-INF-POSS3SG and head-GEN pain-PRES be-INF-POSS3SG (this-GEN) symptom-POSS3SG-DIR.COP).

9. The use of *olur*

The verb *olur* is often found as a dynamic copular verb in compound words, for instance *hāṣīl olur*, *vāḳi' olur*, *za'īf olur*, *haẓm olur*, *zarūret olur*, *mütevellid olur*, *müherrā olur*, *ẓāhir olur*, etc. Furthermore, it appears in its different static and dynamic readings, such as 'it tends to be(come)', 'it tends to have/ acquire', 'it tends to exist/ be found/ come into existence', 'it tends to happen', etc. It sometimes occurs in the modal readings 'it will/ would/ can be(come)', 'it will/ would/ can happen' as well (Karakoç, in print). Example (42) illustrates the use of *olur* within a main clause. There are also examples where *olur* occurs as a modal element conveying 'it is possible, probable', see (43).

- (42) *Furun-da biş-en etmek ter ol-ur.*
 oven-LOC be baked-PART bread moist OL.COP-R.PRES
 'Bread baked in an oven tends to be moist.' (EM 19)

- (43) *Ol-ur ki mefājā' ölümü-n getir-ür.*
 OL.COP-R.PRES JUNCT palsy death-ACC bring-R.PRES
 'It is probable that it causes palsy.' (EM 34)

Though not frequently, the copular verb *olur* is also found in different syntactic types of the *ki*-clauses presented above. Within these clauses it conveys the meanings given above. It should be pointed out that in all its readings it typically appears in descriptive, parenthetical clauses. In this respect its use resembles that of the copular form *-dUr*. Consider the examples (44–46).

- (44) *Bil-gil ki isitma var-dur ki zamān-ī uzun ol-ur, geĵ geĉ-er.*
 know-IMP JUNCT malaria exist-DUR.COP JUNCT time-POSS3 long
 OL.COP-R.PRES late be over-R.PRES
 'Know that that there is a malaria: it tends to last long and its healing process is slow.' (EM 70)

- (45) *Serv ağajın-dan bir nev'-dür ki kara arduĵ yemişi gibi yemiş-i ol-ur ammā bu kızilĵa ol-ur.*
 cypress-ABL a sort-DUR.COP JUNCT black juniper fruit-POSS3
 like fruit-POSS3 OL.COP-R.PRES but this reddish OL.COP-R-PRES
 'It is a sort of cypress tree, which tends to have fruit like the fruit of a black juniper. However, it tends to be more reddish.' (EM 43)

- (46) *Şikāka ki maḳ'ad-da olur aṣṣi-dur.*
 şikāka JUNCT anus-LOC OL.COP-R.PRES useful-DUR.COP
 'Şikāka, which tends to be found in the anus, is useful.' (EM 32)

10. Corresponding structures in Modern Persian

Even if Modern Persian is not the language that served as a model code for the kind of syntactic copies in our data, it could be fruitful to briefly compare the patterns found with the corresponding structures in this language. Leaving aside the complex theoretical issue of the syntactic status of the corresponding *ke*-clauses in Persian, I will look at the realization of restrictive and non-restrictive relative clauses in this language. Restrictive relative clauses differ from non-restrictive ones by the use of an enclitic *-i*. The enclitic *-i* is only added to the head noun of restrictive relative clauses. The head nouns of non-restrictive relative clauses are not marked by *-i* (Thackston 1993: 85–88; see also Jahani 2000). The Persian examples in (47a–b) are taken from Thackston (1993: 88):

- (47) (a) *Ahmad, ke diruz āmad, injā-st.*
 ‘Ahmad, who came yesterday, is here.’
 (b) *Ahmad-i-ke diruz āmad, injā-st.*
 ‘The Ahmad who came yesterday is here.’

The subjunctive in Persian is used in relative clauses if the head noun is indefinite. Examples in (48a–b) are due to Thackston (1993: 141).

- (48) (a) *Dombāl-e kas-i mīgardam ke fārsi balad bāshad.*
 ‘I’m looking for someone who knows Persian.’
 (b) *Dombāl-e ān mard-i mīgardam ke fārsi balad-ast.*
 ‘I’m looking for the man who knows Persian.’

To sum up, the distinction between the restrictive and non-restrictive relative clauses is denoted by means of a clitical *-i* on the head noun, and subjunctive is used if the head noun of the relative clause is indefinite. The situation in our Old Ottoman Turkish data is comparable. The heads of the restrictive *ki*-clauses based on the optative mood are typically indefinite nouns, whereas the head nouns of the non-restrictive, appositive *ki*-clauses based on the present markers are definite, and include names of plants, diseases, etc. The optative mood in Old Ottoman Turkish texts fulfils a subjunctive function to express restrictive relative clauses.

The following clauses are the translations of some of our examples into Modern Persian.⁶ The numbers before the translated examples refer to the numbers of our Old Ottoman Turkish examples given above. Consider the use of different copular markers in the *ke*-clauses:

6 I would like to thank my colleagues, Esmat Esmaeili for translating these examples into Persian, and Forogh Hashabeiky for a critical reading.

- (2') *Eftimūn ke dar hame-ye zabānhā ma'rūf ast garm va xošk ast.*
 (3') *Har qārūrei ke sefid yā zard yā sorx nabāsad xub nist va bāeš-e marg ast.*
 (4') *Fasl-e avval ke bahār ast tabi'ataš garm va marṭūb ast.*
 (7') *Ān maraẓhā-i ke ba sor'at va tabālūd bāšad boḥrānešān roz-e čahārom xāhad būd.*
 (9') *Dilkū üzümi ke fārsiaš angor-e rūbāh va 'arabiaš 'enabe 's-saleb ast xošk va sard mibāšad.*
 (13') *Peste barā-ye darde jegari ke az roṭūbat bāšad mofid ast.*
 (16') *A 'zā-ye ašli-ye badan ke qalb va jegar ast ānhārā taqviyat mikonad.*
 (18') *Eshāli rā ke mozmen bāšad az beyn mibarad.*
 (20') *Ān ke moẓer ast ānrā nabāyad bexorand.*
 (22') *Estesqā marazi ast ke sababaš sarma xordegī-ye jegar ast ...*
 (23') *Ān ke sababaš safra ast 'alāmataš in ast ke rangaš zard va dehānaš talx bāšad.*
 (26') *Ābe xub ān ast ke ravān bāšad.*
 (34') *Taqviyat mikonad ke (tā) ẓa'eif našavand (nabāšand).*

As can be seen from these translations, our Old Ottoman Turkish clauses including *-dUr* correspond to the clauses based on the copular form *ast*. In contrast to this, examples illustrating the use of the optative form *ola* are typically rendered by the copular form *bāšad*, which is the subjunctive copular form in Persian. In example 34, illustrating a purposive clause, both the subjunctive *ke* and *tā* can be used. Further, the form used in this purposive clause is also the subjunctive.

It is interesting to note that the use of different copular forms is also found in Azeri as spoken in Iran. The clauses having *-dUr* in our Old Ottoman Turkish texts (and *ast* in their Modern Persian translations) are best rendered in Azeri by using the copular marker *-dI*. The *ki*-clauses, on the other hand, based on the optative *ola* in the Old Ottoman Turkish texts (and on the subjunctive form *bāšad* in their Modern Persian translations) are rendered in Azeri by the optative-marked copular form *ol-sun* (Esmat Esmaeili, p.c.).

11. Non-finite subordinate copular clauses in the data

Alongside the overwhelming use of *ki*-clauses—which seem to appear as clausal insertions—our data provides scores of examples of copular clauses based on the non-finite subordinating devices such as *olan* [be(come)-PART], *olmāš* [be(come)-PART] and *olmaḵ* [be(come)-INF].

The non-finite subordinate relative clauses display the following properties among others: 1) They often contain locative predicates: *ḵarīn-da ol-an ḵurt-lar* 'worms in the stomach' (EM 52), *ičegü-de ol-an südde-ler* 'interior flatulence' (EM 52), *maḵ'ad-da ol-an baš* 'sore in the anus' (EM 50), *bağarsuḵ-lar-da ol-an baš* 'ulceration in the intestine' (MŠ 126), *bağarsuḵ-da ol-an saḥjī* 'infection in the intestine' (EM 46), *öyken-de ol-an ḵarḥa* 'abscess in the lung' (EM 45), *böbrek-de*

olan taş ‘stones in the kidney’ (MŞ 126), etc.; 2) They often consist of ablative predicates: *şovuk-dan ol-an ağrı* ‘pain arising from cold’ (EM 50), *kan-dan ol-an sūma* ‘malaria arising from blood’ (EM 71), *balgam-dan ol-an kulunĵ* ‘colic arising from phlegm’ (EM 52), *şafra-dan ol-an baş ağrısı* ‘headache arising from gall’ (EM 51), *sevdā-dan ol-mış şiş-ler* ‘tumour arising from black bile’ (EM 43), *şovuk-dan ol-an bel ağrısı* ‘lumbago arising from the cold’ (MŞ 127), etc.; 3) They are often found in possessive constructions meaning ‘to have’: *kulunĵ-i ol-an kişi* ‘the person who has colic’ (EM 38), *böbreg-in-de taş ol-an* ‘the one who has stones in his/her kidney’ (MŞ 126), *şaruliğ-i ol-an* ‘the one who has icterus’ (EM 28), *meşāne-sin-de taş ol-an* ‘the one who has stones in his/her urinary bladder’ (EM 19), *teşennüj-i ol-an* ‘the one who has spasms’ (EM 53)

The non-finite complement clauses make use of the bound infinitive in *-mak*; consider examples (49–51).

- (49) *‘Alāmet-i der-le-mek ve hasta-nuñ bevl-i kızıl ve*
 symptom-POSS3 sweat-INF and patient-GEN urine-POSS3 red and
koyu ol-mak-dur.
 dark be-INF-DUR.COP
 ‘Its symptoms are abnormal sweating and the patient’s urine colour being red and dark.’ (EM 63)

- (50) *Ol ki issi-dan ol-a ‘alāmet-i issi katī ol-mak*
 that JUNCT heat-ABL OL.COP-OPT symptom-POSS3 hot acute be-INF
ve çok şuşa-mak ve iki yağr-ın orta-sı
 and much thirst-INF and two shoulder blade-GEN middle-POSS
ağrı-mak-dur.
 pain-INF-DUR.COP
 ‘The symptoms of the one that is caused by the heat are being hot, excessively thirsty and having pain between the shoulder blades.’ (MŞ 77)

- (51) *‘Alāmet-i, hasta-nuñ mizāj-ı issi ol-mak ve*
 symptom-POSS3 patient-GEN disposition-POSS3 hot be-INF and
bevl-i od renglü ol-mak ve iç-i yalıñlan-mak ve
 urine-POSS3 fire colour be-INF and inside-POSS3 blaze-INF and
katī susa-mak ve ağız-ı ağı ve beñz-i şaru
 very thirst-INF and mouth-POSS3 bitter and face-POSS3 brass
ol-mak-dur.
 be-INF-DUR.COP
 ‘Its symptoms are that the patient’s disposition is hot, his urine has an orange reddish tone, he will have a burning sensation in his chest, have excessive thirst and a bitter taste in his mouth as well as a brass facial complexion.’ (EM 63)

Turkish non-finite subordinate relative clauses are typically used in a restrictive way. They restrict the extension of the referents of their head nouns. Accordingly,

the copied *ki*-clauses based on the optative form *ola* can be considered as stylistic variants of subordinate relative clauses. As already pointed out, the main difference between the non-finite and copied strategies is the *ki*-clauses are syntactically not subordinated. Examples (52–54) aim to illustrate the interesting symbiosis of the native and foreign strategies of clause combining in our data, i.e. a side-by-side occurrence of the syntactically vague insertions by means of the copied *ki*, and the non-finite subordinate clauses.

- (52) *Şadefün tohmî /.../ bēl ağrısı-n ki şovuk-dan ol-a*
 rue-GEN seed-POSS3 lumbago-ACC JUNCT coldness-ABL OL.COP-OPT
dürtijek gider-ür /.../ ve şovuk-dan ol-an bēl ağrısın-a
 rub-CONV cure-R.PRES and coldness-ABL OL.COP-PART lumbago-DAT
müfid-dür.
 useful-DUR.COP
 'The seed of rue, if rubbed, cures the lumbago that is caused by cold /.../ and it is beneficial to the lumbago caused by cold.' (EM 39)
- (53) *Ol kişi-ye ki ma'de-sin-de şiş var-dur,*
 that person-DAT JUNCT stomach-POSS3-LOC tumour exist-DUR.COP
iç-ür-e-ler /.../ ve bavāsiri ol-an-a ve
 drink-CAUS-OPT-3PL and haemorrhoids OL.COP-PART-DAT and
iç-in-den kan gid-en-e yavlağ eyü-dür.
 inside-POSS3-ABL blood run-PART-DAT very good-DUR.COP
 'One should let the person who has a tumour in his stomach drink it /.../ and it is very good for the one who has haemorrhoids and internal bleeding.' (EM 17)
- (54) *Şiş-ler-e ki balğam-dan ol-a yaķu ed-e-ler*
 tumour-PL-DAT JUNCT phlegm-ABL OL.COP-OPT apply a cautery-OPT-3PL
tağid-ur, hāşşa ki kulağ dib-in-de
 dissolve-R.PRES especially JUNCT ear-LOC bottom-POSS3-LOC
ol-an şiş-ler-e vur-a-lar.
 OL.COP-PART tumour-PL-DAT apply-OPT-3PL
 'If one applies it to the tumour that is caused by phlegm, it dissolves it; one should especially apply it to the tumours on the bottom of the ear.' (EM 30)

Bulut (1998) observes that the copied *ki*-clauses in *Seyahatname*, a Middle Ottoman Turkish text from the 17th century, are only used as non-restrictive relative clauses, whereas the Turkish strategy with participles is employed to express restrictive relative clauses. Bulut's examples of *ki*-clauses do not contain verbal forms in optative. In other words, there is no opposition between the present tense and the optative in the *ki*-clauses Bulut investigates. As described, however, the data analysed in the present survey contain different types of copied *ki*-clauses taking either the present or the optative form, and thus indicating a distinction between restrictive and non-restrictive. As a result, the linguistic characteristics of our Old Ottoman Turkish

texts and of the Middle Ottoman Turkish text *Seyahatname* are different. Bulut (2006) investigates relativization strategies in Turkic varieties from a diachronic point of view; she does not, however, go into the matter of the operationalization of the semantic opposition between the present and the optative in *ki*-clauses.

12. Summary and conclusion

This paper has analysed the copied *ki*-clauses based on finite copular markers, *-dUr*, *olur* or *ola*, in two Old Ottoman Turkish texts from syntactic and semantic points of view. The so-called *ki*-clauses appear either within the subject or object constituents of main clauses (first syntactic configuration) or after predicates of previous clauses (second syntactic configuration). Within each configuration the *ki*-clauses occur as clausal insertions in a number of different syntactic patterns.

As for the first syntactic configuration, we have seen that the semantic opposition between the present and the optative is used to express a distinction between restrictive and non-restrictive relative clauses. This distinction is crucial for the relative clauses in Persian, the language that served as a model code for numerous copies in the data. In our texts, the copied restrictive relative clauses—which restrict and select the extension of the indefinite head nouns—are based on the optative mood (*ola*, as well as the complex forms *-mlš ola* and *-(V)r ola* in copular clauses). Thus, the Turkish optative has acquired a subjunctive function in copied restrictive relative clauses. The non-restrictive (descriptive, supplementary) relative clauses, on the other hand, have definite head nouns such as names of plants, diseases, etc., and are based on the present form (*-dUr* or *olur* in copular clauses).

As for the development of the copied patterns in this syntactic configuration, we observe that the clauses with *-dUr* or *olur*, i.e. the descriptive, non-restrictive ones, are not alien to Modern Turkish. Expressions such as the following can still be found in certain stylistic registers in Modern Turkish: *Birinci mevsim ki bahardır tabiatı yeşildir* ‘The nature of the first season of the year, which is spring, is green’ (cf. example 4); *Eftimun ki bütün dillerde meşhurdur şifalıdır* ‘*Cuscuta epithimum*, which is well-known in all languages, is wholesome’ (cf. example 2).⁷ The restrictive *ki*-clauses based on optative *ola*, however, are no longer used in Modern Turkish, having probably disappeared very early; cf. Bulut’s (1998) conclusion regarding *Seyahatname* that relative *ki*-clauses are only non-restrictive, and stand in contrast to restrictive non-finite Turkish relative clauses.

In the second configuration—where the syntactic relations of *ki*-clauses are expressed more vaguely—the distribution of the present tense (*-dUr/olur* in copular clauses) and the optative (*ola* in copular clauses) is mainly dependent on the given

⁷ It is interesting to observe that the use of the copular marker *-Dir* in such *ki*-constructions is still obligatory in Modern Turkish. The zero-copula (*-Ø*) would not be appropriate in this kind of *ki*-clauses, e.g. **Birinci mevsim ki bahar-Ø tabiat-ı yeşildir*, **Eftimun ki bütün dillerde meşhur-Ø şifalıdır*.

syntactic pattern. For instance, the main copular form found in the complement-like *ki*-clauses is *ola* (Section 7.1). There does not seem to be a semantic opposition between *-dUr* and *ola* in this type. The same is true for the purposive *ki*-clauses, in which *ola* is the only choice; i.e. the optative fulfils a subjunctive function in purposive *ki*-clauses (Section 7.4). The development of individual patterns in the second configuration is also interesting because not only the *-dUr*-marked *ki*-clauses, but also some of the constructions based on the optative can still be found in the modern language. Even if the optative form in *-(y)A* has widely vanished, the *ki*-clauses based on the optative *-sIn* are still in use, e.g. *Suyun iyisi odur ki berrak olsun*⁸ ‘The best water is that which is clear’ (cf. example 26); *Sütü kaynatıp biraz sirke katmalı ki kesilip peynir olsun* ‘One should boil the milk and add a bit of vinegar so that it curdles and becomes cheese’ (cf. example 36). These modern *ki*-clauses are based on the optative form *olsun*.

My focus in this paper has mainly been on the *ki*-clauses based on copular markers. Of course, the syntactic patterns and the semantic distinction found between the present and optative are not only crucial for copular clauses. The same distribution of functional patterns is also important for the *ki*-clauses consisting of verbal predicates.

8 It can again be observed that the use of the copular form *-Dİr* in the initial clause of such modern patterns is obligatory. That is, the copular form *-Dİr* cannot be omitted: **Suyun iyisi o-Ø ki berrak olsun*.

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Abbreviations

1	First person	NEC	Necessitative in <i>-mAll</i>
2	Second person	NP	Nominal phrase
3	Third person	O	Object
ABL	Ablative	Ø	Zero-copula
ACC	Accusative	OL.COP	Copular verb in <i>ol-</i> 'to be(come)'
CASE	Case marker		
CONV	Converb	OPT	Optative
DAT	Dative	PART	Participle
DIR.COP	Copular marker in <i>-D²I⁴r</i> (<i>-dir</i> , <i>-dir</i> , <i>-dür</i> , <i>tir</i> , <i>-tir</i> , <i>-tur</i> , <i>-tür</i>) in modern Turkish	PAST	Past tense
DUR.COP	Copular marker <i>-dU²r</i> (<i>-dur</i> , <i>-dür</i>) in Old Ottoman Turkish	PL	Plural
E	Experiencer in copular clauses	POSS	Possessive
EZA	Ezafe	PRO	Pronoun
GEN	Genitive	P.TER	Postterminal in <i>-mİš</i>
IMP	Imperative	R.PRES	The present form in <i>-(V)r</i>
INF	Infinitive	R.PRO	Resumptive pronoun
JUNCT	Junct	S	Subject
N.PRE	Nominal predicate	SG	Singular
		V.PRE	Verbal predicate
		VP	Verbal phrase