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A Modal Framework for the Turkish

Aorist *-Ar*

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Table of Contents

Introduction

Semantic multifunctionality is common among Turkish tense-aspect-modality (TAM) markers. However, the aorist *-Ar* is especially remarkable in this respect as it can express completely opposite meanings in different contexts. For instance, the speaker can use the aorist to express facts in one utterance and hypotheses in the other. This makes the aorist truly a special marker.

Despite how important the aorist is to Turkish, descriptions of it have not yet managed to capture its exact range of meanings. There is only a small body of "canonical" literature detailing the semantic uses of the aorist, which has often a normative, rather than descriptive or explanatory, purpose. More recent research often rely on this literature. As a result, research has mainly focused on the almost-normative notion that the aorist is a temporal marker. This notion has remained the most prominent one in this area of research despite the numerous findings against it over the past few decades. The evidence against the notion that the aorist is a temporal marker, however, need to be investigated in more detail.

This thesis deals with the aorist, its various uses, and how it should be classified. There are two parts to the thesis, and the ultimate goal is to provide a preliminary framework that considers the aorist as a modal. This will be achieved by first providing an overview of what the literature argues to be possible with the aorist, what the limitations of the literature are, and then explaining how a framework regarding the aorist as a modal would address these limitations. The main aim of the first part is to provide an overview of the canonical literature on the aorist and to provide criticism and integrate it with novel data whenever necessary. In the second part, the limitations of the literature will be used to propose a new preliminary theoretical framework. To explain the framework, the core concepts of tense, aspect, and modality will be discussed first, and then the issue of habituality will be tackled. Lastly, the limitations of the proposed framework will be discussed, and the key findings of the thesis will be once again outlined.

Part 1: Critical Review of Canonical Literature

This section of the thesis details the range of possible semantic uses of the aorist *-Ar* and *-DIr* by critically reviewing the existing literature on the matter as well as newly produced data gathered from native speakers. This descriptive work is conducted with a holistic approach, in which these markers are compared to relevant ones where necessary. Moreover, the agglutinative nature of Turkish is taken into consideration by investigating any changes in meaning when the marker is used alongside others. First, an overview of the tense-aspect-modality (TAM) system in Turkish will be provided. Next will be an overview on the aorist and *-DIr,* followed by what the methodology was for the critical review. Afterwards, each potential meaning of the aorist will be described, adding additional data where necessary. Finally, the conceptual limitations of the descriptions and generalizations provided in the literature will be discussed. The second part of the thesis will address some of these limitations by proposing a preliminary theoretical framework.

1.a. TAM System in Turkish

Turkish is an agglutinative language that mostly takes suffixes to enrichen the meaning of a verb, a noun, or an adjective that is acting as the predicate of the verb. One such group of suffixes are the TAM markers, which bind to verbal and nominal predicates to create temporal, aspectual, and modal relations.

In most Turkish sentences, one or more TAM markers can be located in the verbal or nominal predicate. There have been several models of the attachment methods of these markers, as it has been established that some markers are in the same "clusters", meaning that they attach at the same level to a verbal or nominal predicate, and cannot attach to one another. This thesis will take the model of Göksel and Kerslake (2005) as a base, since this is a well-established model in the literature on TAM. The model features five clusters that can be occupied by an overall total of twenty different markers. Note that some markers appear in multiple clusters. This is because these markers can be used with the copula *–(y)-,* or *i-*. A modified version of the model is provided in (1), where only the sixteen relevant markers for this thesis are included. The clusters are consecutive. This means that in situations where more than one marker is present in a verbal predicate, these markers all belong to different clusters. Moreover, markers from different clusters always attach to one another in a set order, with markers from a latter cluster always following ones from former clusters. For instance, if there are multiple markers

attached to a verb and the first marker is from cluster 2, the second marker cannot be from cluster 1. While the second marker doesn't necessarily have to be from cluster 3, it has to be from a cluster after cluster 2. This is illustrated below with (2), where it can be seen that (2a) is acceptable but (2b), (2c) or (2d) are not.

(1)	**V**	**1**	**2**	**3**	**4**	**5**	**AGREEMENT**
		-(y)A (NEG.OPT)	*-(y)Abil* (POSS)	*-DI* (PERF)	*-(y)DI* (PAST)	**-DIr**	*-(I)m* (1sg)
				-mış (PERF/EVID)	*-(y)mIş* (EVID)		*-(sI)n* (2sg)
				-sA (COND)	*-(y)sA* (COND)		*-∅* (3sg)
				-(A/I)r/-z (AOR)			*-Iz/k* (1pl)
				-(y)AcAK (FUT)			*-(sI)nIz (2pl)*
				-(I)yor (IMP)			*-(lAr) ∅* (3pl)
				-mALI (OBL)			
				-(y)A (OPT)			

(2) a. yap   -abil   -miş   -tir   -∅
         do   -POSS   -PERF   -DIr   -3sg
         V   C2   C3   C5   AGR

      b. * yap   -mış   -abil   -dir   -∅
             do   -PERF   -POSS   -DIr   -3sg
             V   C3   C2   C5   AGR

      c. * yap   -tır   -miş   -abil   -∅
             do   -DIr   -PERF   -POSS   -3sg
             V   C5   C3   C2   AGR

      d. * yap   -abil   -dir   -miş   -∅
             do   -POSS   -DIr   -PERF   -3sg
             V   C2   C5   C3   AGR

1.b. Overview of the literature

The suffix *-Ar* is among the most well-documented Turkic markers. It is historically considered to be the oldest known aspectual base (Johanson, 2021). Being considered as one of the major TAM markers in Turkish, *-Ar* has been included in many studies related to modern Turkish. Despite this, accounts on this marker have not been uniform, leaving the available literature unable to exactly describe the semantic contribution of the marker to a sentence.

Earlier linguistic documentations of Turkish have predominantly relied on the Turkish term *geniş zaman* "broad tense" to describe *-Ar*, which highlights the temporal features of the marker. These accounts have initially led to different names for the marker to arise, such as the *timeless tense* (Menges, 1968, as cited in Caro, 2012), and the borrowed term *Muzari,* which indicates all non-past tenses in Arabic (Reichenbach, 2011). Among these, the term *aorist* came to be the most commonly used for *-Ar*, borrowed from Greek and indicating the "unboundedness" of the marker (Lewis, 1967).

Despite their emphasis on the temporality of the aorist, even the earliest reports of the marker mention its modal features. This is done by mentioning instances where the aorist is used to indicate the speakers' attitude. For instance, being one of the earliest linguists to describe Turkish, Lewis (1967) initially refers to the marker as the "broad tense", and mostly investigates the combinations of *-Ar* and other tenses such as the past tense *-DI* and the inferential marker *-mIş*. However, he also mentions the modal features of the aorist, such as its promise and request meanings, even though he does not explicitly adopt a notion of *modality.* Although the concept of modality in a linguistic context was not yet popular outside German and Dutch linguistics, this can be taken as an initial acknowledgment of the aorist's multifunctionality across the tense-aspect-modality boundaries (van der Auwera & Aguilar, 2015).

Rather than depicting the aorist as only a tense, later accounts of the aorist have relayed a more complex picture. Kornfilt (1997), for instance, regards the aorist as a tense, but states that tenses are multifunctional and thus encompass aspect and modality functions in Turkish. This view aligns with those of Banguoğlu (1990), who states that all tenses in Turkish have modal undertones. Contrary to these depictions of the marker, however, there has also been a growing tendency, inspired by Yavaş (1979), to regard the aorist as an aspect that has modal functions rather than a tense with modal functions. Finally, Göksel and Kerslake (2005) imply that the aorist, along with the evidential *-mIş,* is multifunctional and has both temporal, aspectual, and modal meanings.

Another marker that is relevant in the description of the aorist is *-DIr*, as it is sometimes taken to be the nominal counterpart of the aorist (Özgen, 2021). Several uses of the aorist can also be produced with *-DIr* with slight changes to the sentence structure. Whereas the aorist attaches to a verbal predicate, *-DIr* attaches to any non-verbal predicate, such as nominal and adjectival predicates. Lewis (1967) claims that the primary use of *-DIr* is for *simple A=B sentences*, that is, sentences such as (3a). It should be noted that there are forms of these

sentences where *-DIr* alternates with *-∅*, such as (3b). However, Lewis (1967) specifically notes that the marker is never omitted in statements like (4), where the non-verbal predicate is related to the identity of the subject (example modified from Lewis, 1967). This partial ability to omit *-DIr* in certain cases is not a behavior seen with *-Ar*. However, due to the non-verbal nature of most situations in which *-DIr* is used, it is complicated to compare these two markers fully.

(3) a. En   sev-diğ-im   renk yeşil-dir-∅.
    Most   love-NOM-GEN.1sg color green-DIr-3sg
    "My favorite color is green."

   b. En   sev-diğ-im   renk yeşil-∅.
    Most   love-NOM-GEN.1sg color green-3sg
    "My favorite color is green."

(4) Amca-nız   yaman   bir adam-dır-∅.
  Uncle-GEN.3pl remarkable DET man-DIr-3sg
  "Your uncle is a remarkable man."

   Although the main focus of this thesis is not to investigate the similarities between the aorist and *-DIr*, it should also be mentioned here that the literature is inconsistent on whether these are the same markers. As stated above, the traditional viewpoint has been that *-DIr* is an enclitic complement to the aorist, attaching to nominal predicates instead of verbal ones (Temürcü, 2007). The main basis of this argument is related to the historical roots of these markers. Both the aorist *-Ar* and *-DIr* are thought to have arisen from the Old Turkic verb *tur* "stand" (Özgen, 2021). This hypothesis can be supported with a comparison between these two suffixes. Sentence (5a) illustrates that *-DIr* can be used instead of the aorist when sentence (5b) is passivized (examples inspired by Krifka et al, 1995). It has also been observed with examples like (6a) that *-DIr* cannot be used with the aorist within the same predicate (Özgen, 2021). Conversely, other TAM markers are allowed to combine with *-DIr* (see (6b) and (6c)). The aorist's inability to be followed by *-DIr* can be attributed to their equivalent meanings, which would create semantic redundancy in a sentence (Temürcü, 2004).

(5) a. Vahşi hayvan-lar yasal ol-arak koru-n-ma   alt-ı-n-da-dır.
    Feral animal-PL legal be-GER protect-PASS-NOM under-GEN-LOC-DIr
    "Feral animals are protected by law."

b. Yasa   vahşi   hayvan-lar-ı   koru-r-∅.
    Law   feral   Animal-PL-ACC   protect-AOR-3pl
    "The law protects feral animals."

(6) a. *Seda   ev-e   saat   altı-da   gel-ir-dir-∅.
         Seda   home-DAT   hour   six-LOC   come-AOR-DIr-3sg

     b. Seda   ev-e   saat   altı-da   gel-miş-tir.
         Seda   home-DAT   hour   six-LOC   come-INFR-DIr
         "Seda (probably) came home at six."

     c. Seda   ev-e   saat   altı-da   gel-ecek-tir.
         Seda   home-DAT   hour   six-LOC   come-FUT-DIr
         "Seda (probably) will come home at six."

There also exists literature opposing the notion that the aorist and *-DIr* are complementary markers. This line of literature argues that *-DIr* is a word-final copular form used to express generalized modality, presuppositions, or illocutionary force (Göksel & Kerslake, 2005; Özgen, 2021; Yangın, 2020). According to this view, the meanings of the aorist and *-DIr* partially overlap but are not identical. For instance, the habitual use of the aorist has been heavily emphasized by the likes of Reichenbach (2011) and Lewis (1967). Conversely, *-DIr* cannot express habituality.

This thesis will include both sides of the argument regarding the aorist and *-DIr*. Since the semantic functions of *-DIr* occasionally become relevant when describing those of the aorist, the following subsections of this part will detail them alongside those of the aorist. However, special attention will be given to stressing the differences between these markers whenever it will be informative to do so. In the second part of the thesis, the uses of *-DIr* will become less relevant. As such, the marker will not be emphasized as much as the aorist.

1.c. Methodology

As mentioned before, this part of the thesis deals with a critical analysis of the literature and the data and generalizations it provides. The aim is to provide an overview of the uses of the aorist and *-DIr*. Where necessary, new examples from modern standard Turkish will be introduced. These examples have been produced by consulting five native Turkish speakers, ages ranging from 18 to 54. All five speakers are currently residing in Turkey and thus use Turkish as their everyday language.

For the following descriptions of the aorist, the primary focus was on three canonical sources: Yavaş (1979), Kornfilt (1997), and Göksel and Kerslake (2005). These works have been the basis of much of the current literature on the aorist and *-DIr*, such as Sezer (2001), Cinque (2001), Temürcü (2007), Caro (2012), and Özgen (2021). However, with even the most recent of these three sources being produced seventeen years ago, there is a need for reevaluating what is outdated or needs further elaboration. For this reason, any data that seemed ungrammatical or pragmatically odd was noted down during the reviewing process for future consultations with the native speakers.

The new data created for this part of the thesis was produced in three main ways. The first of these consisted in the author, who is also a native speaker of Turkish, creating their own examples. These examples were either entirely original or based on the existing literature. The data was then relayed to the native speakers, who were asked to judge whether the examples were grammatical and pragmatically sound. Additionally, data from the original works that were deemed ungrammatical by the author were also further checked by the speakers. Finally, the native speakers were asked how they would improve the sentences that they had deemed ungrammatical or pragmatically odd.

1.d. Factual Uses of the Aorist and *-DIr*

The factual uses of the aorist and *-DIr* consist of generalized and habitual statements. Both these markers are able to produce meanings related to generalization, whereas only the aorist has a habitual reading, as mentioned before.

1. d. i. Generalized Statements

Traditional research has emphasized that both the aorist and *-DIr* can be used to make general statements. Whereas the aorist achieves this meaning in verbal predicates, *-DIr* does so in nominal ones. As mentioned before, this remark is at the basis of the hypothesis that the aorist and *-DIr* are complementary to one another (Özgen, 2021).

Kornfilt (1997) states that the use of the aorist to express general statements make it *"come closer to a universal tense"*. According to her, although there are no universal tenses in Turkish, the aorist can be used for *generality,* referring to statements will hold true for *"all the time"* (Yavaş, 1979). In this sense, they can be considered *factual* (Özgen, 2021). Among such

statements are sentences such as (7) and (8), which are true in meaning according to general world knowledge (examples from Yavaş, 1979).

(7) İki   kere   iki   dört   ed-er-∅.
     Twi   times   two   four   make-AOR-3sg
     "Two times two makes four."

(8) Güneş   doğu-dan   doğ-ar-∅.
     Sun   east-ABL   rise-AOR-3sg
     "The sun rises from the east."

Aside from generality, the aorist can also be used for referring to a permanent quality of a generic kinds. As such, generalized statements made with the aorist are non-individual, meaning that they always refer to some sort of generic class (Göksel & Kerslake, 2005). Like general statements, permanent quality statements such as (9) can also be considered as *"true all the time"* (example with a modified translation from Yavaş, 1979). However, unlike general statements, these quality statements can also be more subjective. For instance, statements like (10) also be considered false for someone whose world knowledge does not fit that of the speaker. To account for this, Göksel and Kerslake (2005) state that there are two types of general events the aorist can express. The first are *moral* and *scientific axioms* such as (9). These are considered as more objective than the second type of general events, which entail *normative and prescriptive statements*. Therefore, (10) is considered more subject to change.

(9) İnsan   doğ-ar-∅,   yaş-ar-∅,   öl-ür-∅.
     Man   born-AOR-3sg,   live-AOR-3sg,   die-AOR-3sg
     "Human(s) are born, they live and (then) die."

(10) Çocuk-lar   anne-ler-i   taraf-ın-dan   yetiş-tir-il-ir-ler.
     Child-PL   mother-PL-ACC   side-GEN-ABL   raise-CAUS-PASS-AOR-3pl
     "(All) Children are raised by their mothers."

For generalized statements, *-DIr* has been reported as the nominal counterpart of the aorist (Göksel & Kerslake, 2005). This means that only in non-verbal predicates, such as adjectival and noun predicates, can *-DIr* be used for these types of statements. Like the aorist, *-DIr* can also report generalized qualities of a class. However, Kornfilt (1997) remarks that unlike the aorist, *-DIr* can be used in statements regarding a stereotypical entity belonging to a class. As seen in (11), these statements are done so with the use of *her* "every/each". It should

be noted that *her* can also modify frequentative adverbials, which will result in a habitual reading (Kornfilt, 1997).

(11) Her   çocuk   özel-dir-∅.
      Every   child   special-DIr-3sg
      "Every child is special."

Göksel and Kerslake (2005) state that both types of generality can also be expressed with *-DIr*. For instance, (11) can be considered a *normative* axiom, since it is slightly more susceptible to changes between individual and cultural differences than a sentence such as (12).

(12) Su-yun   kayna-ma nokta-sı   yüz   derece-dir-∅.
      Water-GEN   boil-NOM point-GEN   hundred   degree-DIr-3sg
      "The boiling point of water is a hundred degrees."

1. d. ii. Habituality

Aside from general statements, the aorist is also used to make habitual statements. In fact, habituality has been the main focus of initial research on aorist, mainly following sources like Lewis (1967). Despite this, what the aorist exactly expresses in terms of habituality has been inconsistent across literature. That is, there is a disagreement in literature as to whether the repetition of event patterns expressed by the aorist can be called habituality, or if they simply characterize an individual or entity.

It should also be noted here that the notion of habituality discussed by the canonical literature of Turkish is a temporal notion. This is different from other accounts in linguistics where habituality is considered modal (Krifka et al, 1995).

Kornfilt (1997) describes the aorist as a tense that expresses habituality alongside generality. According to her, habitual statements are formed with frequency adverbials such as *her sabah* "every morning" in (13), *akşamları* "at nights" in (14), and *eskiden* "in the old times" in (15). In statements like the latter, the past tense, attached to the ∅-copula, enforces the statement to be not *true all the time* as Yavaş (1979) remarked, making habituals different than generalized statements.

(13) Anne-m   her   sabah   spor   yap-ar-∅.
      Mother-GEN   every   morning   sport   do-AOR-3sg
      "My mother exercises every morning."

(14) Akşam-lar-ı   aile-ce   televizyon   izle-r-iz.
      Night-PL-ACC   family-ADV   television   watch-AOR-3pl
      "At nights, we watch television together as a family."

(15) Eski-den   beraber   çok   zaman   geçir-ir-di-k.
      Past-ABL   together   lot   time   spend-AOR-PAST-3pl
      "We used to spend a lot of time together."

Contrary to Kornfilt (1997), Yavaş (1979) argues that the aorist's function is to characterize the behavior of an individual or entity, rather than to describe habitual patterns over time. This is also discussed in Lewis (1967), who describes sentences such as (16) to be more akin to "He is a smoker" rather than "He smokes" in their meaning. Yavaş (1979) supports this claim by comparing the aorist in (17a) to the progressive -*Iyor* in (17b). According to him, (17a) characterizes the butcher as typically selling good meat, whereas (17b) simply reports the current behavior of the butcher selling good meat. This contrast is also remarked by Göksel and Kerslake (2005), who claim that the progressive describes observed behavior of smoking in (18a), but the aorist describes the character of the individual as a smoker in (18b). They further support this argument by explaining that the progressive can be temporally restricted by the adverbials *bu günlerde* "these days", but the aorist cannot. As such, (18a) can be restricted in its reference time by an adverbial such as *bu günlerde* "nowadays", as demonstrated by (19a), but (18b) cannot, as demonstrated by (19b). Another support to this argument is the claim that the aorist can be used to express someone's usual activity even when there are unusual circumstances (Yavaş, 1979). If correct, this would mean that someone's usual activity could be considered as characteristic, running deeper than surface-level observed behavior. For instance, a sentence such as (20a) is considered as correct but the progressive in (20b) is considered to be incorrect (examples from Yavaş, 1979).

(16) Sigara   iç-er-∅.
      Cigarette   smoke-AOR-3sg
      "He smokes/He is a smoker"

(17) a.   Kasab-ım   iyi   et   sat-ıyor-∅.
           Butcher-GEN   good   meat   sell-PROG-3sg
           "My butcher sells good meat."

      b.   Kasab-ım   iyi   et   sat-ar-∅.
           Butcher-GEN   good   meat   sell-AOR-3sg
           "My butcher is a good meat seller."

12

(18)   a.   Ali   sigara   iç-iyor-∅.
            Ali   cigarette   smoke-PROG-3sg
            "Ali smokes cigarettes."

       b.   Ali   sigara   iç-er-∅.
            Ali   cigarette   smoke-AOR-3sg
            "Ali is a smoker."

(19)   a.   Bu   gün-ler-de   Ali   sigara   iç-iyor-∅.
            These   day-PL-LOC   Ali   cigarette   smoke-PROG-3sg
            "Ali is smoking nowadays."

       b.   * Bu   günler-de   Ali   sigara   iç-er-∅.
              These day-PL-LOC   Ali   cigarette   smoke-AOR-3sg

(20)   a.   Baba-m   erken   yat-ar-∅
            Father-GEN   early   go.to.bed-AOR-3sg
            "My father goes to bed early…

            ama   son   iki   sene-dir   geç   yat-ıyor-∅.
            but   last   two   year-ADV   late   go.to.bed-PROG-3sg
            … but he's been going to bed late in the last two years."

       b.   Baba-m   erken   yat-ıyor-∅
            Father-GEN   early   go.to.bed-PROG-3sg
            "My father goes to bed early…

            ama   son   iki   sene-dir   geç   yat-ıyor-∅.
            but   last   two   year-ADV   late   go.to.bed-PROG-3sg
            … but he's been going to bed late in the last two years."

Although Yavaş's (1979) claim contributed to a significant change of the academic perspective on the aorist, it has a limitation: the progressive can also describe usual events in unusual circumstances (Caro, 2012). In consultations, speakers reported that the reason (20b) sounded off had to do with the repetition of the progressive marker in both clauses rather than something in the meaning. Following this, alternative sentences were produced, where such redundancy was absent. For example, although not presented in the original examples, this kind of dichotomy is usually done with adverbs such as *aslında* "actually", *normalde* "normally", *genelde* "generally", followed by *ama* "but", as seen in (20). Following Yavaş's (1979)

argument, (21a) would be acceptable but (21b) would not. However, discussions with native speakers revealed that (21b) was also acceptable for some speakers. This is remarkable since Yavaş (1979) and those after him took the distinction between the aorist and the progressive as the basis of their arguments. Therefore, if a claim is to be made about the habitual use of the aorist, new support needs to be found.

(21)   a.   Aslında   bura-ya   sık   gel-ir-im (…)
              Actually   here-DAT   often   come-AOR-1sg
              "I actually come here often…

              ama   birkaç   hafta-dır   gel-e-me-di-m.
              but   few   week-ADV   come-POSS-NEG-PAST-1sg
              … but I haven't been able to come these few weeks."

        b.   Aslında   bura-ya   sık   gel-iyor-um (…)
              Actually   here-DAT   often   come-PROG-1sg
              "I actually come here often …

              ama   birkaç   hafta-dır   gel-e-me-di-m.
              but   few   week-ADV   come-POSS-NEG-PAST-1sg
              … but I haven't been able to come these few weeks."

(22)   Ali   sigara   iç-me-z-∅.
        Ali   cigarette   smoke-NEG-AOR-3sg
        "Ali is a non-smoker/Ali doesn't smoke."

        Another issue with the claim that the aorist is not a habitual is the vagueness of the term *characterization* as defined by Yavaş (1979). Namely, if the aorist is used to indicate the typicality of an event, does the *negation* of the aorist indicate the typicality of an event to not occur? For instance, does the predicate of the sentence (22) express that Ali typically does not smoke (example taken from Göksel & Kerslake, 2005)? If so, why is this predicate taken as expressing that Ali is a "non-smoker" in the literature? These are some questions that emphasize how inconclusive the data is in the claim that the aorist is *characterizing*. This issue, as well as these questions, will be discussed more critically in Part 2 of this thesis.

1.e. Non-factual Uses of the Aorist and -DIr

        The second type of semantic function that is common to both the aorist and *-DIr* is related to the speaker's uncertainty of the events described by the sentence. These, called *non-*

factual uses, consist of their possibility, assumption and hypothesis, willingness (Göksel & Kerslake, 2005). Both markers can perform any of these actions. As such, these semantic functions will not be discussed separately as done in the previous section.

Non-factual statements made with the aorist and *-DIr* are those that speakers make given their world knowledge. As such, they can be modified by adverbs expressing how certain the speaker is, such as *kesin/kesinlikle* "for sure/definitely", *herhalde* "probably", and *belki* "perhaps" (Göksel & Kerslake, 2005). Thus, whether the aorist and *-DIr* are factual or non-factual in an expression can be checked with this finding in mind. Using these adverbs in factual sentences will produce results that are pragmatically off, whereas non-factual statements will only be further specified. Therefore, sentences such as (23a) and (24a) can be clearly distinguished as *non-factual* from sentences such as (8) and (12) respectively, which are also repeated down below as (23b) and (24b).

(23) a. Makarna   (herhalde)   beş   dakika-ya   hazır   ol-ur-∅.
            Pasta   (probably)   five   minute-DAT   ready   be-AOR-3sg
            "The pasta (probably) should be ready in five minutes."
            (Given my world knowledge and previous experience, and knowing what near-cooked pasta looks like/when the pasta was put on the stove)

      b. Güneş   (herhalde)   doğu-dan   doğ-ar-∅.
            Sun   (probably)   east-ABL   rise-AOR-3sg
            "The sun (probably) rises from the east."
            1

(24) a. Ayşe   (kesin)   ev-de-dir-∅.
            Ayşe   (definitely)   home-LOC-DIr-3sg
            "Ayşe is / must be / should be home."
            (Given that Ayşe always comes home around a certain time, and it is currently well beyond that time)

      b. *Su-yun   kayna-ma   nokta-sı   (kesin)   yüz   derece-dir-∅.
            Water-GEN   boil-NOM   point-GEN   (for.sure)   hundred   degree-DIr-3sg
            "The boiling point of water is (for sure) a hundred degrees."
            (=I'm making a blind guess, the actual boiling point could be anything)

Despite the seemingly clear categorization of functions found in the literature, the data presented to illustrate this wide range of functions provides a more complex picture. Specifically, it should be noted that context is very important when choosing a non-factual interpretation. Conditional sentences illustrate this point very clearly. For example, a sentence

such as (25) can be interpreted in two ways depending on what the context is. In context (a), the speaker uttering the sentence will be hypothesizing about whether Ayşe will be coming to a place given that Ahmet is coming. In context (b), however, the same sentence will simply indicate the possibility of Ayşe not coming since she is not required to come.

(25) [Ahmet   gel-iyor-sa]   Ayşe   gel-me-z-∅.
      [Ahmet   come-PROG-COND]   Ayşe   come-NEG-AOR-3sg.
      "If Ahmet is coming, then Ayşe won't come."

Context (a):   *Ayşe hates Ahmet. Therefore, she will never want to be in the same place as him.*

Context (b):   *This is a meeting where only one of them are required. There is a chance that neither will come.*

In addition to context, other factors can influence the non-factual reading of the aorist. These include other phrasal elements such as time-referring adverbials. It is with these adverbials that the aorist, but remarkably not -*DIr*, can be used to describe future events (Göksel & Kerslake, 2005). There is a consensus in literature that the aorist is different in its expression of the future compared to the ones produced with the progressive -*Iyor* and the future marker – *(y)AcAk.*. However, there is no conclusive argument on whether the aorist's referral of the future can be considered as one of its uses. Some, such as Göksel and Kerslake (2005), argue that it is because of its ability to convey non-factual readings that the aorist can also be used to make remarks about the future. Others such as Kornfilt (1997) and Yavaş (1979) dispute this claim by stating that in future readings, the aorist only secondarily implies what the speaker thinks of an upcoming event. Moreover, it is also unclear whether using the aorist makes a future event more or less certain. Kornfilt (1997) claims that the use of the aorist to indicate the future expresses less commitment on behalf of the speaker than using the future marker. Thus, a sentence like (26a) shows less determination than a sentence such as (26b). Yavaş (1979), on the other hand, notes that the aorist is used to denote willingness in future contexts. To him, the future marker –*(y)AcAk* would not have such an implicature and simply would express what will happen. As such, the use of the aorist marker in (26a) would specifically indicate that the speaker is intent on the act. Conversely, the future marker in (26b) would lack this message. Instead, depending on the prosody of the sentence, it is interpreted as explaining either *when* the speaker will visit, or what will happen *tomorrow*.

(26) a. Yarın   uğra-r-ım.
          Tomorrow   visit-AOR-1sg
          "I'll visit tomorrow."
          (= I am intending to come by tomorrow.)

      b. Yarın   uğra-yacağ-ım.
          Tomorrow   visit-FUT-1sg
          "I'll visit tomorrow."

Although *-DIr* cannot be used alone to indicate the future, it can be used with the future marker *–(y)AcAk* to make an event more certain, based on a *well-founded authority* (Göksel & Kerslake, 2005). Therefore, future predicates followed by *-DIr* are commonly used where the speaker is simply making an assumption about an event. This can be seen in (27a), where the statement is an assumption based on a certain context and the speaker's world knowledge. Conversely, a sentence like (27b) is neutral in its interpretation like (26b), merely stating what the speaker knows.

(27) a. Yarın   uğra-yacak-tır-∅.
          Tomorrow   visit-FUT-DIr-3sg
          "He'll visit tomorrow."
          (Possible context: the speaker is assuming that he will visit, given that he didn't come today.)

      b. Yarın   uğra-yacak-∅.
          Tomorrow   visit-FUT-3sg
          "He'll visit tomorrow."
          (Possible context: He told the speaker that he'll visit tomorrow.)

1.f. The Aorist and -DIr in Complex Agglutinations

As mentioned in Section 1.a., Turkish markers allow for certain combinations to create different meanings. Therefore, aside from general and non-factual statements, both the aorist and -DIr can attach to other markers to refer to more complex interpretations. When discussing these combinations, it is important to first note which markers can be combined with the aorist and *-DIr* respectively. (28) and (30) illustrate exactly this, based on the model of Göksel and Kerslake (2005) discussed in section 1.a.

(28)	**1**	**2**	**3**	**4**	**5**	**AGREEMENT**
	-(y)A (NEG.OPT)	*-(y)Abil* (POSS)	***-(A/I)r/-z*** **(AOR)**	-(y)DI (PAST)	-	*-(I)m* (1sg)
V				-(y)mIş (EVID)		*-(sI)n* (2sg)
STEM						*-∅* (3sg)
				-(y)sA (COND)		*-Iz/k* (1pl)
						-(sI)nIz (2pl)
						-(lAr) ∅ (3pl)

Examples:

∅   yap   -abil   -ir   -∅.

pro   do   -POSS   -AOR   -3sg

"He can do / He may do."

∅   yap   -ar   -sa   -m.

pro   do   -AOR   -COND   -1sg

"If I do (…)"

∅   yap   -a   -ma   -z   -mış   -∅.

pro   do   -NEG.OPT   -NEG   -AOR   -EVID   -3sg

"(I learned that) He can't / won't do (it)."

∅   yap   -ar   -dı   -m.

pro   do   -AOR   -PAST   -1sg

"I used to do (it)."

The examples in (28) shows that the aorist shares semantic functions with the markers that precede or follow it. For instance, in the addition of non-factual marker such as the possibility marker *–(y)Abil*, the aorist is also read in a non-factual way. Conversely, the use of factual past *–(y)DI* makes the aorist be interpreted as habitual. However, this does not necessarily seem to indicate that certain uses cannot be brought up in the presence of certain tenses. For instance, sentences (29a) and (29b) illustrate that in the proper context, the combination of the past tense *-DI* and the aorist *-Ar* can express both a factual and a counterfactual meaning (sentence 29a is variation from Göksel & Kerslake, 2004).

18

(29) a. Her   yaz   Bodrum'a   gid-er-di-k.
          Every   summer   Bodrum-DAT   go-AOR-PAST-3pl
          "We used to go to Bodrum every summer."

      b. [Zengin   ol-sa-m]   daha   çok   bağış   yap-ar-dı-m
          [Rich   be-COND-1sg]   more   lot   donation   make-AOR-PAST-1sg
          "If I were rich, I would make more donations."

Compared to the attachment strategy of the aorist in (28), the examples in (30) illustrate that *-DIr* mostly serves to emphasize the certainty of an event. Therefore, it can be said that *-DIr* mainly assumes a non-factual meaning in complex agglutinations. However, there are exceptions to this argument. Namely, the combination of *-DIr* with the evidential marker *-mIş* (examples 31a and 31b), and the future marker *–(y)AcAk* (examples 32a and 32b) can be interpreted both in factual and non-factual ways (example 32a from Göksel & Kerslake, 2004).

(30)	**1**	**2**	**3**	**4**	**5**	**AGREEMENT**
	-	-	*-mış* (PERF/EVID)	-	**-DIr**	*-(I)m* (1sg)
			-(y)AcAK (FUT)			*-(sI)n* (2sg)
	V		*-(I)yor* (IMP)			*-∅* (3sg)
	STEM		-mALI (OBL)			*-Iz/k* (1pl)
						-(sI)nIz (2pl)
						-(lAr) ∅ (3pl)

Examples:

∅   yap   -mış   -tır   -∅.
pro   do   -PERF/EVID   -DIr   -3sg
"He's (surely) done (it)." / "He has done it" (in historical context)

∅   yap   -acak   -tır   -∅.
pro   do   -FUT   -DIr   -3sg
"He'll (surely) do (it)."

∅   yap   -ıyor   -dur   -∅.
pro   do   -IMP   -DIr   -3sg
"He's (probably) doing (it right now)."

∅   yap   -malı   -dır   -∅.
pro   do   -OBL   -DIr   -3sg
"He has to do it."

(31) a. (Herhalde)   İstanbul'a   var-mış-tır-∅.
          (Probably)   İstanbul-DAT   arrive-EVID-DIr-3sg
          "He's (probably) arrived at İstanbul (by now)"

    b. İkinci   Dünya   Savaşı   1939   yıl-ın-da   başla-mış-tır.
          Second   World   War   1939   year-GEN-LOC   start-EVID-DIr
          "The Second World War began in the year 1939."

(32) a. [Aday-lar-dan   hiçbir-i   çoğunluk   sağla-ya-ma-dığ-ı   takdir-de]
          candidate-PL-ABL   none-GEN   majority   secure-NEG.POSS-   case-LOC
                                                            NEG-CV-GEN

          "In the event of none of the candidates being able to secure a majority,"

          ikinci   tur-a   geç-il-ecek-tir.
          second   round-DAT   move-PASS-FUT-DIr
          "(the process) will continue to the second round."

    b.   – Sen-ce   gel-ecek-∅   mi?
            – You-ADV   come-FUT   Q
          "Do you think he'll come?"

          Gel-ecek-tir   emin-im.
          Come-FUT-DIr   sure-1sg
          "He'll come, I'm sure."

Another way to derive complex meanings from verbs within the TAM system is to use these markers with the copula ol- "be / become" (Kornfilt, 1997). This copula is used following a noun or adjective or following a lexical verb to produce a predicate. The aorist can be used in both of these cases.

The use of ol- with the aorist after a noun or adjective can produce general statements and non-factual statements. General statements can be produced more easily with nouns, such as in (33). Conversely, complex aorist predicates with adjectives and *ol-* tend to generate more non-factual meanings like in (34) and (35).

(33)   (Bence)   sen-den   çok   iyi   bir   öğretmen   ol-ur-∅.
        (In.my.opinion)   you-ABL   very   good   DET   teacher   be-AOR-3sg
        "(In my opinion), you'd make a really good teacher."

(34)   [Çok   çalış-ır-sa-n]   başarılı   ol-ur-sun.
        [Lot   work-AOR-COND-2sg]   successful   be-AOR-2sg
        "You'll be successful if you work hard."

(35)   Yemek   biraz-dan   hazır   ol-ur-∅.
        Food   little-ABL   ready   be-AOR-3sg
        "The food should be ready soon."

There are two different ways in which the aorist can be bound to a *verb+ol-* combination; by attaching to the verb, or by attaching to *ol-*. Both Kornfilt (1997) and Göksel and Kerslake (2004) agree that a sentence such as (36a), where the aorist attaches to the verb, always has a habitual reading that is then modified by the markers attached to *ol-* (example from Kornfilt, 1997). More specifically, the presence of *ol-* in (36a) refers to the speaker's sudden understanding of what has become a habit (example modified from Kornfilt, 1997). This is different than (36b), in which the speaker is well aware that they have a habit. It is important to note that in the cases where the aorist attaches to the verb, only the past marker *-DI* and the evidential marker *-mIş* can attach to *ol-*. This is critical since Kornfilt (1997) incorrectly assesses that the future marker *–(y)AcAk* can be attached to *ol-* when the verb preceding this copula has the aorist attached to it. However, sentence (37), which she uses to illustrate her point, is viewed as ungrammatical by native speakers consulted for this thesis.

(36)   a.   Her   hafta   sinema-ya   gid-er   ol-du-k.
              Every   week   cinema-DAT   go-AOR   be-PAST-3pl
              "We've come to go to the cinema every week."

        b.   Her   hafta   sinema-ya   gid-er-iz.
              Every   week   cinema-DAT   go-AOR-3pl
              "We go to the cinema every week."

(37)   *Gelecek   yaz   üniversite-ye   gid-er   ol-acağ-ım.
         Next   summer   university-DAT   go-AOR   be-FUT-1sg

The cases where the aorist attaches to ol- rather than the lexical verb preceding it produce non-factual meanings (Göksel & Kerslake, 2004). This type of attachment is used commonly in conditional statements and can be further demonstrated by adding *bence* "In my

21

opinion" to sentences such as (38). In addition to being attached to *ol-* alone, the aorist can also be attached to *ol-* in the marker compound *-Abilir,* which consists of the possibility marker -*Abil* and the aorist. In sentences like (39a), the speaker is speculating (Göksel & Kerslake, 2004). The marker compound can also be used as an attachment to *ol-* that follows a noun or an adjective and produces the exact same meaning, as seen in (39b) and (39c) respectively.

(38)   [(Bence)   Saat   yedi-de   ev-den   çık-sa-k]
        [(In.my.opinion) hour   seven-LOC   home-ABL   leave-COND-3pl
        "(In my opinion) If we leave at seven…

        akşam-a   var-mış   ol-ur-uz.
        night-DAT   arrive-EVID   be-AOR-3pl
        "…we'll have arrived by night."

(39) a. (Acaba)   Ağlı-yor-∅   ol-abil-ir-∅   mi?
          (Perhaps)   Cry-PROG-3sg   be-POSS-AOR-3sg   Q
          "Is he (perhaps) crying?"/"Is it possible that he is crying?"

      b. (Bence)   Sen   iyi   bir   öğretmen   ol-abil-ir-sin.
          (In.my.opinion)   you   good   DET   teacher   be-POSS-AOR-2sg
          "I think you could be a good teacher."

      c. Bu   fikir   güzel   ol-abil-ir-∅.
          This   idea   good   be-POSS-AOR-3sg
          "This can be a good idea."

1.g. Limitations of the Literature

Even when excluding issues such as the age of the studies or poor empirical choices, several limitations can be detected in the existing literature. One of these limitations is the lack of a uniform terminology, which creates inconsistency among studies. Contributions such as Kornfilt (1997), Lewis (1967), and Banguoğlu (1990) all mention, at least in passing, that they consider the aorist to be a tense. This contradicts their analysis of the marker, which concerns itself more with the speaker's attitude towards a statement than its tense. Conversely, Göksel and Kerslake (2004) primarily discuss the aorist through a modal lens. Despite this, they still hold that the aorist still has temporal uses, among which they include habituality. Banguoğlu (1990) attempts to clarify these conflicting explanations of the aorist by stating that the Turkish TAM system is deeply interconnected, with markers possessing several temporal and modal

meanings at once. However, this account lacks depth in investigating *how* TAM categories may be connected to one another or, more specifically, how the aorist draws functions from each TAM category. As such, while useful in its purely descriptive contribution, this reasoning remains unsatisfactory for analytic purposes.

Aside from the issue of terminology, there is also an underlying and perhaps even more significant limitation of the literature that relates to the conceptual definitions of the uses. Although Turkish linguists have tried to clarify the differences between the non-past Turkish markers, one of which is the aorist, these descriptions have mostly failed to remain true to what real native speakers consider to be grammatical. One such instance is Yavaş's (1979) claim the progressive marker is never used as a habitual. This disconnection between the linguistic analyses of the aorist and its real-life uses leads to further unsatisfactory explanations of the marker.

Part 2: Towards a Modal Framework of the Aorist

On the basis of the limitations observed in the canonical literature, this part of the thesis will aim to provide a preliminary framework challenging the idea that the aorist is a temporal marker. This goal will be achieved by first discussing the notions of tense, aspect, and modality as they are conceived in the literature. The discussion will also include a criticism of the canonical view expressed in the literature that the aorist expresses temporality. This criticism will be grounded also on the comparison with other non-past markers in Turkish. With the comparison, it will be established that the aorist is unique in terms of its non-temporal quality and therefore should be viewed through a modal lens rather than a temporal one. In the third subsection, the habitual use of the aorist will be discussed as a generic rather than a temporal imperfective. Finally, the implications and limitations of this framework will be discussed.

2.a. A Deeper Elaboration on Tense, Aspect, and Modality in Turkish

In order to better investigate the semantic properties of the aorist, it is useful to first provide a more detailed assessment of the notions of tense, aspect, and modality (TAM). This will help assessing the conventional notion that the Turkish aorist is semantically multifunctional and has both temporal and modal meanings.

TAM markers provide information regarding the temporal and modal qualities of an event expressed by the predicate. Tense and aspect serve to provide time-related knowledge about the event, whereas modality expresses the possibility or necessity of the event to occur (von Fintel, 2006).

The role of tenses is that of temporally displacing an event described by the predicate relatively to the speech time (Portner, 2005). That is, if time is taken as linear, tenses provide information as to how far away the predicate is to the "now" of the speaker, and in what direction the event is displaced from that "now" (Comrie, 1985). Aspects, on the other hand, refer to the *internal temporal constituency* of the event, giving cues as to whether the event is completed or not at the time of the speech (Comrie, 1976). Capitalizing on Reichenbach's (2011) and Comrie's (1985) notions of tense, the relation between tense and aspect is illustrated in (40). As seen in (40), tense and aspect, being both related to temporality, are deeply interconnected.

(40)
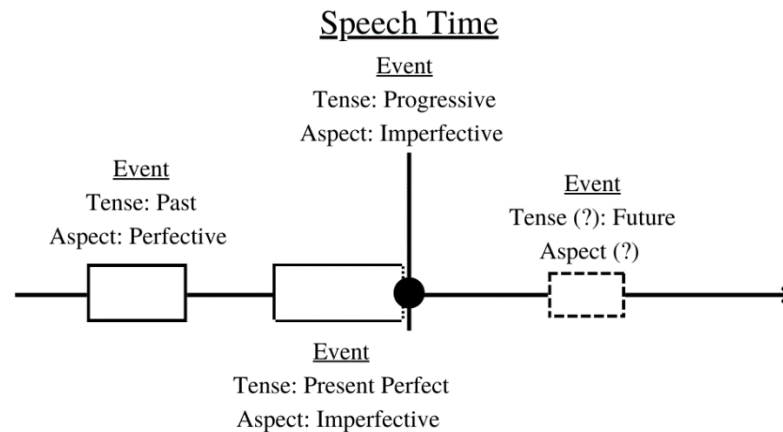
When talking about tense and aspect, it is also noteworthy to mention the notion of *reference time.* Reichenbach (2011) describes reference time as the point through which the events are viewed. This is distinct from speech time since the reference time does not necessarily have to be the speech time. Borik (2006) illustrates the difference between reference and speech time with the following example: the reference time of a sentence such as *Mary saw John* is the same as the event time, since the sentence views the event from a past perspective. Conversely, the reference time of a sentence such as *Mary has seen John* is the same as the speech time since the event is viewed through a present perspective. In (41), the difference between speech and reference times is illustrated through imperfective tenses. As can be seen, the change in reference point aids the speaker to discuss the event in the point of view of the past.

(41) *"I was running for quite a while."*

Meaning illustrated in Reichenbachian framework (where R means reference, E means event, and S means speech time):
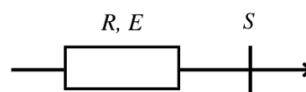

Tense: Past Progressive
Aspect: Perfective

"I have been running for quite a while."

Meaning illustrated in Reichenbachian framework:
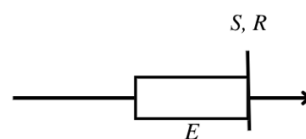
Tense: Present Perfect
Aspect: Imperfective

25

Proponents of the notion that the aorist expresses temporal relations and is therefore to be regarded as a tense often cite the Reichenbachian portrayal of the marker. Reichenbach (2011) describes the aorist marker as referring to a recurring set of events throughout time. To him, there is no singular speech or reference time when the aorist is used, since the number of events being referred to is indefinite. Illustrated below in (42), this portrayal of the aorist is based on the temporal notion of habituality. However, as Reichenbach (2011) does not refer to the concept of aspect at all, this habituality is taken as a tense. Conversely, Comrie (1976) hold that habituality is not a tense but an aspect. This is because habituality refers to a repetitive event, expressing that it is incomplete (Comrie, 1976). As such, habituality has to do with the *internal temporal constituency* of the event the predicate refers to, rather than the direction and distance the event has to the speech time. Following Comrie's line of thought, those such as Yavaş (1979) argue that the aorist expresses aspectual relations, and therefore is not a tense but an aspect.

(42)

$$
\begin{array}{cccccc}
E & E & E & E & E & E \\
\end{array}
$$

S, R
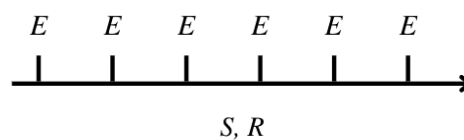
Although temporal explanations of the aorist account for its habitual use, they overlook the non-factual and general uses of the marker. Consequently, Göksel and Kerslake (2004) define the aorist as both an aspect and a modal. To unpack this explanation, it is also important here to define modality. Unlike tense and aspect as defined in the canonical literature on Turkish, modality is separate from temporality. Instead, modals set the possibility or necessity of a predicate in a *set of possible worlds* and are judged relatively to a *modal force* and a *stereotypical background* (Kratzer, 1981; von Fintel, 2006). *The modal force* usually refers to the *conversational background,* which allows the speaker to judge the possible worlds that are relevant in the context of a specific conversation. *The stereotypical background*, on the other hand, refers to the speaker's internal world knowledge. Keeping these terms in mind, Kratzer's (1981) framework can be used to develop a modal explanation of the aorist, since this marker is used to refer to a specific set of possible worlds depending on either the speaker's world knowledge in the factual uses, or the conversational background in non-factual uses.

Before proceeding with the remainder of this part, three final terms will be introduced that are relevant to this framework. The first two of these are *realis* and *irrealis,* which have

been referred to as *factual* and *non-factual* up to this point due to the canonical literature using the latter set of terms. Mithun (1999, as cited in Palmer, 2001) states that *realis* and *irrealis* are related to whether an event is actualized or not. *Realis* refers to those events that are *actualized*, meaning that they have occurred or are occurring. Conversely, *irrealis* refers to as non-actualized events, those that are only concepts in the mind of the speaker. With these terms in mind, modals can be described as indicating the possibility, necessity or actuality of a predicate.

The third term that shall now be discussed is *genericity*. *Generics* refer to those statements that are generalizable, with occasional exceptions (Krifka et al., 1995). This definition distinguishes generics from universals, which are considered to be the absolute truth (Cohen, 2012). Krifka et al (1995) assess that generic statements can be referring to a *kind*, or to a *general property* of the subject NP. To them, kind-referring generics describe facts about a class of individuals, whereas general property-referring generics describe a collective group of events. From what was discussed in the previous section, it can be seen that the aorist and -*DIr* can be used to express both types of generic statements. Although the generic functions of the aorist can be seen as temporal at a surface level, this part of the thesis will argue that this marker is exclusively a modal, rather than temporal, and provide a preliminary framework for this notion based on previous studies. By providing new data that illustrate the inconsistencies of the literature defending the temporality of the aorist, it will be shown that the temporal interpretations of the aorist are context-dependent, and the aorist in its essence lacks any true temporality.

It is also crucial here to note that there is a school of thought describing aspect as modal rather than temporal in order to account for the imperfective paradox (P. Portner, 1998). This paradox is based around the finding that the imperfective and the perfective can both entail completion in atelic predicates but not in telic predicates (Rastelli, 2019). However, the literature reviewed for this thesis all have described aspect through a temporal lens whenever they discussed this term. Kornfilt (1997) groups tense and aspect together, relying on the description of aspect by Comrie (1976). This is similar to Göksel and Kerslake (2005), who state that *"unlike tense and aspect, modality is not related to the concept of time".* Yavaş (1979) also separates the uses of the aorist as *"one aspectual, the other modal",* indicating that the two are not the same. Therefore, any mention of aspect in this thesis is a temporal one, and any argument stating that the aorist is not an aspect is based on this temporal notion.

Lastly, *-DIr* will not be the primary focus of this part of the thesis. This is because the previous literature does not discuss *-DIr* through a temporal lens but rather a modal one. As mentioned in the previous part of this thesis, *-DIr* is rarely used with overt temporal connotations, unlike the aorist. Instead, it is primarily used to express generalizations based on the speaker's internal and conversational knowledge (Göksel & Kerslake, 2005). Therefore, this part of the thesis will not concern itself with *-DIr* as much as the previous part and will instead move forward with the assumption that *-DIr* is a modal, as indicated by Göksel and Kerslake (2005) and Özgen (2021).

2.b. The Aorist Among the Turkish Non-Past

Only few existing contributions support the claim that the aorist has no temporal connotation. Instead, the majority of the researchers assume that the multifunctionality of the marker extends to its characterization as a TAM marker. The literature search conducted for this thesis revealed that only Günay (2014), Gül (2012), Uzun (1998 as cited in Gül, 2012), and Uzun and Erk-Emeksiz (2003, as cited in Gül, 2012) explicitly indicated that the aorist only functions as a modal. Günay (2014) states that with no context or time markers in the sentence, a sentence such as (43a) requires the further question of "When?" to indicate a temporal displacement. Indeed, the aorist seems to explicitly indicate time only in two situations: in sentences such as (43b), where further tense suffixes such as the past marker are used alongside with the aorist, or in sentences such as (43c), where there is an explicit time marker elsewhere in the sentence. Günay (2014) contrasts this with sentence (43d), which inherently depicts an event that happened prior to the speech and reference time.

To visually illustrate the differences Günay (2014) describes, the concepts put forward by Reichenbach (2011) are used below next to the data in (43). These further support the argument that the aorist alone cannot stand for a temporal mark. When there are no temporal remarks in a sentence, like in (43a), the use of the aorist remains ambiguous in its temporality. This can be seen in the way the without context, listener is unable to interpret when the event of the sentence takes place and when the reference time is. These interpretations are only possible when there is context or other markers present in the predicate, as it is in (43b) and

(43c)[1]. Since there is a lack of any more empirical investigation into the temporality of the aorist or lack thereof, the claim of Günay (2012) will be taken as the basis of this section and will be further supported by making comparisons to the other non-past markers in Turkish.
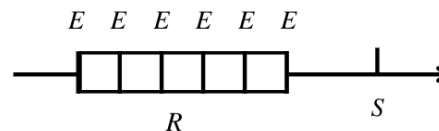
(43) a. ∅   Gör-ür-üm.   *Reichenbachian illustration of* AOR *(modified*
          pro   See-AOR-1sg   *according to Günay, 2014):*
          "I see/I will see."
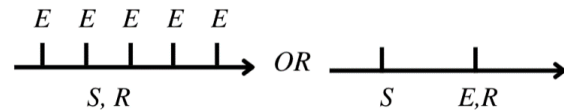
      b. ∅   Gör-ür-dü-m.   *Reichenbachian illustration of* AOR+PAST*:*
          pro   See-AOR-PAST-1sg
          "I used to see/I would have seen."

      c. ∅   Yarın   gör-ür-üm.   *Reichenbachian illustration of* AOR *with time*
          pro   Tomorrow see-AOR-1sg   *cue:*
          "I'll see tomorrow."
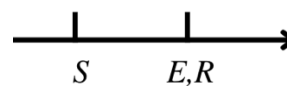
      d. ∅   Gör-dü-m.   *Reichenbachian illustration of* PAST*:*
          pro   See-PAST-1sg
          "I saw."
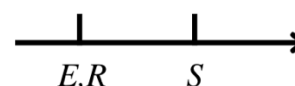
Traditionally, the progressive *-Iyor*, the future *–(y)AcAk,* and the aorist are taken together as the Turkish non-past markers (Caro, 2012). These markers are considered to be different than the past markers in that their temporal meanings are less certain, encompassing multiple types of events outside the past rather than one specific type of displacement (Göksel & Kerslake, 2004). Among these non-past markers, however, the aorist is remarkably vaguer

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[1] Note that in the cases of (42a) and (42c), the Reichenbachian temporal illustration does not do the meaning justice. As discussed in the previous part, the future interpretation of the aorist is exclusively a modal one due to its dependence of the other modal uses such as possibility and commitment.

in temporal reference. This difference among the markers can be illustrated by comparing these markers when attached to a non-specific verb like *yap* "do" with third-person singular agreement, as done in (44). When asked, native speakers were divided in their first-impression of the aorist in (44a), with most interpreted the sentence as habitual; however, some speakers also mentioned ability, volition, and future functions. This was remarkably different than the interpretation of the future marker in (44b) and the progressive in (44c), which the speakers definitively interpreted as a future commitment and an ongoing present event respectively. Although both the progressive and the aorist can also have habitual readings, the habitual reading of (44b) was only noted by speakers when they were later asked to reconsider what the sentence might mean. The ambiguity of (44a) in comparison to (44b) and (44c) emphasizes just how vague the aorist is compared to the other non-past markers in relation to time. As a result, the temporal interpretation of the aorist is directed by context or temporal indicators elsewhere in the sentence; (44a) becomes unambiguous in situations such as (45), whereas a sentence such as (46) is clearly interpreted as a habitual because of the adverbial *sabahları* "in the morning".

(44)   a.   ∅   Yap-ar-∅.
                pro   Do-AOR-3sg
                "He does/He can do/He will do (the task)."   *(habitual/volunteering/future/assumption)*

       b.   ∅   Yap-acak-∅.
                pro   Do-FUT-3sg
                "He will do (the task)".   *(future)*

       c.   ∅   Yap-ıyor-∅.
                pro   Do-PROG-3sg
                "He is doing (the task)."   *(progressive)*

(45)   -   Sen-ce   bu   iş-i   yap-abil-ir-∅   mi?
                In.your.opinion this   job-   do-POSS-   Q
                                          ACC   AOR-3sg
                "Do you think he can do this job?"

               -      ∅   Yap-ar-∅.
               -      pro   Do-AOR-3sg
                       "He can (do it)."

(46)   ∅   Sabah-lar-ı   koş-ar-∅.
        pro   Morning-PL-ACC   run-AOR-3sg
        "He runs in the morning (=every morning)."

The aorist shares some of its uses with the other non-past markers. For instance, both the aorist and the progressive *-Iyor* can be used for habituality. However, interpretation of data such as (44) clearly depicts a picture where the aorist is clearly ambiguous in referring to a point in time compared to the progressive and the future. Where the speakers could not unanimously interpret the aorist in a certain meaning, this was not seen to be a problem for the progressive and the future. If correct, this means that the aorist is distinct from the other non-past markers, since both the progressive and the future markers have clear temporal meanings.

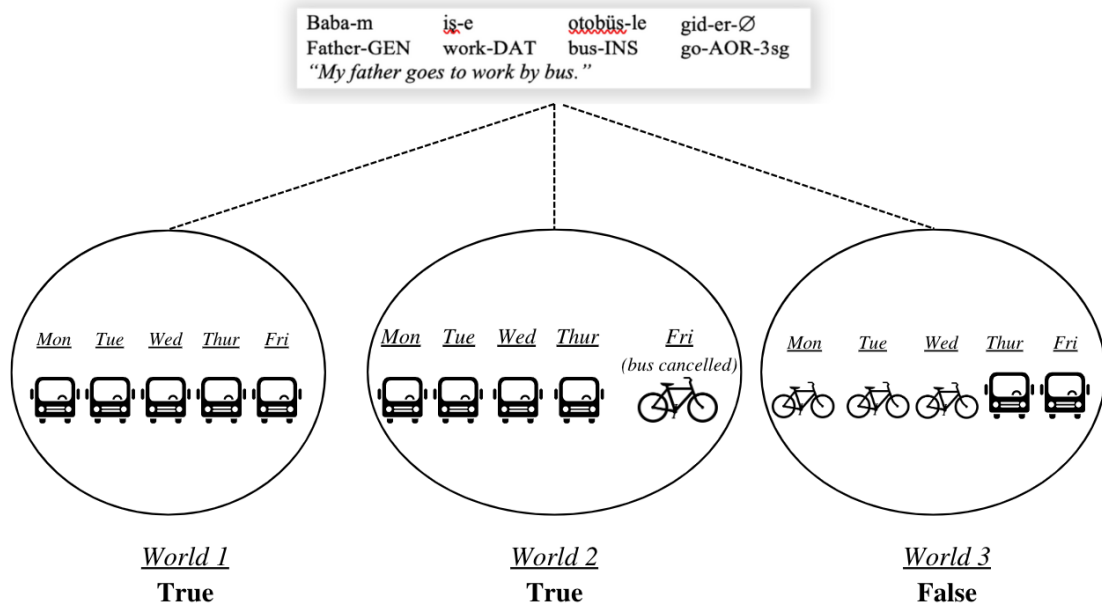## *2.c. The Habitual Use of the Aorist as a Generic*

One of the biggest arguments of the aorist having a temporal function concerns its habitual reading. As previously mentioned, this use has been considered under temporal aspect by Comrie (1976), which has influenced many linguists. To Comrie, habituality is a type of imperfective, denoting incomplete activity. On the other hand, Krifka et al (1995) consider habituality as a generic rather than an imperfective, describing a *sum of events.* This section of the thesis will argue that the Turkish aorist should be considered via the latter lens instead of the former one, making the aorist only a modal.

As mentioned in Part 1 of this thesis, the aorist and *-DIr* can be used to indicate both habituality and what Yavaş (1979) describes as a *characterizing* statement. Additionally, previous literature has also noted the use of the aorist in general statements regarding a class. These meanings can be taken together under the umbrella term of *genericity*. Traditionally, genericity is divided into *habitual characterizations*, referring to recurring patterns of events, and *lexical characterizations,* referring to the identifying properties of individuals (Krifka et al, 1995).

As mentioned in the first subsection of this part, generics allow for some cases where the statement expressed by the predicate is false. As such, even though habituals refer to general patterns of events, there can be exceptions to these patterns. As Yavaş (1979) points out, though, a fundamental question arises from this sort of definition: *How many repetitions should there be for an event to be considered habitual?* An attempt to answer this question is given in (47). It can be seen from this illustration that generic statements only hold true when the overall majority of the cases are compliant with the statement. However, this definition, too, has a drawback, as the term *majority* is not necessarily quantifiable in statements like (48) *Sigara içer* "He smokes," or (49) "He drinks," which can be considered true even if the person does

the activity occasionally. Therefore, a quantity-based definition does not completely describe the full range of meanings that fall under the rubric of habituality.

(47)

Baba-m	iş-e	otobüs-le	gid-er-∅
Father-GEN	work-DAT	bus-INS	go-AOR-3sg
"My father goes to work by bus."			

World 1
True

World 2
True

World 3
False

(48) ∅   Sigara   iç-er-∅.
      pro   Cigarette   smoke-AOR-3sg
      "He smokes."

(49) ∅   Bira   iç-er-∅.
      pro   Beer   drink-AOR-3sg
      "He drinks beer."

Another view on the habituality of the aorist comes from Caro (2012), who proposes that the aorist's habitual use is different than that of the progressive. According to him, the habitual use of the aorist only has modal relations and is unable to be temporally modified. On the other hand, the progressive's habituality has temporal relations and can take temporal modifications. This distinction, as seen in the comparison between the aorist in (50a) and the progressive in (50b), indicates that the habituality of the aorist is strictly a non-temporal one. Conversely, the progressive habitual is a temporal imperfective.

(50) a. *Bebek   bu   gün-ler-de   çok   öksür-ür-∅.
          Baby   these   day-PL-LOC   lot   cough-AOR-3sg

      b.   Bebek   bu   gün-ler-de   çok   öksür-üyor-∅.
           Baby   these   day-PL-LOC   lot   cough-PROG-3sg
          "The baby is coughing a lot these days."

Caro's description of the aorist's habitual use is partially based on the canonical literature, and it can be used to elaborate on the key terms of this preliminary framework. These terms are, as discussed above, the notions of *habitual characterizations* and *lexical characterizations*. Krifka et al (1995) describes these terms as:

     Habitual characterizations: *Generalizes over patterns of events as a*
                                       component of their meaning (Krifka et al, 1995)

     Lexical characterizations: *Generalization over characterizing properties of*
                                       individuals (Krifka et al, 1995)

One large difference between the canonical literature's explanations of *characterization* as opposed to this definition of *characterization* is that the canonical literature discussed in Part 1 strongly holds that habituals are not characterizing, and that the pattern of events signified by the aorist are not habituals and are instead used as an identifying trait of the subject. For instance, sentence (18b), repeated below, was regarded as a characteristic of the subject NP *Ali*, and it was stated that the sentence should be translated as "Ali is a smoker" (Lewis, 1967; Yavaş, 1979; Göksel & Kerslake, 2005). Contrastively, the current definition of *characterizing* also includes habituals, which are regarded as a generalized pattern of behavior. Within this framework, sentence (18b) would be considered a habitual characterization, and the gap in the literature regarding characterizations and habituals would be covered.

(18)   b.   Ali   sigara   iç-er-∅.
           Ali   cigarette   smoke-AOR-3sg
           "Ali is a smoker."

Following this initial explanation of the framework and the explanation of Göksel and Kerslake (2005), who state that one of the aorist's uses is to describe *characteristic qualities or behavior of an individual or class*, the aorist can be seen as expressing both habitual and lexical characterizations. Both Göksel and Kerslake (2005) and Yavaş (1979) contrast this to progressive, which they both define as expressing observed repetitive behavior. This distinction between the two markers is illustrated in (51) (examples from Göksel & Kerslake, 2005). Sentence (51a) clearly generalizes the pattern of behavior the subject NP "Americans" exhibits. As opposed to the generic meaning in (51a), though, (51b) merely describes what the speaker

has observed (examples from Göksel & Kerslake, 2005). Also note that the NP *Amerikalılar* "(the) Americans" in (51b) refers to a specific group of Americans, as opposed to all Americans in (51a). This further supports the notion that *-Iyor* is used exclusively for observed behavior and cannot generalize the behaviors of a class.

(51) a. Amerikalı-lar   çok   süt   iç-er-∅.
          American-PL   lot   milk   drink-AOR-3sg
          "Americans drink a lot of milk."

      b. Amerikalı-lar   çok   süt   iç-iyor-∅.
          American-PL   lot   milk   drink-PROG-3sg
          "(The) Americans drink a lot of milk."

Although this description of the differences between the aorist and the progressive does account for examples such as (51), it falls short of fully illustrating the uses of the aorist. For instance, sentences with verbs like *know* and *resemble* are pragmatically off when used with the aorist (as seen in (52a) and (53a)), but this is not the case with the progressive, as seen in (52b) and (53b) (example (52) from Taylan, 2002, example (53) translated and modified from Krifka et al, 1995). If the semantic function of the progressive is purely a temporal one, how can it be used to express generalizations with verbs such as *know* and *resemble*? Moreover, if the aorist can be used to produce lexical generalizations, why is it not possible to use it with these verbs?

(52) a. *Ayşe   anne-si-n-e   benze-r-∅.
          Ayşe   mother-GEN-B-DAT   resemble-AOR-3sg

      b. Ayşe   anne-si-n-e   benz-iyor-∅.
          Ayşe   mother-GEN-B-DAT   resemble-PROG-3sg
          "Ayşe resembles her mother."

(53) a. *Can   Fransızca   bil-ir -∅.
          Can   French   know-AOR-3sg

      b. Can   Fransızca   bil-iyor-∅.
          Can   French   know-PROG-3sg
          "Can knows French."

In order to answer this question and fully understand the exact semantic use of the aorist, it becomes necessary here to explain the two types of predicates that are relevant for this

framework: *stative* predicates and *action* predicates. Smith (1997, as cited in Taylan, 2002) defines these predicates as:

Stative predicates:	[− dynamic]
	[+durative]
	[−telic]
	<u>Example:</u> *John resembles his father.* (Taylan, 2002)
Action predicates:	[+dynamic]
	[+durative]
	[−telic]
	<u>Example:</u> *John is playing soccer.* (Taylan, 2002)

These terms are noteworthy, since they serve to answer the question posed above about the use of the progressive. At this point, with (52) and (53) in mind, it seems that the progressive can be used to form lexical characterizations, whereas the aorist is used to create habitual characterizations. Following this hypothesis, if the aorist indeed only expresses habitual characterizations, we would expect it to only attach to action predicates. This is because stative predicates, such as *know* or *think,* only produce lexical characterizations (Krifka et al, 1995). However, sentences like (54) shows that the aorist can be used with stative verbs to form generalizations in its negative form *-z*. Thus, it can be assessed that the negative aorist *-z* is used to produce a lexically characterizing meaning.

(54) Can   Fransızca   bil-me-z-∅.
      Can   French   know-NEG-AOR-3sg
      "Can doesn't know French."

Krifka et al (1995) propose that the difference between habitual and lexical characterizations can be observed by adding a prepositional phrase to restrict the generic quantifier. Habitual characterizations are said to tolerate restrictions in this way, whereas this is not the case for lexical characterizations. Using this test with the exact prepositional phrase Krifka et al (1995) implemented, the hypothesis that the aorist can be used to create both habitual and lexical characterizations can be tested. (55a) shows that sentence (18b) can be modified by a prepositional phrase, supporting the previously discussed statement that this is a habitual characterization (example modified from Göksel & Kerslake, 2005). Contrastively,

(55b) shows that (54) cannot be modified by a prepositional phrase, indicating that it is indeed a lexical characterization.

(55) a. Ali   yemek-ten   sonra   sigara   iç-er-∅.
          Ali   meal-ABL   after   cigarette   smoke-AOR-3sg
          "Ali smokes cigarettes after the meal."

      b. *Can   yemek-ten   sonra   Fransızca   bil-me-z-∅.
          Can   meal-ABL   after   French   know-NEG-AOR-3sg
          "Can knows French after the meal."

The contrast between (55a) and (55b) also reveals something about the level of these predicates, and how the aorist is used with them. Kratzer (1995) states that stage-level predicates can take spatiotemporal expressions, whereas individual-level predicates cannot. Based on this notion, habitual characterizations such as that in (55a) can be viewed as a stage-level predicate. Conversely, lexical characterizations such as that in (55b) are considered individual-level predicates. Taking the explanation for (55) into account, it can be said that individual-level predicates cannot be formed with the positive aorist.

Here, it should also be tested whether the negative aorist -z can be used to make any habitual characterizations. This way, the exact semantic role it takes becomes clear. Where habitually characterizing predicates done with the non-negative aorist -Ar can take frequentative aderbials like *genellikle* "usually" and *hep* "always", the negative aorist -z can take *(neredeyse) hiç* "(almost) never/not at all" and its variants such as *hiçbir zaman* "never" and *hiç kimse* "no one". These can be used in sentences with action-based predicates. (56) shows such a sentence, where the negative aorist -z is used with an action verb as a predicate. As previously discussed, the test Krifka et al (1995) propose can also be used here to see whether -z can be used to describe a habitual characterization or remains a lexical characterization. As seen in (57), sentence (56) allows a spatiotemporal phrase to modify it, meaning that -z is indeed used as a habitual characterization in this case. Based on the observation from before, it can be therefore said that -z can be used in both stage-level and individual-level predicates.

(56) Baba-m   (hiç)   spor   yap-ma-z-∅.
      Father-GEN   (never)   sports   do-NEG-AOR-3sg
      "My father (never) does sports."

(57) Baba-m   kahvaltı-dan   önce   spor   yap-ma-z-∅.
      Father-GEN   breakfast-ABL   before   sports   do-NEG-AOR-3sg
      "My father doesn't do sports before breakfast."

To summarize the findings of this section, the use of the aorist can be viewed through an exclusively modal lens. This can be done by considering the habitual use of the aorist as a generic rather than a temporal imperfective. The aorist can be attached to both habitual and lexical characterizations, but it requires negation in the latter case.

2.c. Limitations and Discussion

The aorist and *-DIr* are unlike any other markers in the Turkish language, in that they are used to express events both in the realis and the irrealis (Özgen, 2021). While *-DIr* can easily be identified as a modal, the literature is inconclusive on the exact semantic role of the aorist. Some, such as Kornfilt (2004), explicitly refer to the aorist as a tense only. Others, such as Yavaş (1979) and Göksel and Kerslake (2004), state that the aorist is a marker that has both temporal and modal relations. Among these claims, there is a body of literature defending that the aorist is a modal only, stating that the aorist has no temporal relations unless there are other temporal expressions in the sentence (Gül, 2012). Based on this last group of arguments, this part of the thesis attempted to create a preliminary framework, in which the factual use of the aorist is viewed as a generic rather than a habitual or universal.

Though successful in mending the gap in the literature regarding the aorist marker, this preliminary framework has some shortcomings. The first has to do with the concepts put forward in the literature on genericity. More specifically, the notion of habitual characteristics is incongruent with the lack of inherent temporality of the aorist. Integrating the characterization test of Krifka et al (1995) and the description of predicate levels by Kratzer (1995) leads to the finding that habitual characteristics are stage-level predicates. This means that they allow spatiotemporal modifiers. If the aorist indeed means habitual characteristics, then it should also allow for these types of modifiers; however, Caro (2012) remarks that this is not the case. The verbal predicate of sentence (47) is an action and therefore must be considered through a habitual lens, but it allows no temporal restriction. This contradiction can mean that these terminologies are not properly defined and are used inconsistently, which creates a limitation for the argument made in this thesis. However, it can also be argued that the proposed framework is only preliminary and has already managed to reconnect the canonical literature on Turkish to the large body of semantic work done on genericity. Therefore, this shortcoming

37

can be interpreted as promoting further work on this area of Turkish, which should focus on critically reevaluating the terms used for generics, habituals, and the semantic functions of the aorist.

Another limitation of the proposed framework is the way it considers aspect. Since all the canonical literature of Turkish and the aorist refers to aspect as a temporal notion, the framework proposed has also considered it as such. As a result, the notion of imperfectivity here also refers to something temporal. Despite this, it is important to once again state that this is not the case for all literature, with an important body of literature regarding at least some forms of aspect as modal and not temporal (e.g. Landman 1992). As mentioned in the beginning of this part, this school of thought was not found in the research on Turkish and therefore was not considered. However, doing so might have helped account for some of the gaps in literature in an approach resembling the arguments of the canonical literature that considers Turkish TAM markers as multifunctional. Thus, future research inspecting the aorist and its habituality through a modal-aspectual lens should be conducted. In addition to answering more questions about the habitual, this would also be beneficial in mending the gap between the literature on the Turkish aorist and the body of literature regarding aspect cross-linguistically.

Conclusion

The exact semantic function of the Turkish aorist has been long-debated in the literature, with even the most established literature unable to account for the marker's exact range of uses. This thesis aimed to provide a critical overview of the aorist, and to create a preliminary framework that describes the aorist as a modal marker instead of a temporal marker. The first of these aims was accomplished by reviewing all the uses canonical literature has described for the aorist and making criticisms where necessary. The main criticisms regarding the literature were related to the temporality of the aorist, which was not a satisfactory explanation for the marker's uses. These criticisms were used to move to the hypothesis that the aorist is a modal marker, similar to *-DIr*. Then, this hypothesis was tested for the habitual use of the aorist, which the canonical literature considers to be temporal.

Overall, it was found that the aorist can be framed as a modal expressing generic characterizations. This framework is beneficial since it could potentially eliminate the problems in the canonical literature regarding the terminology used. Moreover, this framework also helps account for the questions raised following the empirical examples in canonical literature. Future research should further improve the framework by clarifying the terminology used for generics and mending the gap between the Turkish literature and the school of thought that considers aspect as a modal.

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