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A contrastive analysis of aspect in English and Moroccan Arabic

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This study endeavors to undertake a comparative analysis of aspect in English and Moroccan Arabic, hereafter referred to as MA, adopting a cognitive linguistic approach, with special attention to the categorization of different situation types as proposed by Radden and Dirven (2007). It also aims to highlight the aspect areas that may challenge Moroccan EFL learners when acquiring this English grammatical construction. The study reveals that aspect is treated differently in English and MA. English aspect hinges on the viewing frame adopted. Therefore, the shift from one viewing frame to another results in the change from one situation type to another. By contrast, in MA, the perfective use calls for the adoption of a maximal viewing frame. However, the imperfective use calls for two interpretations: the event can be seen with either a maximal or a restricted viewing frame. In the absence of elements that co-determine the aspect in MA, general context is the only indication of the appropriate interpretation. The differences in the aspectual systems of English and MA may lead to difficulties in language acquisition. MA learners attempting to learn English, and vice versa, may face challenges in learning both the grammatical structure and its associated meanings.

Keywords: aspect, viewing frame, cognitive linguistics, situation types, language acquisition

1. Introduction

Aspect represents the "different ways of viewing the internal temporal constituency of a situation" (Comrie 1976: 3). Radden and Dirven (2007) assert that there are two types of aspect which depend on whether the speaker views a situation with a maximal or a restricted viewing frame. In other words, the viewing frame adopted allows us to see the entirety of a scene, or to zoom in to see part of it. These two types of the viewing frame are instigated by the grammatical structures used in sentences. In the present study, we aim to compare and

analyse the similarities and differences between English and Moroccan Arabic (henceforth: MA)¹ aspect when it interacts with the different situation types.

The article is organized into three sections and a conclusion. The first section discusses the notion of aspect within the framework of linguistic theory, in general, and Cognitive Linguistics, in particular. The second section draws a comparison between the verbal system in English and MA. The third section discusses the similarities and differences between English and MA aspect as expressed in the different situation types. The conclusion makes a few predictions regarding features of the English aspectual system that are likely to be challenging to Moroccan learners of English as a foreign Language (EFL).

2. Aspect in linguistic theory

Aspect has received considerable attention in linguistic theory. Regarding form, four approaches will be briefly discussed here, namely those advanced by Vendler (1967), Michaelis (1998), Langacker (1999), and Croft (1998). Vendler and Michaelis make a distinction between lexical aspect and grammatical aspect. Lexical aspect indicates that aspectual meaning is expressed by lexical items, particularly verbs. Grammatical aspect indicates that aspectual information is expressed by language-specific grammatical means. In the works of Langacker and Croft, no distinction is made between lexical and grammatical aspect. In terms of meaning, we will address the shift made from describing aspect as "the internal temporal constituency of a situation" (Comrie 1976: 3) to characterizing aspect as denoting viewpoint and playing a role in forging connections across clauses (Boogaart & Janssen 2007: 817). After that, the viewing frame and its interaction with situations will be addressed as discussed in Radden and Dirven (2007).

2.1. Aspect form

A distinction in the traditional literature on aspect is usually made between two types: lexical aspect or *Aktionsart* and grammatical aspect or simply aspect (Boogaart & Janssen 2007). Regarding the first type, Vendler (1967) proposes four time schemata based on three criteria. The first criterion depends on whether the situation as enunciated by the verb has duration; The second one depends on whether the situation involves change; And the third one depends on whether the situation has an inherent end point (telic is the term used to describe a situation that has an inherent end point). The use of these three criteria results in the four so-called Vendler classes of verbs. Table 1 illustrates Vendler's classification with examples adapted from Boogaart and Janssen (2007).

¹ The variety described in this study is the one spoken in cities like Rabat, Casablanca, Kénitra and other urban centers in the Atlantic plains. It is the most prestigious variety usually used in television programs and radio broadcasts.

	Duration	Change	Telicity	Examples
State	+	Ι	_	love, have
Activity	+	+	_	walk, swim
Accomplishment	+	+	+	paint a picture, build a house
Achievement	_	+	+	recognize, stop

Table 1: Vendler's (1967) lexical aspectual classes

As illustrated in Table 1 STATE verbs are durative, have no change, and atelic, ACTIVITY verbs are durative, have change, and atelic, ACCOMPLISHMENT verbs are durative, have change, and telic, and ACHIEVMENT verbs are non-durative, have change, and telic.

There are two features which are fundamental in distinguishing between these classes. The first one is whether the class has a natural stopping point (Boogaart & Janssen 2007). That is, is it telic or atelic? Thus, states and activities are atelic while accomplishments and achievements are telic. The second one is whether we can evaluate the class as progressing or developing (ibid.). That is, is it dynamic or static? Or does it have stages or not? In general, verbs belonging to states and achievements do not appear in the progressive, while verbs belonging to activities and accomplishments do. To illustrate, consider the following examples:

- (1) Wilson loves Sarah.
- (2) Adam swam yesterday.
- (3) James built a house.
- (4) Ana recognized James.

In example (1), there is nothing that can draw the loving state to an end, and it cannot be said to "go on", thus *Wilson is loving Sarah* is questionable. Likewise, in example (2), there is nothing in the description of the activity of swimming which implies that an end point occurs. But, unlike states, activity verbs can be said to "go on', thus it is grammatical to say *Adam was swimming at 9 p.m. yesterday*. In Example (3), an event which makes "James built a house" true is over when James finished building a house. Therefore, accomplishments have an inherent end-point. They are also dynamic since they can appear in the progressive, so it is fully acceptable to say *James was building a house*. Example (4) illustrates the achievements class. Verbs belong to this class have an inherent end-point, thus, the event of recognizing James in Example (4) is over when Ana recognizes James. Situations belonging to this class are inexpressible in progress because they are near instantaneous. That is, they finish as soon as they have begun (Rothstein 2004).

Landman (1992) accounts for the non-progressive aspect of states and accomplishments by arguing that these two classes do not have stages. Rothstein (2004: 12) claims that there

are two different reasons for this. Achievements are not time-extended because they are instantaneous, and stages are indistinguishable. On the other hand, states are long enough, but they are non-dynamic. This means that we cannot distinguish stages because every segment is a mirror image of every other segment (Radden & Dirven 2007).

One of the problems that Vendler's classification suffers from is that looking at verbs alone is inadequate in order to determine lexical aspect (Boogaart & Janssen 2007: 814). For instance, the verb walk by itself is atelic. By contrast, the predicate walk a mile is telic. This suggests that other elements in the clause can contribute jointly to determine the "lexical" aspect. As a result, Boogaart and Janssen (2007: 814) conclude that lexical aspect "is a property of complete clauses rather than a property of verbs or predicates."

Michaelis (1998) makes a clear distinction between lexical and grammatical aspect, as situation aspect and viewpoint aspect, respectively. She argues that the contrast between events and states falls under the purview of the situation aspect. Situation aspect is detached from its specific manifestation in a given language because it is universal rather than language specific. In addition, she maintains that the grammatical encoding of the event/ state distinction using language-specific resources is the concern of the viewpoint aspect (Michaelis 1998). In this respect, "there is no one-to-one mapping between situation aspect and viewpoint aspect, since viewpoint aspect may override "the canonical representation" of situations" (Boogaart and Janssen 2007: 816). To illustrate, consider these two examples:

- (5) a. ? I am loving her.
 - b. I am loving her more and more, the better I get to know her.

As the verb *love* belongs to Vendler's class of states, it hardly appears in the progressive form. The verb *love* in example (5a) is durative, has no change, and atelic; therefore, the use of the construction in the progressive form is not acceptable. By contrast, the state of loving in (5b) involves change, thus it is acceptable in the progressive form. In this case, a shift in "temporal scale" leads to a shift in acceptability (Boogaart & Janssen 2007: 816). This argues for the claim that the viewpoint aspect may override the commonly accepted representation of situations. Michaelis (1998) considers the progressive an "override construction" in English.

In Langacker's (1999) account, English verbs belong to one of two broad-ranging aspectual classes: perfective and imperfective. Perfective verbs have "the basic cognitive capacity of perceiving change" (Boogaart & Janssen 2007: 816). In contrast, imperfective verbs lack this capacity. The test used by Langacker (1998) to distinguish between perfective and imperfective verbs is their congruence with the progressive form. Therefore, perfective verbs can occur in the progressive, while imperfective verbs cannot. It is worth noting that the progressive/non-progressive test is used by Vendler to distinguish states from non-states (Vendler 1967: 98). However, the perfective processes provided by Langacker cannot be seen as equivalent to the telic situation types provided by Vendler. In this respect, atelic activity verbs such as walk, swim, sleep in Vendler's account denote perfective processes in Langacker's account.

Langacker (1999) argues against Vendler's firm lexical categorization of verbs. He claims that verbs may have a predefined value. However, the aspectual interpretation that can be given to any expression is "flexibly and globally determined" (Langacker 1999: 390). To illustrate this point, Boogaart and Janssen (2007: 815) provide the following examples:

- (6) a. The road winds through the mountains.
 - b. The road is winding through the mountains.

The construction in (6a) does not entail change because the verb *wind* is imperfective in Langacker's terminology. By contrast, the same verb in (6b) is used in the progressive form; therefore, it is perfective in Langacker's terminology. These two examples provide clear evidence of the role of construal in the domain of aspect (Boogaart & Janssen 2007: 815). Accordingly, the same situation can be construed as either perfective or imperfective. Based on the discussion of the two constructions in (6), Langacker (1999) concludes that there is no fundamental distinction between lexical and grammatical aspect. Both are encompassed by the concept of "perfectivity" which can be applied to verbs, expressions, and constructions.

Langacker (1999) suggests that the distinction between count/mass nouns in terms of boundedness can be beamed onto the distinction between perfect and imperfect aspect. The term boundedness "relates to whether a quantity is understood as having inherent boundaries (bounded) or not (unbounded)" (Evans & Green 2006: 519). In the domain of space, boundedness is the major element used to distinguish between count and mass nouns (Langacker 1999). For instance, count nouns such as *pen* and *ruler* have bounded structure. That is, each noun assigns an entity with inherent 'boundaries' which can thus be individuated and counted. In contrast, mass nouns such as *water* and *air* do not have inherent 'boundaries', and thus cannot be individuated or counted. Similarly, in the domain of time, boundedness applied to discern between perfect and imperfect aspect (Evans & Green 2006). To illustrate, consider the following examples:

- (7) a. Adam has had a shower.
 - b. Adam is having a shower.

The perfect aspect, which is marked by the use of the perfect auxiliary *have* and the past participle *had*, encodes the event in (7a) as complete and thus construed as bounded. This is because the perfect aspect used in the construction allows us to see the event in its entirety and thus has boundaries. By contrast, the imperfect aspect, which is marked by the progressive auxiliary *be* followed by the progressive participle *leaving*, encodes the event in (7b) as 'ongoing' and can thus be construed as unbounded. This is because the imperfect aspect used in the construction allows us to see the event in its progress and thus has no boundaries.

Another account to aspect is proposed by Croft (1998). Croft refers to Langacker's perfectives as actions since they involve change, and imperfectives as states since they do not involve change. He further classifies actions into processes and achievements. Processes extend in time, while achievements do not.

Furthermore, he tackles the issue of the complex interplay between aspectual grammatical constructions and the temporal structure of events as designated by verbs. A good example of such complex interplay is the simple/progressive distinction in English as discussed in Boogaart & Janssen (2007). In this respect, Croft (1998) claims that lexical aspect seems to determine certain grammatical patterns. For instance, the verb *learn* in example (8) cannot be used in the simple present unless the sentence receives a habitual reading.

(8) He learns the poem.

In addition, as has been mentioned earlier, "aspectual constructions provide a conceptualization of the temporal structure of the event, and language users are flexible in adjusting the temporal structure to fit the construction" (Boogaart & Janssen 2007: 16). This idea is well illustrated in example (5) above. As has been noted, even though it is unusual for stative verbs such as *love* to appear in the progressive form, the construction in (5b) with the verb *love* in the progressive form is acceptable. This is because the state of loving in this construction is construed as involving change, thus it is acceptable in the progressive form.

2.2. Aspect meaning

In cognitive linguistics literature, there is a transition from describing aspect as "the internal temporal constituency of a situation" (Comrie 1976: 3) to characterizing aspect as denoting viewpoint and playing a role in forging connections across clauses (Boogaart & Janssen 2007). To elaborate the idea of aspect and view point, Cutrer (1994) uses mental space theory notions to describe the difference between the French perfective past *passé simple* and the imperfective past *imparfait*. Cutrer (1994) argues that the distinction between the French perfective and imperfective aspect is a matter of perspective. The perfective past does not characterize the Focus space as Viewpoint space, whereas the imperfective aspect does. Cutrer (1994: 193) provides the following description to IMPERFECTIVE and PERFECTIVE:

The IMPERFECTIVE identifies a focus space N and indicates that N is viewpoint. The PERFECTIVE identifies a focus space N and indicates that N is not viewpoint.

The situation in the perfective past is construed from an external Viewpoint because the perfective past does not identify the past Focus space as Viewpoint. By contrast, the imperfective past identifies the past Focus space as Viewpoint. Thus, it makes a shift from an "external" Viewpoint to an internal one (Boogaart & Janssen 2007). To illustrate, consider the following examples:

- (9) Passé simple: *Pierre arriva*. (Pierre arrived) (perfective)
- (10) Imparfait: Pierre arrivait. (Pierre was coming) (imperfective)

In example (9), the speaker uses the perfective to indicate that he has an external view-point of the event. He does not indicate the past Focus space as Viewpoint. Thus, he sees the scene of arriving in its entirety. This is impossible unless the speaker has an external point of view of the scene. In contrast, he uses the imperfective in (10) to indicate that the speaker has an internal viewpoint of the event. He indicates the Focus space as Viewpoint. Thus, he has an internal view of the scene of arriving. This internal viewing is allowed by using the Focus space as Viewpoint.

On the other hand, aspect plays a role in forging connections across clauses (Boogaart & Janssen 2007). In this respect, Hopper (1982: 5) claims that "the fundamental notion of aspect is not a local-semantic one, but is discourse pragmatic". He contends that the perfective and imperfective distinction represent foreground and background in discourse. He further explains that the perfective is the prevalent form used to express sequential events in narratives. In other words, the perfective form is used to convey information "on the temporal ordering of situations presented in consecutive sentences" (Boogaart & Janssen 2007: 818). By contrast, the imperfective aspect is used as a background to situations, descriptions and actions which are simultaneous or overlap with a perfective event. Thus, the imperfective form describes situations that are in progress in the background.

2.3. The interaction of situations and aspect as a viewing frame

Viewing frame is a key element in Radden & Dirven (2007) classification of situation types, particularly when situation types interact with aspect. Therefore, an illustration of viewing frame is of importance here. Viewing frame is of two types: maximal and restricted. The two types are evoked by grammatical structures used in sentences in terms of progressive and non-progressive in English. To illustrate, consider the examples in (11) below:

- (11) a. Adam drove to work.
 - b. Adam was driving to work.

The use of the non-progressive aspect in sentence (11a) allows us to see the whole route of Adam's car from his home to his work. It is a construal that provides a maximal viewing frame of the scene. By contrast, the use of the progressive aspect in sentence (11b) allows us to see part of the scene. It is a construal which provides a restricted viewing frame of the scene.

The interaction of aspect and situations results in categorizing situations to different types. Broadly speaking, a situation is "understood here in the sense of events that happen or states that things are in" (Radden & Dirven 2007: 47). Thus, *James is cooking a pizza* is a typical event and *James is overjoyed* a typical state.

Radden and Dirven (2007) assert that situations are characterised by an important property which is the main element used in classifying situation types: it has a particular temporal structure. That is, some situations have a starting point, an end-point and a certain duration as in *My uncle brought a nice car*. Other situations do not have a starting point or an end-point

and hence no specific duration as in *He lives in Morocco*. The two examples belong to two different types of situations: the former describes an event, while the latter describes a state. These are the two main types of situations.

When aspect interacts with these two types of situations (events and states), they result in eight types of events and five types of states (Radden & Dirven 2007). Four types of events are bounded, namely accomplishments, bounded activities, achievements, and acts. The other four types are unbounded, namely accomplishing activities, unbounded activities, culminating activities, and iterative activities. Three types of sates are bounded, namely indefinitely lasting states, habitual states, and everlasting states. The other two types are unbounded, namely temporary states and temporary habitual states. By comparing and analyzing these types in English and MA, we will shed light on the way these two systems handle aspect.

3. Verb forms in English and MA

In English, verbs have several different forms that indicate tense, aspect, mood, and agreement with the subject. The main verb forms in English are: the infinitive, the present, the past, the future, and the participle (Larsen-Freeman & Celce-Murcia 2015: 20-21).

The infinitive is the base form of the verb such as go, walk, etc. The infinitive form may be used alone or in conjunction with the particle to (the to-infinitive), e.g., She saw him swim v. She wants to swim (Crystal 2008: 243). The present form of verbs usually marked by adding -s to the base form in the third singular person as in He sings, and the absence of affix in the first and second singular person as in I read and they play. The past form of the verb is of two types; regular and irregular. Regular verb forms are marked by adding -ed to the base form as in Jessica listened to music yesterday. Irregular verb forms do not follow the regular pattern of verb conjugation for the past tense and past participle forms. They generally have unique and sometimes unpredictable forms for these tenses. The future is generally marked by will + the base form of the verb as in They will travel next month. It can also be marked by the present form of verb to be + the base form + -ing. Another verb form that indicates the future is going to + the base form.

The participle is a special verb form that functions as an adjective or a part of a verb phrase (Crystal 2008: 351-352). There are two types of participles: the present participle and the past participle. The present participle is marked by adding *-ing* to the base form of the verb. The past participle is used in various verb forms, such as the present perfect, past perfect, and passive voice. For regular verbs, the past participle is often marked by adding *-ed* to the base form of the verb. However, for irregular verbs, the past participle may have a different form.

In MA, there are two main verb forms: the so-called perfect and the so-called imperfect (Harrell 1962: 173). The perfect indicates simple past actions as in *ktəbt-ha* 'I wrote it' (ibid.). The imperfect indicates potential action with various shades of meaning, such as immediate future action, demands, exhortations, or proposals (ibid.: 174). These two verb forms have various conjugations that occur based on tense and aspect. Table 2 summarizes the various conjugations of the perfect (past) and imperfect (present) verb forms for the verb *ktəb* 'to write'.

	Perfect	Imperfect
1 st person singular	ktəbt 'I wrote'	nəktəb 'I write'
2 nd person singular masculine	ktəbt 'you wrote'	təktəb 'you write'
2 nd person singular feminine	ktəbti 'you wrote'	tkətbi 'you write'
3rd person singular masculine	ktəb 'he wrote'	yəktəb 'he writes'
3rd person singular feminine	kətbat 'she wrote'	təktəb 'she writes'
1st person plural ²	ktəbna 'we wrote'	nkətbu 'we write'
2nd person plural	ktəbtu 'you wrote'	tkətbu 'you write'
3rd person plural	kətbu 'they wrote'	yəkətbu 'they write'

Table 2: The conjugations of the perfect and the imperfect verb forms for the verb ktəb 'to write' in MA

It is worth mentioning that the perfect marks only complete actions in the past as in *ktab risala* 'He wrote a letter'. However, the imperfect, in addition to other markers, can be used to mark different tenses and aspects. With the prefix *ka*-, the imperfect marks the present habitual (it is also referred to as the durative in the present) as well as the ongoing actions in the present as in *ka-yəktəb r-rasa?il lə-ṣħab-u* which can be translated as 'He writes letters to his friends' or 'He is writing letters to his friends'. It also marks the past habitual (it is also referred to the durative in the past) and ongoing actions in the past when it is used with the perfect of the auxiliary verb *kan* 'to be' and the prefix *ka*- as in *kan ka-yəktəb r-rasa?il lə-ṣħab-u* 'He used to write letters to his friends/ He was writing letters to his friends'. The imperfect verb form can also mark the future when it is combined with the particle *ġadi* as in *ġadi yəktəb risala* 'He is going to write a letter'.

In addition to the perfect and the imperfect, MA has two other forms, namely the imperative and the active participle. The imperative is "morphologically defined only for the second person" (Harrell 1962: 175). It lacks subject pronoun and usually takes the basic form (root) without any tense or person markers. A typical example of this type of verbs is *ktəb* 'Write!'. The active participle "functions as a verb in the sense that it takes objects and indicates various degrees of time and manner of verb actions" (Harrell 1962: 173). A typical example of the active participle would be *galəs* 'sitting' in *ṛa-h galəs fə-ḍ-ḍaṛ* 'He is staying at home'.

Unlike the imperfect verb form, the active participle cannot be used with the durative *ka*and the particle *ġadi*. It can only be used with particles that function as auxiliaries such as *kan* 'to be' as in *kan galəs fə-d-dar* 'He was staying at home' and *ra-*³ 'there' as in *ra-h galəs fə-d-dar* 'He is staying at home'. In this example, the demonstrative particle *ra-* functions as
the verb *to be* indicating that the speaker emphasizes that he is staying at home.

² When no reference is made to gender, that implies that it is neutralized.

³ *ra* is a demonstrative particle used to emphasize or affirm a state or an action as in *ra-huwa ža* meaning 'He's come' or 'He's right there'. It also signifies remoteness (in contrast to *ha-*) as in *ra-huwa təmma* meaning 'He's over there' or 'There he is' (Harrell & Sobelman 2004: 120).

4. A contrastive analysis of aspect in English and MA

English and MA handle aspect differently. Whereas the perfective/imperfective aspect distinction is made clear in English by the use of non-progressive/progressive forms, respectively, the MA aspectual system is more complex, and the distinction made between perfective/imperfective verbs is not enough to classify a certain construction as perfective or imperfective. To see how these two language systems handle aspect, the different situation types proposed by Radden and Dirven (2007) will be compared and analysed.

4.1. Types of events

Events "are dynamic situations that involve changes and hence heterogeneous" (Radden & Dirven 2007: 177). When aspect interacts with event situations, it results in different types of events. Events can be bounded or unbounded. Bounded events are viewed with a maximal viewing frame, are seen externally, and in their entirety. Unbounded events are viewed with a restricted viewing frame, are seen internally, and in their progression. In English, bounded events are marked by the use of the non-progressive form of verbs. In MA, the use of the perfective necessitates the event to be bounded. The imperfective when combined with other elements can also make the event bounded. Example (12a) illustrates bounded events as marked by the use of the non-progressive form in English, and (12b) illustrates them by the use of the perfective form in MA.

(12) a. Ann changed the baby's nappy.

b. an bəddlat l-kuš l-l-uliyyəd
Ann change.PRF.3.SG.F DEF-nappy to-DEF-baby
'Ann changed the baby's nappy.'

In English, the event in (12a) is bounded since it is marked by the non-progressive form of the verb *changed*. Similarly, in MA, the event in (12b) is bounded since the verb *bəddlat* 'changed' is in the perfective form. We can conclude that as the use of the non-progressive marks bounded events in English, the use of the perfective form of the verb marks bounded events in MA. In this sense, the non-progressive in English is equivalent to the perfective in MA.

However, things seem different when we compare the use of the progressive in English and the imperfective in MA. While the progressive marks unbounded events in English, the imperfective does not necessarily mark them in MA. In fact, other elements are combined with the imperfective to determine whether events are bounded or unbounded in MA. To illustrate, consider the following examples:

(13) a. Ann was changing the baby's nappy.

b. an kant ka-tbəddəl l-kuš l-l-uliyyəd
Ann be.PRF.3.SG. DUR-change.IMPRF.2.SG.F DEF-nappy to-DEF-baby
'Ann was changing the baby's nappy.'/ 'Ann used to change the baby's nappy.'

The use of the progressive in the event expressed in (13a) implies that it is viewed internally. Thus, the event in (13a) is unbounded in English. By contrast, it seems that, in addition to the imperfective, other elements in the clause co-determine aspect in MA. For instance, the construction in (13b) is ambiguous in the sense that the prefix ka- is polysemous. It indicates the construction as unbounded (on progress) as well as bounded (in this case habitual). To specify (13b) as bounded, and therefore understood as habitual, the speaker may use adverbs such as $kull \, sastayn$ 'every two hours'. And to specify it as unbounded, the speaker may use adverbs such $dak \, l$ -waqt 'at that time', or the active participle galsa 'sitting', which functions as an auxiliary when preceded the durative. In the absence of any element to co-determine the aspect of constructions in MA, general context is the only indication to the appropriate interpretation.

The above conclusions can be generalized over the various types of events. Accordingly, in English, the progressive and non-progressive are used to denote unbounded and bounded events, respectively. By contrast, in MA, the perfective is used to denote bounded events, while the imperfective are used to denote unbounded events and habitual events which are considered bounded by the theoretical framework adopted in this study. The various types of events will be addressed in terms of pairs. This is due to the fact that the types constituting each pair share almost the same characteristics. The only difference between them lies in the viewing frame adopted.

Accomplishments and accomplishing activities are the first pair to discuss. Accomplishments are bounded telic events that take a certain duration for their completion. They require an energy source that propels the event to its conclusion. They consist of a series of cumulative phases leading to a conclusive end-point. Each of the cumulative phase or sub-events, contributes to the completion of the event as a whole, which therefore takes a certain amount of time to be realized (Radden & Dirven 2007). Accomplishments are only called so when the activity is completed, otherwise it is called an accomplishing activity (ibid.). That is, an accomplishing activity is when an event stops midway. In English, accomplishments are marked by the use of verbs in the non-progressive form as in (12a) while accomplishing activities are marked by the use of verbs in the progressive form as in (13a) above. Thus, accomplishments are bounded and therefore viewed with a maximal viewing frame, while accomplishing activities are unbounded and therefore viewed with a restricted viewing frame.

In MA, the use of the perfective form of the verb poses no challenges since it denotes the activity as an accomplishment as in (12b). The use of the perfective form of verbs in MA is used only with bounded situations. However, the use of the imperfective form of the verb in (13b) denotes the activity either as an accomplishing activity or as a habitual. Thus, the use of the imperfective does not oblige MA users to change their viewing frame. It is the use of the imperfective with other elements such as adverbs, the active participle *galos* 'sitting', and general context which co-determine the adopted viewing frame as illustrated above.

The second pair to discuss involves bounded and unbounded activities. In general, activities are durational and atelic events. They do not have a conclusive end-point. They are solely characterized by their duration. They may involve intentionally acting humans and non-humans. Instances of activities carried out by humans are running, smiling, drinking

water, etc. Instances of activities in the non-human world are usually seen as processes and include raining, the wind blowing, the sun shining, etc (Radden & Dirven 2007). There are two main types of activities, namely bounded and unbounded activities. To illustrate, consider the following examples:

- (14) a. They played football.
 - b. *ləSbu l-kuṛa* play.PRF.3.PL DEF-football
- (15) a. They were playing football.
 - b. *kanu ka-ylə\foliatra l-kuṛa*be.PRF.3.PL DUR-play.IMPRF.3.PL DEF-football

Bounded activities are viewed externally. They are marked by the use of the non-progressive form of verbs in English as in (14a). By contrast, unbounded activities focus on the progression of the event. They are seen internally. They are marked by the use of the progressive form of verbs in English as in (15a). Both bounded and unbounded activities are durational and atelic. But "the different viewing frame imposed on each of them gives rise to different grammatical behaviour and different meanings in English" (Radden & Dirven 2007: 186).

The MA counterpart of the bounded activity expressed in (14b) behaves in the same way it does in English. This is because the use of the perfective form of the verb $l \circ S b u$ 'they played' in (14b) compels users to view the construction with a maximal viewing frame. However, the MA counterpart of the unbounded activity expressed in (15b) does not behave in the same way it does in English. The use of the polysemous prefix ka- and the imperfective form $yl \circ S b u$ 'playing' does not specify whether the activity is bounded or unbounded as mentioned earlier. The sentence in (15b) can be understood as an activity in progression or as a habitual. As indicated earlier, MA users use other elements such as adverbs, and the active participle $gal \circ S$ 'sitting' to specify which type of activity is used; otherwise, general context is the only indication to the appropriate interpretation.

Radden and Dirven (2007) maintain that temporal boundaries are important for bounded activities in English. As a result, without these boundaries bounded activities sound odd as in *They played. By contrast, in the absence of temporal boundaries, bounded activities sound fully acceptable in MA as in $l ext{2} ext{5} ext{b} ext{u}$ 'they played'. This is because MA bounded activities depend on presuppositions as their boundaries which allow them to sound fully acceptable without temporal boundaries.

By contrast, temporal boundaries are not important for unbounded activities in both languages. Accordingly, it is fully acceptable to say *They were playing in English*. Likewise, it is fully acceptable to say *kanu ka-ylasbu* 'They were playing' in MA. It seems that the focus on the progression of the action allows users of the two languages to neglect the boundaries of the unbounded activities. Therefore, they are not necessary to be mentioned in these constructions (Radden & Dirven 2007: 186).

In English as well as in MA, there are other boundaries which can be used with bounded activities and result in a perfectly well-formed construction without providing any further context. For instance, in English, it is fully acceptable to say *They played marbles*, *They worked on their articles*, *They worked in the garden*. These activities are bounded by invoking the domain of the play, the domain of the work, and the domain of space, respectively (Radden and Dirven 2007). The same thing can be said about these examples' counterparts in MA. Thus, it is fully acceptable in MA to say *ləsbu l-biy* 'They played marbles', *xədmu sla l-maqal dyal-hum* 'They worked on their article', and *xədmu fə-j-jəṇḍa* 'They worked in the garden'.

In English and MA, bounded and unbounded activities evoke subtle nuances in meaning that often go beyond temporal notions. They can differ with respect to implicatures by the type of the aspect used. For instance, the bounded activity *I talked to Mr. Green* and its counterpart in MA *hdərt msa ssi grin* suggest that the speaker initiated the talk, that his talk with Mr. Green was held with some purpose in mind, and that their conversation led to some result. We conclude that the non-progressive in English and the perfective in MA used in the bounded activities invites implicatures of factuality and determination.

By contrast, the unbounded activity *I was talking to Mr. Green* and its counterpart in MA *kunt ka-nəhdər msa ssi grin* imply that the speaker possibly happened to meet Mr. Green, that they talked for talk's sake, and that they only had some casual small talk. Likewise, when this example is understood as bounded in MA, it suggests that the speaker used to meet Mr. Green, that they used to talk for talk's sake, and they used to have casual talk. The progressive in English and the imperfective in MA used in unbounded activities may give rise to all sorts of interpretations due to their focus on the event's progression.

Achievements and culminating activities constitute the third pair of events' types. Achievements are bounded events that focus on the punctual moment of the event's termination and invoke a preceding culminating or "build-up" phase (Radden & Dirven 2007). They have no duration. They apply to terminal situations as in (16a):

```
    a. The baby fell asleep.
    b. l-uliyyəd tah bə-n-nsas (achievement)
    DEF-baby fall.PRF.3.SG.M PREP-DEF-sleep
```

The situation depicted in example (16a) involves a "build-up", or culminating phase leading to a terminal point. It is, in this sense, in contrast to an accomplishment. Likewise, the equivalents of (16a) in MA as shown in (16b) is viewed with a maximal viewing frame, so it is bounded. It is punctual since it does not require a duration for the event to happen. That is, we cannot say that *l-uliyyad nsas* 'The baby fell asleep' until it happens and becomes part of the past.

The point of termination is profiled whereas the culminating phase is only invoked (Radden & Dirven 2007). This is justified by the fact that we cannot amalgamate achievements with durative adjuncts denoting a stretch of time in English and MA. So, we cannot say *the baby fell asleep for an hour in English or * l-uliyyəd ṭaħ bə-n-nsas l-muddat sasa

in MA. These two examples sound odd because achievements occur. That is to say, they are not brought about intentionally. Accordingly, people cannot be asked to perform an achievement because it is beyond a person's control, for instance we cannot issue the order: *Fall asleep* in English or *tih nasos* 'fall asleep' in MA.

The unbounded counterparts of achievements are called culminating activities. In this type, the focus is on the terminal point of achievement or the build up phase preceding the achievement. Instead of adopting a maximal viewing frame as in achievements, we view the terminal point of the achievement or its preceding culminating phase with a restricted viewing frame. In this case, an end-point is expected to be reached but need not occur (Radden & Dirven 2007). Consider the following examples:

```
(17) a. The baby is falling asleep.
b. l-uliyyəd ka-yṭiħ bə-n-nsas

DEF-baby DUR-fall.IMPRF.3.SG.M PREP-DEF-sleep
```

In English and MA, culminating activities can be viewed with a restricted viewing frame as in (17a) and (17b), respectively. In the English example and its counterpart in MA, the focus is on the preceding culminating phase before the end-point. We expect the end-point to be reached, but has not occurred yet. That is, the baby may fall asleep but not sleep at the end. We can say, for instance, that *the baby was falling asleep when he suddenly started crying*. In this sense, the end-point described in the sentence falls outside the viewing frame; hence, the achievement may not occur.

Unexpectedly, in MA, in the absence of indicators such as adverbs, the imperfective form *ka-yənsəs* 'He is falling asleep' means only that the activity is on progress. That is, the general context is not enough to specify whether it is a culminating activity or a habitual unless an indicator is used such as the adverb *kull sastayn* 'every two hours'.

The last pair to discuss in the events' types consists of acts and iterative activities. Acts are punctual atelic events. They do not prompt a culminating phase leading to a terminal point. As Radden and Dirven (2007: 190) put it, "acts come about so quickly that they are thought of as having no duration at all". To illustrate consider the following examples:

```
(18) a. The baby burped.b. l-uliyyəd tgərrə?DEF-baby burp.PRF.3.SG.M
```

The events expressed in the English example (18a) and its counterpart in MA (18b) are conceived as involving no time, so they are punctual. And they do not have a conclusive end-point, so they are atelic. They do not invoke a culminating phase that leads to a terminal point, so they happen quickly as they have no duration. Therefore, they are inherently bounded since they cannot be seen internally. In this respect, MA and English behave in the same way since the use of the perfective in MA necessitates the user to view the

construction with a maximal viewing frame, and so does the use of the non-progressive in English.

When acts are viewed with a restricted viewing frame, they are no more acts. They become iterative activities. Iterative activities are defined as "quick successions of punctual acts, which are conceived of as constituting a single durational event" (Radden & Dirven 2007: 182). Put it differently, when an act is being iterated in a way that is conceived as constituting a single durational event, it is then an activity that involves iteration and, for that reason, it is called an iterative activity. The typical examples in English and MA are those expressed in (19a) and (19b), respectively.

(19) a. The baby is burping.
b. l-uliyyəd ka-yə-tgərrə?
DEF-baby DUR-burp.IMPRF.3.SG.M

Normally, the act of burping happens so quickly to the extent that we think of it as having no time at all and so the act should be bounded in English as in example (19a) and its equivalent in MA (19b). But, when we use the progressive as in example (19a) in English and (19b) in MA, our way of viewing the event differs in that we see a lot of events happen successively and quickly to the extent that we consider them as one event that is happening progressively. The main difference between acts and iterative activities lies in the fact that in the latter we are compelled to view an iterative activity as extended in time. Since a punctual act cannot be extended in time, we interpret the event as a quick succession of acts: an activity involving iteration (Radden & Dirven 2007).

However, unlike in English, it is not the only interpretation given to the imperfective form used in iterative activities in MA. The use of the imperfective form in MA may also mean successions of indefinitely recurrent equivalent situations in different times. That is to say, it is a recurrent situation that the baby burps whenever I meet him. In the absence of indicators, MA users depends on context to opt for the right option.

4.2. Types of states

Unlike events, which involve change, states are static situations. When aspect interacts with states, it results in different types of states. States, like events, can be bounded or unbounded. When states are bounded, they are called lasting states. Lasting states are viewed with a maximal viewing frame as in (20). They are marked using the non-progressive form of verbs in English. When states are unbounded, they are called temporary states. Temporary states are seen internally as in (21). They are marked using the progressive form of verbs in English.

- (20) Ann lives with her parents.
- (21) Ann is living with her parents.

By contrast, in MA, it happens that sentences (20) and (21) have the same equivalent as can be seen in (22) below:

```
(22) An ka-tsis / Saysa msa walidi-ha
Ann DUR-live.IMPRF.3.SG.F / live.AP.3.SG.F with parents-3.SG.F

'Ann lives with her parents.' 'Ann is living with her parents.'
```

Sentence (22) is ambiguous. It may mean that Ann lives with her parents indefinitely. It may also mean that she is temporarily living with her parents. As indicated earlier, the shift from the maximal viewing frame to the restricted viewing frame in MA requires the use of some elements that co-determine the aspect such as adverbs. Otherwise, general context is the only indication to the appropriate interpretation. It is worth noting that the active participle galos 'sitting' cannot be used with the verb y i i i 'to live' neither in the present nor in the past. However, the active participle of the verb y i i i 'lives/is living', i i i i i 'lives/is living', can result in the same meaning of the construction in (22) be it bounded or unbounded.

MA users use some elements to co-determine the viewing frame adopted, otherwise they rely on general context. For instance, MA speakers use adverbs of time such as *daba* 'now' as in *an Sayša mSa walidi-ha daba* 'Ann is living with her parents now', to clearly indicate that Ann is temporarily living with her parents.

As for general context, the sentence an \Im ayša $\mathop{\mathit{m}} \Im$ a walidi-ha 'Ann lives with her parents' can be the answer to a question like $\mathop{\mathit{m}} \Im$ a man \Im ayša an? 'Who does Ann live with?', therefore this sentence is the equivalent of the English sentence in (20). In this case, the question limits the scope of the answer to express a lasting state which is seen as infinite. If the answer is meant to express a temporary state, it will be the equivalent of example (21).

The use of the perfective form in states allow the user to exclusively view the state with a maximal viewing frame. This is because, the perfective form of verbs in MA is the equivalent to the simple past form of verbs in English as mentioned in section 3.

Radden and Dirven (2007) state that lasting states include three sub-types, namely indefinitely lasting states, habitual states, and everlasting states. And temporary states include two sub-types, namely temporary states, and temporary habitual states. In the following discussion of types of states in English and MA, we will address these types in terms of pairs. This is due to the fact that the types constituting each pair share almost the same characteristics. The only difference between them lies in the viewing frame adopted. There is an exception here. The last type in states category, called everlasting states, does not have an unbounded counterpart; therefore, it will be addressed based on this fact.

The first pair to address involves indefinitely lasting states and temporary states. Indefinitely lasting states are defined as "conditions which last for an indefinite time but may eventually cease to exist" (Radden & Dirven 2007: 191) as in (23a).

```
(23) a. My life is exciting.
b. ħyat-i wasr-a
life-1.sg exciting-3.sg.F
```

This definition suggests that this type of states can be located in past as in *My life was exciting* (when I first got married), present as in *My life is still exciting* (these days), or future as in *My life will be even more exciting* (when I get old). Besides, they can be expressed by predicative adjectives as in (23a), participles (e.g. *He's disappointed*), prepositional phrases (e.g. *He's at school*), predicate nominals (e.g. *It is a cat*), and stative verbs (e.g. *She loves her husband*, *He hates his wife*, *He wants to be an engineer*, etc).

Indefinitely lasting states lack boundaries because they are infinite. Thus, they cannot be expressed in the progressive. Our view of states as infinite is invoked by the use of the non-progressive. The use of the non-progressive also makes us see the states as homogeneous, general and factual. For instance, the use of the non-progressive in example (23a) commits the speaker to the factuality of the state described in the sentence.

In MA, indefinitely lasting states behave in the same way they do in English as in (23b) above. The state expressed in construction in this example lasts for an indefinite time but may eventually cease to exist in any time. It suggests that it can be located in past as in ħyat-i kant wasra (məlli yallah tzəwwəjt) 'My life was exciting (when I first got married)', present as in ħyat-i mazal wasra (had l-iyyam) 'My life is still exciting (these days)', or future as in ħyat-i ġadi tkun wasra ktər (məlli nəkbər) 'My life will be even more exciting (when I get old)'.

It is worth noting that, unlike English, MA can use non-verbal construction to express indefinitely lasting states as in (23b) above. Non-verbal constructions in MA can express meaning without the use of the verb.

In English, stative verbs expressing indefinitely lasting states are used in the non-progressive form as in *He loves his wife*. By contrast, in MA, stative verbs indicating indefinitely lasting states are used in the imperfective form as in *ka-yəbği mṛat-u* 'He loves his wife'. Even though the verb in MA is in the imperfective form, it does not indicate a temporary state. It indicates an indefinitely lasting state as in English. Our evidence on this is the adverb *daba* 'now'. If we add it to the sentence *ka-yəbği mṛat-u (daba)* 'He loves his wife (now)', it will not mean that his love is temporary and will cease after a certain period. It implies that he did not use to love her in the past, but now he does.

When indefinitely lasting states are viewed with a restricted viewing frame, they become temporary states as illustrated in (24a).

```
(24) a. We are sitting in the garage playing cards.
```

```
b. ra-ħna galsin fə-l-garaj ka-lləsbu<sup>4</sup> karṭa there-we sit.AP.3.PL in-DEF-garage DUR-play.IMPRF.1.PL cards
```

This is marked by the use of the progressive *are sitting*. Likewise, the MA equivalent of (24a) expressed in (24b) is a temporary state. The restricted viewing frame in the MA exam-

ple is imposed by the use of the active participle *galsin* 'sitting'. However, things look different when we render the MA temporary state *tumubilt-i galsa ka-təjmə l-gəbṛa fə-l-gaṛaj* into English. The English equivalent of the MA temporary state is the indefinitely lasting state *My car sits in the garage collecting dust*. This inconsistency between English and MA can be justified by the fact that in MA, it is impossible to imagine a situation in which the car is indefinitely collecting dust as in English. This is probably because in MA, the active participle *galsa* 'sitting' imposes an internal view on the described construction. In addition, the use of the imperfective form of the verb, *ka-təgləs* 'is sitting' in this case, will make the construction sound odd. This is probably because the car cannot perform a human act as sitting. By contrast, the use of the imperfective verb form *ka-ngəlsu* 'we are sitting' in (24b) will result in a fully acceptable construction meaning that we are used to sitting in the garage playing cards. In this case, the MA sentence in (24b) is an indefinitely lasting state.

In English, many states may be described adopting a maximal viewing frame or a restricted viewing frame and, as might be expected, convey different meanings as in *How do you like your job?* and *How are you liking your job?*, respectively. However, it is not the case in MA. The equivalents of the English examples, be it viewed with a maximal or a restricted viewing frame, are expressed using the imperfective form of the verb in MA as in *kifaš ka-tji-k xdəmt-ək?* 'How do you like your job?'/ 'How are you liking your job?.'

In English, the specific meaning each sentence conveys is determined by its aspect and contextual cues. For example, the speaker of the question *How do you like your job?* assumes that I have formed an opinion about my job, whereas the speaker of the question *How are you liking your job?* makes no such assumption. This question may be paraphrased as meaning 'By the way, have you already formed an opinion on your job?'. However, in MA, both the equivalent of the two above English examples *kifaš ka-tji-k xdəmt-ək?* makes no assumption to whether the speaker has formed an opinion or not yet. To assume that the speaker has already formed an opinion, he uses the perfective which is the equivalent of the past in English as in *kifaš jat-ək xdəmt-ək?* 'How did you like your job?'

In English, the infinite view invoked by the non-progressive sentences makes us see the states as homogenous, general and factual, while the internal view invoked by the progressive sentences makes us see the states as heterogenous, specific and episodic (Radden & Dirven 2007). By contrast, in MA the infinite view invoked by the perfective sentences makes us see the states as homogenous, general and factual, while the internal view invoked by the imperfective sentences makes us see the states as heterogenous, specific and episodic.

The difference in meaning between these modes of viewing shows up more strikingly in the context of increase such as *I like my job better and better everyday* and *I'm liking my job better and better*. In the former example, a person's emotional state of liking something usually lasts indefinitely. In this case, the non-progressive aspect is the expected form to use, which conveys a factual statement about an increase in liking. In the latter example, the restricted viewing frame allows the speaker to focus on the incremental phase of liking as they increase from day to day. The restricted viewing frame is not only used to show increases in emotion but also to express changing states as in *He is resembling his father more and more*.

By contrast, in MA it is not the perfectivity or imperfectivity of the sentence which makes the difference between a person's emotional state of liking something that usually lasts indefinitely or focusing on the incremental phase of liking as they increase day after day. In fact, the imperfective is used to denote both meanings as illustrated by the MA counterparts of the English sentences *I like my job better and better everyday* and *I'm liking my job better and better* which can be rendered to MA as $ka-ta Sjab-ni \ xdamt-i \ kull \ nhar \ ktar$ and $xdamt-i \ gadiya \ ka-ta Sjab-ni \ kull \ nhar \ ktar$, respectively. In fact, the use of some linguistic cues which makes the difference in meaning between these two examples such as the word gadiya 'going'. The word gadiya 'going' is used in the latter example to indicate the progression in the increase of liking. This linguistic cue is also used with changing states as in $gadi \ ka-yašbah \ la-bba-h \ ktar \ wu-ktar$ 'He is resembling his father more and more', to indicate that the changing of the state is in progress.

In English as well as in MA, states that involve intentionally acting humans as *You're rude* and its MA non-verbal counterpart *nta xayəb* may allow a temporary reading *You're being rude* and its MA counterpart *ġadi ka-təxyab*. This is not surprising since humans are able to change the world around them. The only difference between English and MA is that in English the shift from an indefinitely lasting state to a temporary state is allowed by the use of the progressive in the temporary state. However, in MA, the shift is allowed by the use of some clues such as the active participle *ġadi* 'going' in the temporary state.

The second pair of states' types to address involves habitual states and temporary habitual states. Habitual situations are not states. They are "successions of indefinitely recurrent equivalent situations" (Radden & Dirven 2007: 193). In other words, habitual states are individual events that recurrently happen and are seen in their entirety, and hence are perceived as a single situation. Thus, they are multiplex. A good illustration of this type is the sentences expressed in examples (25a) and (25b).

```
(25) a. My sister wears high-heeled shoes.
```

b. *xt-i ka-talbas şabbat t-ṭalu* sister-1.SG DUR-wear.IMPRF.3.SG.F shoes DEF-high-heel

The behaviour of wearing high-heeled shoes is habitual since it is done regularly. Habitual states show specific grammatical behaviour. In the past, they are marked by the use of *used to*. Present and past habitual situations can be expressed using *keep V-ing*, and the use of *now* to indicate the recent beginning of a habitual state.

In MA, the equivalent of construction (25a) is the one expressed in example (25b). It is ambiguous. It may mean that my sister is wearing high-heeled shoes, or she habitually wears high-heeled shoes. As indicated earlier, in the absence of elements to co-determine the kind

⁵ Even though the combination of *ġadi* with *ka*- is frequent among Moroccan speakers, it has not been discussed in literature at least to our knowledge, including Harrell (1962). When this combination is used, it implies the intensification of the action in progress. That is, the longer the action persists, the more intense it becomes as in *ra*-h *l*-qadiyya ġadiya ka-təkbər meaning 'The matter is getting more serious!'.

of viewing frame adopted, MA speakers depend on contextual clues and discourse cues to differentiate between the two.

Both in English and MA, habitual states can be observed in nature as well, but rarely as in *The sun rises in the east*. This example and its MA equivalent *š-šəms ka-təšrəq mə-l-məšriq* both mean that the sun rises in the east. Unlike (25b) in MA, this example is not ambiguous because it is bounded by invoking the domain of space *l-məšriq* 'the east'.

In English as well as in MA, habitual situations are multiplex. They are typically composed of individual events that are seen in their entirety and synthesized into a single situation. In such type of situations, we lose sight of interruptions between the individual events and perceive them as forming a homogenous, lasting state. Radden and Dirven (2007), claim that in some other languages habitual situations are grouped with events.

Habitual states show specific grammatical behavior in English. Habitual situations that occurred in the past are marked by *used to* as in *Mary used to work in a pub*, and are marked by the simple present form in the present as in *She works in a pub*. Present and past habitual situations may be also expressed by *keep v-ing* as in *She keeps applying for new jobs* and *She kept applying for a job*, respectively. The recent beginning of a habitual state may be indicated by *now* as in *She now works at McDonald's*.

Likewise, in MA, habitual acts show specific grammatical behaviour. In general, they are marked by the use of *kan* plus *ka*- plus the imperfective form of the verb in the past as in *xaṭib-ti kant ka-təxdəm f-baṛ* 'My fiancée used to work in a pub', and *baqi* 'keep' plus *ka*-plus the imperfective form of the verb in the non-past. Like in English, in MA, the recent beginning of a habitual state may be indicated by *daba* 'now' plus the imperfective form of the verb or some exceptional active participles such as *xəddam* as in *ṛa-ha ka-təxdəm/xəddama daba f-makdunaldz* 'She now works at McDonald's.'

It is noteworthy that for verbs, such as *dxəl* 'to enter', whose durative form signifies only habitual or repetitive actions but not progressive ones, the active participle imparts a progressive meaning, as exemplified by *huwa daxəl* meaning 'He is entering.' In contrast, the active participle of other verbs, which do not typically take on a progressive form in English, such as *fhəm* 'understand', acquires a durative meaning, as demonstrated by *huwa fahəm* 'He understands' (Harrell 1962: 178).

In English as well as in MA, the habitual nature of a state can also be highlighted by means of the frequency adjuncts as *always*, *all the time*, *continuously*, *constantly* in English, and the frequency adjunct *daymon* 'always', *kull marra* 'every time' in MA as equivalent to all the mentioned adjuncts in English. These adjuncts emphasize the repeated occurrences of the event.

As in English, in MA, past and incipient habitual states may be combined as opposites, as in *She used to work in a pub, but now she works at McDonald's* and *kant ka-təxdəm f-bar, wa-lakin daba ka-təxdəm f-makdunaldz*, respectively.

The unbounded counterparts of bounded habitual states are called temporary habitual states. While habitual states are viewed with a maximal viewing frame, temporary habitual states are viewed with a restricted viewing frame. Radden and Dirven (2007) indicate that the temporariness of the habitual state may suggest that it has just recently come into existence as in *She is working in a pub*. Frequency adjuncts may be used with temporary habitual

states as in My husband is constantly getting into trouble. When it is the case, the temporary habitual states invite inferences of irritation on the part of the hearer.

```
    a. Mom is working at the Ministry of Finance (for the moment).
    b. mm-i ka-təxdəm / xəddam-a f-wizart mother-1.SG DUR-work.IMPRF.3.SG.F / work.AP-SG.F in-ministry
    l-maliya (had s-saγa)
    DEF-finance this DEF-time
```

By contrast, in MA, it is the use of adverbs that allow MA speakers to shift from a habitual state to a temporary habitual state as in (26b). The use of the durative ka- plus the imperfective form of the verb in addition to the adverb had s-sasa 'at this time' specifies the construction in (26b) as unbounded. The restricted viewing frame adopted in this construction suggests that the speaker's mother is just temporarily working in the ministry, and she may move to another sector or stop working anytime. In the absence of the adverb had s-sasa 'at this time', there will be a shift in the viewing frame. Consequently, it will be viewed with a maximal viewing frame which results in considering (26b) a habitual state.

As in English, the use of the frequency adjuncts in MA implies irritation. But they do not impose viewing the construction with a restricted viewing frame as they do in English as in *ṛajl-i daymən ka-yəjbəd ṣ-ṣḍa*s 'My husband always gets in trouble'.

The last type to discuss in types of states is called Everlasting states. The situations belonging to this type are true all the time and do not change. Thus, they are solely expressed in the present, but not in the past, or the future, nor in the progressive aspect (Radden & Dirven 2007). A typical example of this type is (27a).

```
(27) a. Oil floats on water.

b. z-zit ka-ṭṭṭləʕ fuq l-ma

DEF-oil DUR-rise.IMPRF.3.SG.F on DEF-water
```

The state expressed in this example is a physical law. Thus, it is true in all situations. All the states that have timeless validity by their nature belong to this type. The English example (27a) implies that whenever oil is mixed with water, oil floats on water. In this case, it is seen with a maximal viewing frame. This is marked by the use of the non-progressive form of the verb in this example.

Likewise, the MA example (27b) has the same interpretation as its English counterpart expressed in (27a). In MA, everlasting states are marked by the use of the durative *ka*- plus the imperfective form of the verb. The use of the imperfective does not make the construction ambiguous. This is because there is only one valid interpretation which is that the speaker determines himself to the everlasting truth of the proposition expressed in the construction. Non-verbal constructions can also be used to express everlasting sates in MA as in *la-syalat huma l-jins la-qwiy* 'Women are the stronger sex.'

In English as well as in MA, typical examples of everlasting states are definitions, eternal truths, generalizations that are claimed to be true, and proverbial truths. All of these everlasting states have timeless validity by their very nature.

5. Conclusion and implications

To conclude, aspect allows language speakers to view constructions with a maximal or a restricted viewing frame. These two types of the viewing frame are evoked by the grammatical structures used in sentences. This study shows that aspect is handled differently in English and MA. In English, constructions which are viewed with a maximal viewing frame are marked by the use of the non-progressive, while constructions which are viewed with a restricted viewing frame are marked by the use of the progressive. The shift from one viewing frame to another results in the change from one situation type to another. By contrast, the use of the perfect in MA necessitates the user to view the construction with a maximal viewing frame. However, when the imperfective form of the verb is used, the construction is ambiguous. It may mean that the user views the event with either a maximal or a restricted viewing frame. In the absence of elements that co-determine the aspect in MA, general context is the only indication of the appropriate interpretation.

The difference in aspect system in English and MA may result in difficulties in language acquisition. If a native speaker of MA wants to learn English, or vice versa, they may face difficulties in terms of grammatical structure as well as semantic interpretation. For instance, a native speaker of MA may use the same structure to express both a progressive as well as a non-progressive situation. He may use the present continuous to refer to an action happening now or for an action that habitually happens. He may also use the present tense to refer to a situation that is on progress or to a habitual situation. This is due to the fact that the imperfective in MA can be used to view a situation with a maximal as well as a restricted viewing frame. For the same reason, a native speaker of English may get confused in what the appropriate interpretation of MA construction using the imperfective form of the verb is. It seems that both native speakers of MA and native speakers of English may not face any difficulties in learning English non-progressive form of verbs in the past and MA perfective form of verbs, respectively. This is because the equivalent of the English simple past structure is the perfective structure in MA. Accordingly, this paper is of importance to language acquisition researchers interested in the acquisition of aspect and applied linguistics researchers interested in having insights about aspect to find the effective way to teach this grammatical structure.

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