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**A PRELIMINARY INVESTIGATION INTO THE
 ASPECTUAL CLASSES OF VERBS IN ABYANI ARABIC**

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Abstract:

This paper discusses the characteristics of Aktionsart in Abyani Arabic in the light of Vendler's classifications of verbs. Verbs are classified into four classes: states, activities, accomplishments and achievements. The paper explores the aspectual features of verbs in this dialect focusing mainly on the similar and different aspects compared to their counterparts in English. The discussion shows that verbs in Abyani Arabic can be classified into four classes in accordance with Vendler (1957). However, this classification does not strictly apply to verbs in this dialect where the majority of verbs can shift interpretation from a class to another depending on the structure in which they occur. Shifting interpretation can apply to a sub-class of verbs within the same class in Abyani Arabic. Besides, it is not only the verb that determines the aspect of the sentence but the entire structure including the verb, the temporal adverbials, the directional PP and the NP in the object position. It is observed that the diagnostic for adverbial that is used to distinguish duration and telicity of events in English cannot occur solely with the perfective form in this dialect but it requires the verb galas 'stayed' to co-occur with in the same structure, this construction can shift interpretation of accomplishments into activities and achievements into states and distinguish states from non-states. The discussion is mainly based on ideas from Vendler (1957), Dowty (1979), Bach (1980&1986), Smith (1997) and others. In brief, this paper demonstrates several properties of the aspectual classes of verbs in Abyani Arabic that can be a good starting for further future studies.

Keywords: Events, accomplishments, achievements, states, activities, Abyani Arabic.

1. Introduction

This paper aims to investigate the aspectual classes of verbs in Abyani Arabic; a dialect spoken in Abyan Governorate in the southern part of Yemen. This dialect does not differ syntactically from the other dialects spoken in Yemen but it varies, to some extent, lexically, morphologically and phonologically. It mainly focuses, compared to English, on the behavior of lexical aspect (Aktionart) in this dialect.

The aspectual classes of verbs in this dialect have not been discussed before; therefore, there is a substantial need to uncover the properties of aspectual classes and conduct this preliminary investigation considering the influential and prominent Vendler's classification of verbs. This study is significant because it offers novel data, uncovers new aspects of this dialect, and compares those aspects to English.

There are two questions that this paper attempted to answer: 1) What are the aspectual classes of verbs in Abyani Arabic? 2) To what extent does Vendler's classification of verbs account for the behavior of verbs in this dialect? It is important to note that the data for this study is offered and judged by the author of this paper since she is a native speaker of this dialect.

The paper is organized as follows: section one is the introduction. Section two discusses the theoretical background of the study. Section three discusses the aspectual classes of verbs in Abyani Arabic. Section four is the conclusion.

2. Theoretical background

The aspectual classes of verbs refer to the internal structure of events in time. Philosophers and linguists developed a system of classifying events into aspectual classes, called *aktionsart*, this word has a German etymology where *aktion* means 'action' and *art* 'type or sort'.

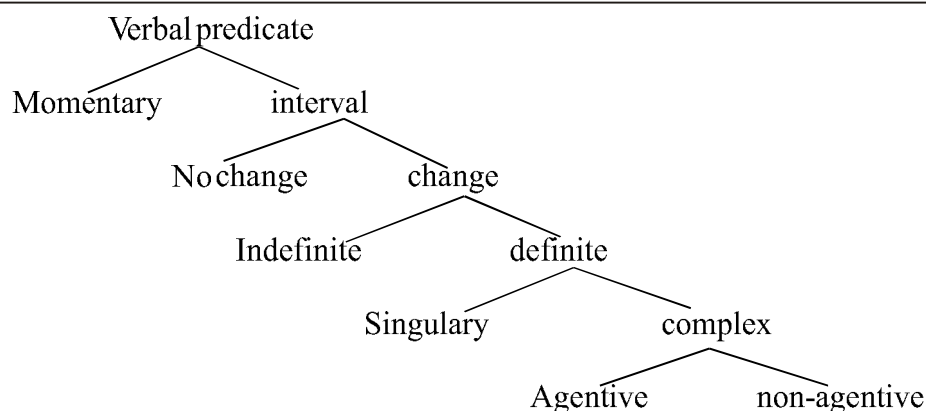
Vendler (1957) classified events into four classes: state, activity, accomplishment and achievement. He relied on specific criteria to distinguish events from one another especially boundedness or bounding, duration and change and mainly demonstrated the similarities and the differences among those classes. According to him, accomplishments and activities differ from achievements and states in that the former allows the use of the progressive tense. Activities and accomplishments are distinct by boundedness. He argued that activities do not have a terminal point; for instance, *John drew circles*, whereas accomplishments do. On the other hand, achievements and states are distinguished in that achievements are instantaneous, whereas states are durative. He also claimed that the absence and presence of change determine the difference between heterogeneous and homogeneous events where heterogeneous events contain internal change, i.e. they vary from one moment to another, while homogeneous events are stable and are not submitted to any internal change. This distinction is used to account for the difference between states and processes, where states are considered homogeneous because they do not incur any internal change. Processes, on the other hand, are heterogeneous; for instance, the process of walking passes through different stages, i.e. there is internal change. Vendler (1957) also employed the progressive tense as a criterion to measure the variation among these classes of verbs. Yet, it was criticized by linguists because many achievement verbs in Vendler's list can appear in the progressive, such as *he is winning the race*. The compatibility with the progressive test does not provide a suitable criterion for the classification of states and achievements into one class (and of activities and accomplishments into another). Here are some verbs that are classified into four types as illustrated below:

- **States:** desire, want, love, believe, own, resemble, be in New York;
- **Activities:** run, walk, write letters, push a cart, breathe;
- **Accomplishments:** run a mile, walk to the car, write a letter, recite a poem;
- **Achievements:** recognize, realize, spot, identify; lose, find, reach (the summit); win (the race); cross the border; start, stop, resume; be born, die.

There is another category added by Smith (1997) falling between accomplishments and achievements, commonly called *semelfactives*, which subsumes verbs like *knock, cough, blink, tap*, and so forth. This categorization describes states, activities and accomplishments as durative while semelfactives and achievements as punctual. Semelfactives have common features with achievements and accomplishments as well, particularly in being bounded.

There are other accounts like Dowty (1972 & 1979) where a fine-grained lexical semantic analysis of eventuality type using the philosophical insights was developed as well as the linguists' semantic analysis. He asserted that semantic, pragmatic and discourse semantic motivations are very salient factors in giving an adequate description of verbal predicates and sentences with their aspect and tense. He found Vendler's syntactic tests to distinguish his four categories not consistent to account for all examples, which gave him a strong motive to revise Vendler's classification.

Dowty's classification of verbal predicates (1979: p. 184) is given in the following diagram:



Generally, two syntactic tests are applied to ascertain the aspectual classes of events. The first one is concerned with the effect of certain adverbs that target the properties of events, which embed telicity and atelicity. The second is related to the effect of tense and aspect verb form on predicates of different classes.

Further, Bach (1980, 1986) analysed events in terms of part-whole relation and by direct structural analogies between nominal and verbal predicates. Many features appear in his classification such as 'agentivity', and features that capture the distinction between state and non-state that play a significant role in organizing the grammar of natural languages. Furthermore, he posits one eventuality type 'event' to account for the two-way distinction of Vendler's (accomplishment *vs.* achievement), as well as Dowty's (singularity *vs.* complex change) that was of a wide benefit, it sets them clearly apart from state and activity predicates. He gave more significance to the domain of discourse rather than time structures in analysing eventualities. According to him, time structure is reconstructable in terms of relations among eventualities.

Smith (1997) defined aspects as a parameter that is realized differently in languages of the world. The traditional view of aspect is that it is grammaticalized viewpoint, i.e. perfective and imperfective. Recently, the meaning of the term aspect is broadened in a way that aspect refers to the internal event structure and external event structure. According to Smith, the internal event structure is called situation type (Aktionsart) while the external event structure is called viewpoint type. She claimed that the situation type aspect is compositional, i.e. it composes of the verb, arguments and adverbs. Situation type aspect is a semantic domain expressed in covert linguistic categories. Smith (1997) used three temporal features, i.e. dynamism, durativity and telicity to distinguish the five situation types of her classification of events: state, activity, accomplishment, semelfactive and achievement. Further, she used three binary features to determine the stativity, the lack or existence of duration and the telicity and atelicity of events.

Table 1: Temporal features of the situation types (Smith 1997: p. 20)

	Static	Durative	telic
State	+	+	-
Activity	-	+	-
accomplishment	-	+	+
Achievement	-	-	+
Semelfactive	-	-	-

Recent accounts in the literature such as Ramchand (1997), Bhatt and Pancheva (2005), and Borer (2005) and Rothstein (2004) agreed on that some aspects of the situation aspect are structural. Other accounts like Ramchand (2001 & 2003) argued that aspect is decomposed into sub-events that built up a syntactic structure.

In this paper, the most significant goal is to contribute novel linguistic data of situation

type/aktionsart in the dialect under investigation basing on the four classic divisions of aspect mainly Vendler's classifications. Other aspects of aktionsart will be discussed in detail in future studies.

2.1 Boundedness and Unboundedness

The scale of boundedness pertaining to the lexical difference of verbs is determined by whether verbs have an end/terminal point which is called telic, a word comes from ancient Greek (*telos*, end) while those lacking the culmination point are called atelic. Consider the following examples:

1) a. Mary walked to the park.

b. Mary walked in the park.

(1a) differs from (1b) in that it incurs telicity. The event in (1a) is considered telic because the process of walking culminates by reaching the park. On the other hand, (1b) does not have an endpoint. (1a) is interpreted as follows: there is a starting point, which is represented by X and an endpoint, which is reaching the park, the process of walking starts from X and ends by reaching the park, as illustrated in (1c):

c. X-----|the park

The process of walking to the park is accomplished by reaching the park, and any stretch of time between X and the park merely describes walking, but not walking to the park. On the other side, (1b) does not have an endpoint and any stretch of time describes walking in the park, as in illustrated (1d):

d.



The temporal adverbs used to target telicity are the completive *inadverbial* while the durative *foradverbial* is used with unbounded events. Consider the example below:

2) a. Mary walked to the park *in an hour*.

b. Mary walked in the park *for an hour*.

In (2a), *walking to the park* is telic, i.e. the culmination of the event is fulfilled by reaching the park; therefore, it only permits *in* adverbials. In (2b) *walking in the park* does not have an endpoint thus; it permits only *for* adverbials because the event is atelic. It is observed that *in* adverbials occur with both accomplishments and achievements with a slight difference. That is, they modify the duration of the event with accomplishments; while with achievements, the event occurs at the end of the interval because achievements are instantaneous, it is like a transition from one state to another such as the switch from not recognizing to recognizing in (3c). Consider this example:

3) a. She cooked the lunch in an hour. (accomplishment)

b. He ate the apple in a minute. (accomplishment)

c. Tom recognized her in a second. (achievement)

D. The boy lost his bag in an hour. (achievement)

States and activities have unbounded reading; thus they do not select *in* adverbial. Consider these examples:

4) a. *The light was on in two days. (State)

b. *She loved him in a minute. (State)

c. *They chatted in two hours. (Activity)

d. *The leaves fluttered in the wind in two minutes. (activity)

The shift from past to future accompanied by *in* adverbials will result in eliminating the ungrammaticality

of this kind of events, as in:

- 5) a. The garden will be sunny in few minutes. (State)
- b. They will talk in one hour. (activity)

The use of future tense creates only one onset interpretation where the sentence is more natural with all event classes in this tense. Strictly speaking, *in* adverbials are used as diagnostic test with the perfective tense. On the other hand, bounded events take only *in* adverbials; they become ungrammatical with *for* adverbials as in (6):

- 6) a. *She cleaned the house for an hour. (Accomplishment)
- b. *Mary walked to the school for two hours. (Accomplishment)
- c. *Tom recognized his mother for a minute. (Achievement)
- d. *They arrived home for an hour. (achievement)

Furthermore, there are other tests pertaining to telicity like the compatibility with *finish*, *take* or *spend*.

Complements of *finish*

Finish can occur with accomplishments without requiring any special interpretations but it cannot occur with other types of events. Consider this:

- 7) a. Mary finished walking to school. (Accomplishments)
- b. Mary finished walking in the park. (Activity)
- c. *Mary finished recognizing her old friend. (Achievement)
- d. *Mary finished loving her husband. (states)

Complements of *take* vs. *spend*

Take and *spend* seem to be in complementary distribution, i.e. *take* can occur with accomplishments but *spend* cannot do so. Conversely, *spend* can occur with activities while *take* cannot.

- 8) a. It took me an hour to write this letter. (Accomplishment)
- b. It took me an hour to listen to music. (Activity)
- c. I spent an hour writing the letter. (Accomplishment)
- d. I spent an hour listening to music. (activity)

The discussion above showed that there are various tests for telicity. It is clear that events are classified as telic or atelic. However, telic events still differ among themselves in being durative or instantaneous (lack of duration).

2.2 Tense and aspect

Both tense and aspect convey information about the time of a described event or state of affairs. Tense places the whole event or situation on the time line in past, present or future. Aspect is concerned with the internal structure of the event itself. Tense and aspect are used to distinguish states from non-states. Non-state predicates (accomplishments, achievements, activities) are interpreted as habitual in the present simple tense. On the other side, states are interpreted as holding at the time of utterance whether they are carried through states or temporary situation. States become ungrammatical in the progressive aspect. Consider these examples:

- 9) a. We are eating apples. (Non-state)
- b. *John is knowing English. (state)

Non-state events can occur with the progressive aspect without violating the rules of English grammar. While states are usually ungrammatical with this aspect. However, states in the progressives are available in French and Chinese (Smith, 1997).

2.3 Agentivity

States do not have agents while non-states do. Some agent-oriented adverbs like *accidentally*, *deliberately*, *conscientiously*, complements of verbs like *persuade*, the imperative sentences and pseudo-cleft constructions are associated with agency. They are felicitous with accomplishments and activities but

not with states and achievements. Consider these examples.

- 10) a. They deliberately ate the apples. (accomplishment)
- b. My father deliberately walked in the park. (activity)
- c. *He was happy deliberately. (state)
- d. *Tom noticed the pictures carefully. (achievement)

According to these examples, only accomplishments and activities are agentive.

- 11) a. I persuaded him to drink the coffee. (accomplishment)
- b. Mary persuaded me to chat with John. (activity)
- c. *His father persuaded him to be happy. (state)
- d. *The police persuaded the witness to recognize the criminal. (achievement)
- 12) a. Build the house. (accomplishment)
- b. Walk in the garden. (activity)
- c. *Be sad. (state)
- d. *Turn forty. (achievement)

Smith (1997) claimed that only an event that is controllable can be persuaded or commanded. Other forms in which *be* + *adjective* are well-formed if they are interpreted as containing the so-called agentive *be*, as illustrated in (13):

- 13) a. Be good!
- b. Be quiet!
- c. Do not be fool.
- d. Be nice.

This kind of sentences is acceptable since they do not have certain property in command but they are commands that behave in a certain fashion where *agentive be* denotes a behavior and it is a process.

Pseudo-cleft constructions occur in non-states because they are associated with agency. Consider these examples:

- 14) a. What John did was build the cottage. (accomplishment)
- b. What the group members did was chat with each other. (activity)
- c. *What the couple did was be happy. (state)
- d. *What John did was recognize the lady standing in the door. (achievement)

In brief, agents have control and volition; accomplishments and activities may be agentive, but states and achievements are not agentive. Since, achievements and states are mental events that happen undeliberately unattainable by effort.

2.4 Parallelism between countability and boundedness

Smith (1997) reported that countability and boundedness are related. Bounded events resemble count nouns while unbounded events resemble mass nouns. Bounded events have distinct properties in their predicates that allow us to count them; for example, *a walk to the park* incurs a telicity of the event that the event culminates by reaching the park. Unbounded events do not have a culmination point or boundaries. For example, in *a walk in the park*, there is no definite endpoint. Similarly, mass objects do not have distinctive boundaries or definite forms, which would allow us to count them. Mass nouns such as *sugar*, *milk*, *water* and so forth do not have inherent quantity or outer form. They resemble unbounded events in being homogeneous. For instance, if you have a bottle of water and take a glass from it, the word *water* applies to the whole content in the bottle, glass and the rest. The same thing applies to unbounded events. For example, *Tom is asleep* describes the whole event as well as what holds in any stretch of time within that event. Unbounded events and mass nouns do not have inherent bounded form or quality. However, these properties can be modified by addition. Consider this:

- 16) a. a piece of chalk NP- bounded form
- b. a walk + to the library Event predicate bounded form

c. drew + a circle.

Bounded form

The determination of unbounded events relies on the nature of its object/affected theme. If its affected theme is a count object, the event turns to be an accomplishment. Otherwise, it is an activity. Consider these examples:

17) a. I wrote a letter to my mother. (accomplishment)

b. I wrote letters to my mother. (activity)

On the other hand, verbs which do not have an affected theme like *push* do not depend on their objects like the former verbs. These predicates remain atelic even if they are followed by bounded object.

18) a. He pushed the cart. (activity)

b. He pushed carts. (activity)

This phenomenon has been known as aspectual composition, especially when the telicity or atelicity of the event is determined by its following affected theme. Another example of this phenomenon comes from the effect of prepositional adjuncts on event predicates. Consider these examples:

19) a. She walked in the library. (activity)

b. She walked to the library. (accomplishment)

In Bhatt and Pancheva 2005, there is an initial treatment of these facts and see also Smith 1997, Verkuyl (1972, 1993) who use the feature [+/-ADD TO] and [+/-SQA] where both involved assigning lexical features to verbs, direct objects and prepositional phrases. The main features are telicity to verbs and countability to objects as well as specifying the nature of the prepositional phrases whether they indicate location or direction. For example, some verbs which do not have an effected theme are considered [-telic] such as *push* while others which have an effected theme like *draw* are [+telic]. Similarly, nouns such as *a circle/the cart* are [+count] while nouns like *circles/carts* are [-telic]. Along the same lines, prepositional phrases are assigned features like *in the park* [+location] while *to the park* [+direction]. The following system helps us to infer whether the event is telic or atelic:

20) a. [+telic] + [+count] → [+telic]

b. [+telic] + [-count] → [-telic]

c. [-telic] + [+/-count] → [-telic]

d. [-telic] + [+location] → [-telic]

e. [-telic] + [+direction] → [+telic]

In brief, the beginning of this distinction ascribed to an observation made by Aristotle. Linguists and philosophers suggested some classifications to explain the semantic variation that event predicates entail. The discussion of this paper mainly is based on Vendler's classification (1957), where he proposed four categories of event classes. The chief characteristics that determine his classification are: telicity (boundedness), atelicity (unboundedness), and change. Dowty (1972, 1979) and Bach (1980, 1986) suggested other classifications that involve a wider set of characteristics that will account for natural language grammars. It is likely that the classifying feature of boundedness, duration, and change are essential notions for analysing certain syntactic and semantic events.

3. Aspectual classes of verbs in Abyani Arabic

This section explores the aspectual classes of events in Abyani Arabic. This study shows many variations regarding states and accomplishments. In Abyani Arabic, states occur with both *in/for* adverbials but the meaning changes with *in* adverbial. However, in English, states occur only with *for* adverbials. Along the same lines, the telicity of accomplishments in Abyani Arabic is not affected by the occurrence of *in/for* adverbials, i.e. both *in/for* adverbials can occur with accomplishments and the event remains telic. Furthermore, Abyani Arabic shows some minor differences such as the dispensability with *for* adverbials with some events.

Abyani Arabic is pro-drop language; it is inflected for gender, number and person. Verbs in Arabic dialects demonstrate two morphological patterns, the so-called perfective and imperfective forms

(Aoun, *et al.* 2010). The perfective form is represented by the past tense while the imperfective form is represented by the present and future tense. Our purpose is mainly concerned with applying Vendler's classification to this language and investigating the aspectual properties of events. As was illustrated in the previous section, there are three syntactic criteria that can be used as diagnostics: tense and aspect criterion, agentivity as well as boundedness and unboundedness.

3.1 The application of syntactic tests on Abyani Arabic

3.1.1 The tense-aspect criterion

The progressive is used as a diagnostic to distinguish the linguistic behavior of verbs especially whether a verb denotes an inherently extended event or not. In English, this test is used to distinguish states from non-states. Accomplishments and activities can occur in the progressive while states and achievements cannot, as in:

- 21) a. Mary is eating an apple.
b. Mary is walking.

On the other hand, states and achievements cannot occur in the progressive, as illustrated in:

- 22) a. *He is loving her.
b. *I am reaching the top.

The distinction between state and non-state was first drawn by Lakoff (1966). A complete list of tests was given in Dowty (1979) based on Ryle (1949), Vendler (1957), Kenny (1963), Lakoff (1966), and others. In what follows, some of these tests will be applied to Abyani Arabic as a diagnostic to distinguish between states and non-states.

Fehri (1993) mentioned that locating situation in time is contributed by several elements such as verbal inflection, auxiliary verbs, modal and negative particles. Traditionally, tense in Arabic is viewed as having past/non-past distinction and tense specification on verbs must be compatible with temporal adverbs. The morphology of the verb can indicate past and non-past, especially present and future. Those tenses can be denoted by the presence and absence of particular prefixes. For example, *ya/ta* denotes the present tense, the lack of prefixes indicates the past tense and *sa* indicates the future tense. The auxiliary system in Arabic is not like English; therefore, the present progressive tense is not denoted morphologically on the verb. However, the reference to these aspects is expressed by the use of temporal adverbs. For instance, *al-aan* 'now' is used to indicate the progressive with dynamic verbs, but when it occurs with state verbs it does not provide a progressive interpretation. It is observed that state verbs cannot occur in the progressive in this dialect. Along the same lines, achievements do not occur with any temporal modifier indicating the progressive; they are ill-formed with *al-aan* 'now'. Consider the following sentences:

- 15) *ahabaha al-aan
love.1s. now
'I love her now.'
16) *yashbah abuu al-aan.
resemble.3s father-his now.
'He resembles his father now.'

States cannot occur with the temporal modifier *al-aan* 'now' to express a temporal reading and even if it occurs, it does not give a temporal reading. Achievements cannot appear in the progressive, as in (17):

- 17) *hih ta haselha al aan. (achievement)
she find.3sf now.
'She is finding it now.'

Activities and accomplishments do not incur any grammatical violations when they occur in the progressive:

- 18) yagry alaan. (activity)
run.3ms now.
'He is running now.'
- 19) yatqadda alaan. (accomplishment)
eat.3ms lunch now
'He is having his lunch now.'

3.1.2 Agentivity

Events require an agent to perform the action. As discussed above, certain tests are employed to distinguish agentive from non-agentive predicates, for example; adverbs like *carefully*, *deliberately*, verbs like *persuade*, the imperative and pseudo-cleft constructions. In what follows, these tests are applied to predicates in Abyani Arabic as a diagnostic.

Aqna□ = Persuade

Only accomplishments and activities can occur with the verb *persuade* in Abyani Arabic while states and achievements cannot.

- 20) *□aqna□ooh yahabha. (state)
persuade.3ms love her
'They persuaded him to love her.'
- 21) *□aqna□ah yat□araf ala sadiqah alqadeem. (achievement)
Persuade.3ms recognize on friend-his the old.
'He persuaded him to recognize his old friend.'
- 22) □aqna□hum yagru. (activity)
persuade.3pm run.
'He persuaded them to run.'
- 23) □aqna□aha tamshi la al-madrasah. (accomplishment)
persuade.3fs walk.3sf to the-school.
'He persuaded her to walk to school.'

It is clear that events in Abyani Arabic behave like English with respect to this test.

Bal□aani = deliberately

States and achievements cannot occur with *deliberately* whereas activities and accomplishments are well-formed with this adverb.

- 24) *bal□ani habbaha. (state)
deliberately love.3ms-her
'He deliberately loved her.'
- 25) *bal□ani faaz fi al-masabaqah. (achievement)
Deliberately win.3ms in the-competition
'He deliberately won the competition.'
- 26) bal□ani gara mail (accomplishment)
deliberately run.3ms mile
'He deliberately ran a mile.'
- 27) bal□ani gara (activity)
deliberately ran.3ms
'He deliberately ran.'

This test also shows that states and achievements are not agentive while activities and accomplishments are agentive.

Imperatives

Imperatives cannot appear with non-agentive predicates. Therefore, states and achievements are ungrammatical in the imperative form:

- 28) *hibbaha. (state)
love her
- 29) *hassil al-kitaab. (achievement)
find the book.
- 30) aktub al-rasaleh (accomplishment)
write the letter
- 31) tanafas basur□ah (activity)
breathe fast

Pseudo-cleft construction

Pseudo-cleft constructions show a slight difference where only states cannot appear in this construction, but other events including achievements can.

- 32) *aish alli amaluh annuhum sa□adu (state)
what that do.3pm that they be happy.
'What they did was to be happy.'
- 33) aish alli □amaluh annuhum waqafu (achievement)
what that do.3pm that they stop.3pm
'What they did was stopping'
- 34) aish alli □amalatah annaha nadafat al-hamam. (accomplishment)
what that do.3pm that-she clean.3pm the bathroom
'What she did was cleaning the bathroom.'
- 35) aish alli □amalalooah albanaat annahom takalamu. (activity)
what that do.3pm the girls that talk.3mp
'What the girls did was talk.'

3.1.3 Duration and Boundedness

The test of duration and boundedness is considered to be one of the syntactic tests targeting the aspectual properties of events. It shows whether these events have a terminal point. In English *in* adverbials fix the time point provided by the event within the started interval, for instance, *in a week* or *in an hour*, etc. On the other hand, *for* adverbials modify the duration of events, such as *for an hour*, *for a month*, etc. I attempt to apply these tests to Abyani Arabic and note down the variations between the two languages. It is observed that *for* adverbials cannot occur with the just the past tense as in English but it is associated with the verb *galas* 'stayed' which indicates duration.

3.1.3.1 States

English state verbs are ungrammatical with *in* adverbials. They occur only with *for* adverbials. Conversely, in Abyani Arabic state events may also take *for* adverbials as well as *in* adverbials but with a slight difference in meaning. For example, *hub* 'love' when it occurs with *in* adverbials it expresses a different meaning, as in:

- 36) habu ba□dahum fi asboo□
love.3pm each.3mp in a week.
'They fell in love with each other in a week.'

This sentence is interpreted as that they started feeling love for each other in a week, an inchoative reading. The verb morphology does not change but the meaning is modified when it is attached to *in* adverbials. (37) express a state but the preposition *for* is sometimes dispensable with state events in Abyani Arabic.

- 37) galasu yahabbu ba□dh lamudat/ sanah.
stayed.3mp love.3mp each (PI) for period year.
'They stayed in love each other for a year.'

The verb *galas* and the adverbial *lamudat* together describe a state of love that continued for one year. The behaviour of this verb resembles to some extent the behaviour of the verb *know* in Malayalam as the verb

submits to a morphological change to give a different reading. Consider this example from Malayalam.

- 38) a. ari y-u ka.
 know- infinitive
 'To know.'
 b. enikka ata ariy aam. (state)
 I-DAT that know-MOD
 'I know that.'
 c. ñaan ata ari-ññu (eventive)
 I that know-PAST
 'I got to know that.'

In Malayalam, the verb *know* is stative but it becomes eventive when it is attached to the suffix *ññu*. Similarly, *love* in Abyani Arabic is stative but when it occurs with the *in* adverbial, an inchoative reading is provided. The eventive *know* in Malayalam and *love* in Abyani Arabic undergo a shifted interpretation because of the morphology of the verb in Malayalam and the temporal *in* adverbial in Abyani Arabic.

Some state verbs like the perception verb *fahim* 'understand' in Abyani Arabic can be stative and achievement depending on the context.

- 39) fahim al-dars
 understand.3ms the lesson
 'He understood the lesson.'

This sentence describes a mental state. This verb is incompatible with the durative temporal adverb *lamudat sa□ah* 'for an hour' which means that states cannot always be durative.

- 40) *galas yafahim al dars lamudat sa□ah.
 stayed.3ms understand.3ms the lesson for period hour.
 'He understood the lesson for an hour.'

The occurrence of the *in* adverbial with this verb shifts the verb from state to achievement.

- 41) fahim al dars fi sa'ah.
 understand.3ms the lesson in hour
 'He understood the lesson for an hour.'

Eisele (1990) argued that this verb in Cairene Arabic is ambiguous between stative reading and inchoative reading; he described this type of verbs as polysemous stative that have stative inchoative reading. In Abyani Arabic, *fahim* behaves like an achievement verb when it co-occurs with the temporal adverbial *fi sa'ah* 'in an hour' which gives an inchoative reading. Bhat and Pancheva (2005) mentioned that perfective morphology and telicity can coerce states into achievements (inchoative). In (41), the *in* adverbial that contributes telicity coerce the state verb *fahim* into an achievement verb. In sum, duration and atelicity are not lexical properties of state verbs in Abyani Arabic but properties assigned to the entire structure.

3.1.3.2 Activities

Activities in English are described as atelic, durative and dynamic events. Activities in Abyani Arabic behave like their counterparts in English in some places but they differ in other places. Consider these examples:

- 42) a. ??hafar alqabr lamudat sa□ah.
 dig.3ms the grave for period hour
 'He digged the grave for an hour.'
 b. galas yahafur alqabr lamudat sa□ah.
 sit.3ms dig.3ms the grave for period hour
 'He was digging the grave for an hour.'

It seems that the durative adverb *lamudat sa□ah* occurs only with the imperfective that expresses continuity of the action that explains why (42a) is unacceptable.

- 43) a. hafar alqabr fi sa'ah.
dig.3ms the grave in an hour
'He digged the grave in an hour.'
b. *hafar qabuur fi sa'ah.
dig.3ms graves in an hour

'He digged the grave in an hour.'

(43 a) is an accomplishment verb and the bounded object determines the telicity of the sentence. While (43 b) is ungrammatical because object is not bounded.

- 44) galas yasabah fi al-baheerah (lamudat) sa'ah
stayed.3ms swim.3ms in the lake for period hour.
'He swam in the lake for an hour.'

It is also observed that the verb *yadhaf* 'push' that is always an activity verb in English behaves differently in this language. *Yadhaf* is coerced into achievement when it occurs with *in* adverbial. Consider these examples:

- 45) galas yadahaf al'arabah lamudat sa'ah
stayed.3ms push.3ms the cart for period hour
'He pushed the cart for an hour.'
46) dahaf al'arabah fi daqiqah
push.3ms the cart in minute
'He pushed the cart in a minute.'

Sentence (47) is an activity; it is interpreted as a process and durative where the process of pushing continued for an hour. While sentence (48) means that pushing is an achievement that does not take duration so it is momentous and telic. Two points are observed through the behaviour of this verb. First, in English, as mentioned above, *push* remain atelic even if it is followed by a bounded object, but in Abyani Arabic it does not. Second, the completive adverbial *in* coerces the verb from an activity into an achievement where pushing here means moving the cart from a position to another. This behaviour indicates that some aspects of aktionsart are structural, i.e. specifying the aspectual feature of the sentence is not completely dependent on the lexical verb but it is a feature endorsed to the entire structure. This view is discussed in Borer (1998,2005), Ramchand (1997, 2003), Kratzer (2004) and others.

3.1.3.3 Accomplishments

Accomplishments differ in that they consist of a process leading up to a culmination or an end point, or outcome. These events permit only *in* adverbials in English. Accomplishments in Abyani Arabic behave in a similar way to English. Consider these examples:

- 47) a. katab al resalah fi daqiqah.
write.3ms the letter in minute.
'He wrote the letter in a minute.'
b. *katab al resalah lamudat sa'ah.
write.3ms the letter for period hour.
'He wrote the letter for an hour.'
c. galas yakatub al resalah lamudat sa'ah.
stayed.3ms write.3ms the letter for period hour.
'He wrote the letter for an hour.'

(47a&b) shows that accomplishments occur with *in* adverbials but it cannot with *for* adverbials. However, the co-occurrence of *for* adverbial with the verb *galas* can shift interpretation of the event from accomplishment into activity. The ungrammaticality of (47b) is not because the accomplishment verb cannot co-occur with *for* adverbial but it is because the perfective form of the verb and the adverbial *for* cannot co-occur. It is worth noting that *for* adverbial in this contexts cannot solely trigger a shifted

interpretation in which the event can be interpreted as atelic. Atelicity is contributed by the verb *galas* and the *for* adverbial together.

There are some verbs like the verb *hafadh* 'memorize' that expose a different behaviour when used with *for/in* adverbials. That is, the adverbials do not affect the telicity of the event.

- 48) hafadh al_dars fi sa□ah
memorize.3ms the lesson in hour
'He memorized the lesson in an hour.'

This sentence means that it took him an hour to memorize the lesson. While sentence (49) does not mean that he spent an hour memorizing the lesson but it gives a different interpretation and the telicity of the event is not influenced.

- 49) galas yahafadh al dars lamudat sa□ah.
stayed.3ms memorize.3ms the lesson for period hour.
'He memorized the lesson for an hour.'

(49) means that he spent an hour memorizing the lesson, but the action is not accomplished. In sum, *galas+for* adverbial can trigger a shifted interpretation of accomplishments into activities.

3.1.3.4 Achievements

Smith (1997) states that achievements are instantaneous events that result in a change of state, and they are characterized as dynamic, telic and instantaneous. Consider this example in English;

- 50) They reached the top.

(50) is instantaneous and telic. Iterative readings are not very plausible with achievements. Verbs like *die*, *reach*, *find*, *lose*, *disappear* are examples of achievements. These verbs cannot take any duration. In Abyani Arabic, achievements exhibit a similar behaviour to their counterparts in English. Consider these examples:

- 51) *hasal almaftaah lamudat daqeeqah.
find.3ms the key for period minute.
'He found the key for a minute.'
- 52) *galas yasal al-beet lamudat sa□ah
stayed.3ms arrive.3ms the house for period hour.
'He arrived home for an hour.'

Hassal 'found' and *wasal* 'arrived' are instantaneous and telic and they cannot trigger a shifted interpretation as shown by the examples above where the occurrence of the durative adverbial with these verbs makes the sentences unacceptable. However, some verbs such as *dhayya* 'lost' and *akhtafa* 'disappeared' can take duration and have a shifted interpretation besides their instantaneous reading as shown below:

- 53) galas gawazah daya□ lamudat shaher.
Stayed.3ms his passport lost for period month.
'his passport was lost for a month.'
- 54) galas makhtafi lamudat sanah
stayed.3ms disappeared for period year.
'He disappeared for a year.'

The events in the above two sentences can take duration where the period of losing the passport in (53) took a month and the duration of disappearance in (54) took one year. These examples show that achievements in Abyani Arabic can trigger a shifted interpretation into states. It is worth noting that only some achievement verbs can trigger a shifted interpretation as shown by the examples in this subsection while others cannot. That is, verbs in examples (51&52) cannot submit to a shifted interpretation. Which means that achievements require another subsection or classifying verbs into four classes is not sufficient.

4. Conclusion

The discussion shows that aspectual classes in Abyani Arabic show many aspects. It is not sufficient to classify verbs strictly into four classes because it is not only the verb that determines the aspectual feature of the sentence. This feature is structural rather than lexical. The Vendler's classification may account for a group of verbs but not for all. Some verbs within a particular class can shift interpretation from state to achievement or from activity to accomplishments or vice versa while some verbs cannot shift interpretation. It is shown that telicity and the object (bare plurals, (in)definite NPs) play a role in shifting interpretation and determining the aspectual feature of the sentence. In conclusion, the aspectual feature of the sentence is not only determined by the lexical feature of the verb but it is contributed by other elements in the sentence.

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