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Vit Bubenik, John Hewson
Memorial University of Newfoundland

Osama Omari
Yarmouk University
Irbid

TENSE, ASPECT AND AKTIONSART IN ARABIC

A number of specialized studies of tense and aspect in Semitic languages are available (Cohen 1989, Eisele 1999, 2005, Fleisch 1957, Kuryłowicz 1973, Woidich 1975, and others) with due attention paid to Arabic. This article examines these categories in Arabic in terms of a range of recent studies of verbal systems in Indo-European and Niger-Congo (Hewson & Bubenik 1997, Hewson and Nurse 2002, 2005, Nurse, Rose, and Hewson 2010). It addresses some of the theoretical problems surrounding the use of the terms "perfect" and "perfective" and the suitability of the latter term for Semitic linguistics. It discusses the appearance of the analytic "double-finite" forms of Arabic (of the type *kuntu katabtu* 'I had written'), the rise of the Progressive and Habitual aspects, and the role of the particle *qad*. Finally, a variety of serial constructions are examined in spoken Arabic (Algerian, Moroccan, Egyptian, Syrian, Jordanian, Palestinian and Saudi), focusing on the grammaticalization processes of regional varieties of Arabic.

Introduction

This article has two main purposes. The first is to compare the Tense-Aspect system of Arabic with such systems in other language families and phyla, and to reduce, as far as possible, confusions of terminology. The form that represents complete events in Semitic languages, for example, has been called sometimes Perfect and sometimes Perfective, but its usage is quite different from that of Perfects and Perfectives elsewhere in the world. Comrie comments (1976:78) apropos written Arabic, that the terms Perfect and Perfective do not

have the same meaning as when they are used in Slavic and elsewhere. Likewise it is argued by Cohen (1989) that the term *Perfective* for aspectual contrasts in languages as diverse as Slavic, Greek, and Arabic is unsatisfactory.

The second purpose is to present an overview of the development of synthetic aspectual forms (i.e. with auxiliaries) in modern Arabic, introducing a wide range of data from the regional vernaculars, using the categories and nomenclature established in Sections 1-3.

1. Theoretical considerations

Most linguistic studies on tense and aspect in the twentieth century were based on proposals by the positivist philosopher Reichenbach (1947) for whom the tenses and aspects of human languages formed a nomenclature to refer to moments on the "line of time", an imaginary line which represented the past, the present and the future, as in (1) where S represents the moment of the Speech Act, the space to the left the past, and the space to the right the future. There is also an arrow to indicate the movement of time from left to right (1947:290)
(1)

S

----------|---------->

Our understanding of time, however, has been considerably altered in the 75 years since Reichenbach's "line of time", by scientific research in a variety of fields. Reichenbach's S, as becomes a positivist philosopher, was supposed to represent the "point of speech", an empirical reality. But there is no such empirical reality, for two reasons: (1) there is a difference of time between the beginning and the end of an act of language, and (2), an even more serious objection, there is a difference of time between the speaker and the hearer, essential poles of any act of language. On the television screen, in reports coming in from the far reaches of the world, for example, there are occasions where the reporter on the screen is still listening to the question the listeners at home have already heard. The "point of speech" is not a static position, a point on Reichenbach's Line of Time. In 20th century science, anyone occupying a different space, even in the same room, necessarily also occupies a different time zone.

Positivists also treat languages as different nomenclatures for things and events in the real world. Psychologists and linguists, however, have realized that we do not talk about the real world directly: we can only talk about our perceptions of the world. We do not have a God's-eye-view of the world; we can only talk about what we have perceived, remembered, and imagined: the major function of language is, consequently, to represent the product of cognitive processes: of perception, memory, and imagination.

Time, consequently, is not an imaginary abstraction, a position on an imaginary line, but a personal experience that is ongoing and empirical, as demonstrated by George Miller in his research (1956) on measuring the Working Memory[1], an automatic cognitive function that allows us to repeat what has just been said. The present of a speech act is the mental time of the speaker or writer (which includes the empirical operation of the Working Memory): if a letter takes days to reach its addressee, the *now* of the letter represents the time when it was written, the mental time of the writer, which is a measurable part of the world of experience.

The Working Memory, our empirical experience of time, records each moment of the present as it occurs, keeping this recording accessible for a few seconds, as the content of the Working Memory continues its journey further into the past, to the deeper levels of memory. The empirical flow of time, as experienced by human beings, is from the present into the past, not from the present into the future. In terms of twentieth century science, Reichenbach's arrow is a naive over-simplification, based on the assumption that time on the clock, which moves forward, is real time.

The stop watches that time the speed of runners, however, measure only what the runner has done; they only measure the past. *The materiality of time, and the human act of measuring or using time, run in opposite directions*. Confronted by the materiality of time, the time which works in the mind recording the stream of consciousness (whether we like it or not) human beings are inescapably passive; we shall call this Descending Time. But in all our creative mental activity, the mind works forward through time, into the future, as we do in creating a sentence; we shall call this Ascending Time. It is normal for tense and aspect systems to represent both of these human experiences: the experience of time, and of the activities that use time.[2]

In Hewson and Bubenik (1997:3-4) it was observed that all movement is perceived as a contrast between figure and background: either the movement of figure against background, or of background against figure, using the analogy of a strip of film as it records activities. The film moves through the camera in the opposite direction to the activity being recorded, as in Figure 1, where X marks a frame that has been exposed, and the symbol ☼, representing exposure to light, marks the frame

[1] Not to be confused with the Short Term Memory; see Baddeley, "Short-Term and Working Memory " (2000). The Working Memory is a cognitive mechanism that allows us to review what has just happened or just been heard. It allows us to repeat verbatim what has just been said, up to a limit of 7 (∓2) units of information, normally a matter of less than five seconds.

[2] In surveying the Tense/Aspect systems of the 12 Indo-European families (Hewson and Bubenik 1997), for example, five families were shown to have two tenses in DT (Albanian, Armenian, Greek, Slavic, Tocharian), another four had two tenses in AT (Germanic, Hittite, Modern Indic, Modern Iranian), and three others had more complex tense systems (Baltic, Celtic, Italic), with tenses in both AT and DT.

open to the lens, the moment of immediate experience The omega field represents the moments of DT, and the alpha field represents the moments of AT.

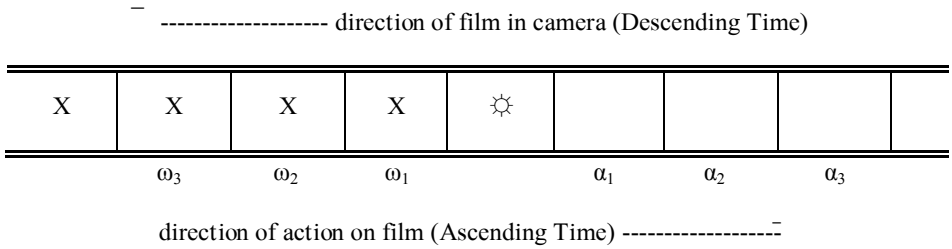

Figure 1:The contrast of Ascending and Descending Time: the film analogy

This double experience of time has been noticed by others (e.g., Benveniste 1965, Fillmore 1975, Traugott 1978), using such terms (Clark 1973:35) as 'moving-ego' (Ascending Time) vs. 'moving-world' (Descending Time) or 'moving-ego' vs. 'moving-time' (Fleischman 1982:324). Lakoff & Johnson, in their book *Metaphors We Live By* begin their ninth chapter with the observation (1980:41) that there are "…two contradictory organizations of time. In the first, the future is in front and the past behind … In the second, the future is behind and the past is in front". In short, much linguistic commentary reflects an awareness of the binary nature of temporal experience. Researchers in Cognitive Linguistics (e.g. Gentner, Imai, and Boroditsky (2002) which shows that English native speakers comprehend ego-moving metaphors faster than time-moving metaphors) have continued to use Fleischman's *moving ego* versus *moving time* as metaphors for AT and DT.

We also note that the data on the strip of film may be examined in two ways: (1) it can be run through a projector, which gives an automatic rerun of whatever was filmed, the film in the projector running in the opposite direction to the action it presents on the screen, or (2) it can be examined frame by frame to see how the action unfolds, which is not a rerun, but an examination of the *phases* of the action on the film. This difference reflects an important distinction between DT (the rerun in experiential time, the moving background) and AT (the phases of the event, especially the beginning, the middle, and the end, the moving figure moving through the phases.

1.1. Distinguishing Tense from Aspect

Aspect is found in Child Language from the very first beginnings of speech. Tense comes at least a year later, and tense contrasts (in languages that have

them) even later. One of the most frequent first words of an English speaking child is "Gone" or "Allgone", a recognition that some events in the never ending stream of the present do in fact come to completion. This first lexical utterance is also a grammatical utterance, part of a fundamental binary contrast: the present by its nature is Imperfective, and events that come to completion in the stream of time are then linguistically represented as Perfective (in this case English *gone*) and markedly different from the stream of the endlessly incomplete present.[3]

The contrast between these two forms in Descending Time (PFV and IPFV) is found all over the globe in the world's languages, and because this is a simple binary contrast between an event in progress, and one which has arrived at its completion, both of them represent the fundamental empirical experiences of the Working Memory. We can represent the relationship of these two forms schematically as follows:

(2)

Imperfective	[<————X- - - - - - - -]
Perfective	[<————————————X]

The square brackets represent the beginning and the end of the event. The solid line segment of the Imperfective represents that part of the event which is already complete in Memorial Time, already recorded in the Working Memory of the subject, represented by X. The dotted line segment then represents the incomplete part of the event, the part that remains open to completion.[4] In the Perfective there is no dotted line, the event has arrived at completion and the subject is consequently represented as having arrived at the conclusion of the event. In short, the way that the Perfective (the Imperfective that has now been completed) is configured in the memory gives a representation of the closure of the event, a fact that may be observed in its usage (see below). It should be noted, furthermore, that the Imperfective is normally the unmarked form of the two, and the Perfective the marked form: in Slavic languages, for example, a Perfective can typically be derived from an Imperfective by the addition of a perfectivizing preverb, as in Russian *on pisal* "he was writing" and *on napisal* "he wrote".

1.2. The five cardinal positions of aspectual forms

These diagrams also enable us to demonstrate the difference between Tense and Aspect, since Aspect is the representation of the time involved in the

[3] The contrast is dramatically illustrated by the auctioneer's "Going, going, going … Gone!"

[4] The French terms *accompli* and *inaccompli* are useful here: the Imperfective has both *accompli* and *inaccompli*, whereas the Perfective has only *accompli*.

event, Event Time, for which there are five cardinal positions, as in (3), a diagram originally presented in Hewson and Bubenik (1997:14).[5]

(3) **A [B----------C----------D] E**
Prospective [Inceptive Imperfective Perfective] Retrospective

Position A is the view of the event before it begins, traditionally called Prospective (Comrie 1976:64). B represents the very beginning of an event; C an event in progress, and D an event that has reached its completion. Position E, a retrospective look at the completed event from its result phase was traditionally called Perfect, a Latinate term now avoided by linguists because of a continuing confusion between Perfect and Perfective. The term Anterior has been used as a substitute, but it is confusing since the result phase (the cardinal position **E**) is actually *posterior* to the event. Comrie, in introducing the Prospective aspect (1976:64) notes, in fact, that "The perfect is retrospective, in that it establishes a relation between a state at one time and a situation at an earlier time", a comment on the parallelism between A[B and D]E that can be seen in (3) above. Consequently, in place of *Perfect* and *Anterior*, we shall use the more descriptive term *Retrospective*,[6] the natural counterpart of *Prospective*.

All five positions in (3) can be illustrated with forms from English, if we use both finite and non-finite forms, as in (4), with the two exterior positions represented by compound forms, and the three internal positions represented by single forms.

(4) A We know the rope *will break*
B We saw the rope *break*
C We saw the rope *breaking*
D We saw the rope *broken*
E We know the rope *has broken*

What is of interest here is that the infinitive *break* in B and the past participle *broken* in D both represent complete events, from two different perspectives, that will be examined in the next section: the form in B represents the whole event from beginning to end, in all its phases, while the form in D represents the completion of the event, as described above in 1.1. There are interesting parallels: (i) the infinitive *break* is used in both A and B (on both sides of the initial threshold); (ii) the participle *broken* is used in both D and E (on both

[5] In phonology such diagrams represent the interrelationship of the elements of a single system (as in the diagram of the eight cardinal vowels), and demonstrate the systemic values that stem from each position.

[6] See also Jespersen (1924:269), on the Present Perfect: "… it may be called a retrospective variety of the present".

sides of the final threshold). It should also be noted that the finite forms (with auxiliaries) are used for the external positions, while the non-finite forms (two participles and infinitive) are used for the internal positions.

2. The Fundamentals of Aktionsart

The cardinal positions of grammatical aspect also apply to lexical aspect, normally called Aktionsart.[7] But the lexical representation of events has a quite different rationale: an activity such as *jump*, for example, has a beginning (leaving the ground), a middle (movement through the air), and an end (returning to the ground): all such representations follow the action, which may have four possible phases: a beginning, a middle, an end, and an ensuing result phase, as in (5), where we follow Vendler's description (1967) of the four types of Aktionsart: States, Activities, Accomplishments, and Achievements.

(5)

1 [X----------->]	State	Monophasal
1 2 [X-----------> ----------> - - - - - -]	Activity	Biphasal
1 2 3 [X-----------> ----------> ---------->]	Accomplishment	Triphasal
1 2 3 4 [X-----------> ----------> ---------->]---------->	Achievement	Quadriphasal

States:	live, stay, like, want, know, see, hear, sit, stand, lie
Activities:	walk, talk, speak, run, fly, do, write, eat, laugh, tremble
Accomplishments	jump, give, tell, put, kick, strike, go, come, arrive, leave
Achievements	create, erect, design, make, complete, pronounce, emit

Many verbs have allosemes that take them into a different category: *sit, stand, lie*, for example, become Accomplishments in *sit down, stand up, lie down*. Many Activities when accompanied by a Direct Object also become Accomplishments: *do the washing up, eat an apple, write a letter*. When said of a human being or an animal, *run* is an Activity, but when said of a river, it becomes a State, because all phases of the event are then identical, whereas in human running there is stopping and starting and phases called *strides*. *Flow*, a stative lexeme, is a more appropriate representation than *run* for the movement of a river.

The most important observation is that all these lexical representations of events involve AT and the concomitant phases that are typical of representations

[7] A German word which means 'kind, or type, of action'.

in AT. It is also important to note that States, in AT, are *complete* from the very *first* moment: since every moment is identical to every other moment, a State has only one phase, which is complete from the very first moment. States in DT, by contrast, being incomplete in time, are always *incomplete* until the very *last* moment, a diagnostic for distinguishing Perfectives from Performatives: states that are represented by Performatives in English (and Germanic languages in general) turn up as Imperfectives in Slavic and other languages: *he knew* (PFM)/ *on znal, il savait* (IPFV); *she likes* (PFM)/ *ona lyubit, elle aime* (IPFV); *the house stood* (PFM)/ dom stoyal, la maison se trouvait (IPFV).

3. Ascending and Descending Time in the languages of the world

In the memory, as we have seen, time (empirical time) is DT; it flows from the future through the present into the past. In the imagination (as opposed to the memory), time is AT; it runs from the present into the future. When rehearsing the meaning of a lexeme such as *jump* in our imagination, we work in AT, beginning with movement into the air, and ending with the return to the ground. When we look at human languages as instruments of cognition, we must expect both of these different experiences of time to be represented in different ways.

In the survey of Indo-European languages (Hewson and Bubenik 1997), we noted (see footnote 2) that of the 12 language families involved, five had 2 tenses (Past and Nonpast) in DT; four had the same two tenses in AT, and three groups had three or more tenses in both AT and DT. After much discussion of the substantial contrasts between the two types of completive and incompletive forms (as in (6) below), it was decided to call the completive form in AT (as in English) a Performative, for the following reasons: (1) it is always used in Performative function (*I promise, I agree, I refuse, I object, I admit you, I appoint you, I insist, etc.*) where the Perfective may *not* be used, and (2) it always represents the complete performance of all phases of the event, whether the event be (a) multiphasal (*I ran, I jumped, I built the house*), where Slavic languages use the Perfective, or (2) monophasal, stative (*I knew, I wanted, I lived, I sat, stood, waited, remained*), where Slavic languages typically use the Imperfective, not the Perfective.

Where English has two tenses in AT, for example, Russian has two tenses in DT, as in (6). It is notable that the base form in English is Completive, and the derived Incompletive a marked form; whereas the base form in Russian is Incompletive and the derived, marked form, is Completive: each system is a mirror image of the other, as in (6a). The Progressive is the marked form in English, and the Perfective the marked form in Russian. Likewise in (6b), with a stative verb, the Performative must be used in English, and the Imperfective in Russian (the Perfective *uznál* means “he found out”, not “he knew”).

(6)

			COMPLETIVE	INCOMPLETIVE
a.	English	AT	he wrote (PFM)	he was writing (PROG)
	Russian	DT	on napisál (PFV)	on pisál (IPFV)
b.	English	AT	he knew (PFM)	he *was knowing (PROG)
	Russian	DT	on *uznál (PFV)	on znal (IPFV)

There is extensive evidence that there are major differences of distribution between Perfective and Performative, on the one hand, and between Progessive and Imperfective on the other, as outlined in Figure 2 (Hewson 2012:517), which shows these four grammatical aspects in the vertical parameters, and a variety of Aktionsarts and functions in the horizontal parameters.

	PFV	PFM	IPFV	PRG
Complete Activities	**Yes**	**Yes**	No	No
Complete Achievements	**Yes**	**Yes**	No	No
Statives	No	**Yes**	**Yes**	Sometimes
Performative function	No	**Yes**	**Yes**	No
Instant presents	No	**Yes**	**Yes**	No
Habitual function	No	**Yes**	**Yes**	Sometimes
Proverbs	No	**Yes**	**Yes**	No

Table 1: Distribution of Forms in AT and DT

3.1. Review of terminology

In using the terms *Perfective*, *Imperfective*, *Performative*, and *Progressive* in Table 1 above, we have endeavoured to be as faithful as possible to the terminology established for aspectual studies in the past century. Our use of *Perfective* and *Imperfective*, for example, follows the usage of Roman Jakobson, who introduced Slavic aspectology to Western Europe (1933), and established these terms as appropriate for the two tenses in DT that are typical of Eastern and Western Slavic languages (Hewson and Bubenik 1997:283ff). The term *Progressive* is also used in the sense that has always been commonly agreed on as a compound form (analytic aspect) typically made up of a verbal auxiliary + verbal (English *is eating*), or aux + preposition + verbal (Irish *tá sé ag labhair* is-he-at-speak 'he is speaking').

The term *Performative*, on the other hand was our 1997 solution to a perennial problem. The forms in English (*talk/talked, speak/spoke, put/put*) were always called the Simple Forms by the English grammarians, a term normally used also by Comrie, who only used the term *Nonprogressive* (1976;25) in an attempt to name an aspect with an extraordinary range of usage. This term is dysfunctional in other Germanic languages, however, where only Icelandic, like

English, has a grammatical Progressive. Welmers (1973:345-348) writing on African languages, where the Performative is a common aspect in Niger-Congo (found in 20 of the 21 languages analyzed in Nurse, Rose, and Hewson 2010), suggested the form be called Factative because "the construction expresses the most obvious fact about the verb in question". There are two difficulties here: (1) there is confusion with the term *factitive* which is in the dictionary whereas *factative* is not, and (2) Progressives "it is raining" and Imperfectives "il pleut" also express the "most obvious fact about the verb in question".

Other linguists (e.g. Smith 1997) use *Perfective* for both Perfective and Performative, which is not acceptable when the distinctive distribution of each form can be laid out schematically as in Table 1 above. The term *Performative* was adopted because it is used with considerable frequency in English in the performative function, where the use of the verb form is the performance of the event itself: *I resign, I protest, I admit, I apologize, I claim, I propose, I refuse*, etc., where *I am resigning*, etc., is not a resignation. And finally, as a completive aspect, it represents the complete performance of all phases of the event, whether the event be monophasal or multiphasal: *he knew* (1); *he ran* (2); *he jumped* (3); *he arrived* (4).

4. The paradigmatic forms of Classical Arabic

When we examine the two major paradigms of the Arabic verb, as in (7), it is notable that the prefixed forms of the *yaktubu* paradigm are used to represent events in the ongoing present, and the suffixed forms of the *kataba* paradigm are typically used to represent the past, so that *yaktubu* is normally translated as "he is writing", and *kataba* as "he wrote". In these paradigms we have labeled the *kataba* paradigm as Performative and the *yaktubu* paradigm as Imperfective, categories that we shall justify in the paragraphs that follow.

(7)

		PERFORMATIVE	IMPERFECTIVE
Singular	3 masc.	kataba	yaktubu
	fem.	katabat	taktubu
	2 masc.	katabta	taktubu
	fem.	katabti	taktubīna
	1	katabtu	ʔaktubu
Dual	3 masc.	katabā	yaktubāni
	fem.	katabatā	taktubāni
	2	katabtumā	taktubāni
Plural	3 masc.	katabū	yaktubūna
	fem.	katabna	yaktubna
	2 masc.	katabtum	taktubūna
	fem.	katabtunna	taktubna
	1	katabnā	naktubu

In the PFM paradigm the categories of person-number-gender are marked by cumulative suffixes; the categories of person-number are marked by prefixes in the IPFV paradigm: for these inflections the PFM paradigm (in Ascending Time) is the mirror image of the IPFV paradigm (in Descending Time). The PFM has no other markings, but the IPFV has suffixes which give an indication of function: without suffixes the bare stem represents possibility, and is used with a jussive function: *yaktub* (see below, 5.1)

4.1. The Vast Present

Tense normally arises in Child Language when the child uses a finite Imperfective form to represent the experiential present, the here-and-now;[8] in this way the whole of Universe Time becomes a single tense, in which the past is represented by completive forms (e.g. Perfectives or Performatives), because any event that is materially complete in the Vast Present must necessarily be in the past, in memorial time, time coeval with the memory.

This basic (apparently universal, see Antucci and Miller 1976; Bloom et al 1980) system is then further elaborated in different ways: with further aspectual contrasts, or with tense contrasts, or with both.[9] In Arabic, as we shall see, the single tense, the Vast Present, is maintained, and further developed with a variety of aspectual formations.

It is clear, in fact, that the system commonly found in Semitic languages has an Imperfective in DT that is used as a (Vast) Present tense, corresponding with a Performative in AT, that is normally used to represent the past, especially with Active (i.e. non-Stative) verbs, but is found with present meaning in performative function (Mughazy 2008), and also in proverbs which typically represent stative situations.

4.2. The performative and stative usage of the Arabic *kataba*-form

Since scholars (Comrie 1976; Cohen 1989) have noted that the usage of the *kataba*-form is different from that of a Perfective, it is important to examine the distribution of this form in the functional categories outlined in Table 1 above. In the performative *function* the verb itself represents the performance of the act, as in *I resign*, as opposed to *I am resigning* (which only indicates intention, and not the act of resignation itself). Neither the Progressive nor the Perfective can be used in this function, which requires either a Performative (as in English,

[8] This normally occurs in English Child Language with the *–ing* participle: *I playing, I swimming*. This form is replaced by the Progressive when tense contrasts develop.

[9] From currently accessible data it can be stated that aspectual contrasts are a linguistic universal, but not all languages have tense constrasts. Chinese, for example, has a Vast Present, with past, present, and future represented aspectually (Xiao and McEnery 2004).

and Germanic languages in general) or an Imperfective (as in Czech, and Slavic languages in general). A large number of verbs can be used in performative function: *I insist, I resign, I agree, I apologize, I regret, I appeal, I object*, etc.

Arabic, being different from Indo European languages in having both a Performative and an Imperfective, may use either one or the other in performative function. Mughazy, in an interesting demonstration of performative expressions in Arabic (2008:570) gives examples of both forms used in performative function, as in (8). In English, which has no Imperfective finite forms, both verbs would be Performative; in Czech, which has no Performative, they would both be Imperfective. English Progressives and Czech Perfectives can not be used in this function.

(8)	a.	ana	a-ʕtariḍ	(IPFV) 'I object!' (lawyer's intervention)
		I	1SG+object	
	b.	qabil-t-u	z-zawāj	min-ki (PFM) "I accept to marry you"
		agree+1SG	the=marriage	from=2/SG/F

A similar distribution shows up in proverbs, which typically have Performative forms of the Nonpast tense in English, and Imperfective forms of the Nonpast in Czech, as in (9).

(9) a. idā ḥaḍarat al-malāʔikah ġābat aš-šayāṭīn
when appear+PFM+3/SG/F the-angels disappear+PFM+3/SG/F the-devils
'When angels appear, devils disappear (Elkhadem 1993:9)

b. ēš mā ṭabaxat al-ʕamiša li-zawjatihā bi-yataʕaššā
what what cook+PFM+3/SG/F the half-blind to husband=her IND=3/SG/M+sup
'Whatever the half-blind wife cooks for her husband, he sups it' (Burckhardt 1972:43)

c. xayr an-nās man faraḥ li 'n-nās bi 'l-xayr
good the=people who rejoice+PFM to the=people in the=welfare
'He is chosen of the people who rejoices in the welfare of others' (Burckhardt 1972:246)

In these examples, the *kataba*-forms have present, not past reference. There is no way that such forms can be described as past tense.

5. The analytic Retrospective (traditionally *perfect*) in Arabic

As a lexical verb *kāna* is the verbum existentiae 'be; exist; occur' which has to be used for equational predication in the past: *kāna 'l-kitābu* (Nom) *jadīd-an* (Acc) 'the book was new' (versus copula-less predication in the present *al-kitāb-u jadīd-un* (Nom) 'the book is new'. In its lexical meaning of 'existing, occurring' *kāna* allows for derivatives such as the causative (*kawwana* 'create, form', *takwīn* 'formation, creation') and the causative-reflexive (*is-ta-kāna*

'become humble, humble oneself'). As will be shown in Sections 5 and 6 its grammaticalization as an auxiliary provided Arabic (and Gəʕəz) with means to create its analytic retrospective aspect with *kāna* assigning the event unambiguously to the past time zone: *kāna kataba* 'he had written' (Gəʕəz *kona kataba* < *kaw(a)na). To appreciate this point we may remind ourselves of the state of affairs of Akkadian (representing the Old Stage of Semitic) and Middle Hebrew and Aramaic. The cognate root KWN, Akkadian *kânu*, possessed lexical meaning 'be strong, just' (adjective *kî/ênu* 'legitimate'). The Akkadian verbum existentiae *bašûm* 'exist' is documented in the imperfective *ibašši* 'he is' (and the stative *baši* used in the same meaning) but the expected perfective/modal form *ibšû < *ibši-ū* 'he was' is not documented (see von Soden 1952:102, 118).

However, neither of these two lexical verbs was ever grammaticalized as a temporal auxiliary in conjunction with participles or finite forms of the main verb – the Akkadian T/A system remained solidly aspect-based (but see Section 6.) During the Middle Stage of Semitic we witness the beginnings of a new state of affairs with the rise of analytic formations exploiting the grammaticalized form of the root HYH 'be, exist; become; happen' in Hebrew and Aramaic (see under 6.1).

The rise of the analytic Retrospective, with finite forms for both the auxiliary and the main verb, represents a salient innovation of Arabic and Ethiosemitic (Gəʕəz). We may speculate that the structure *kān-a…* X *katab-a* 'it was … X wrote' (both finite PFMs) could have originated in a biclausal structure 'It (so) happened (that) he wrote'; this option could be entertained in conjunction with the particle *qad* (see Section 7). Another option is to derive this double-finite construction from pseudo-relative clauses of the type *kānat ummuhu qad katabat* 'his mother was [a woman/one who] had already written' with the relative clause left unmarked when referring to an indefinite antecedent; in diachronic terms this structure could be an initial input to the grammaticalization process which ended up as the past perfect 'he had written' (as argued by Bubenik 2011:18).

The core system of Classical Arabic (in 10) can be portrayed as recreating the West Semitic perfect form *kataba on an analytic basis (> Retrospective *kāna kataba*) and recategorizing the old perfect *kataba as Performative. More specifically, the Proto-Arabic system can be reconstructed as containing originally (at least) two prefixal and two suffixal conjugations: Imperfective *ya-ktub-u, Perfective *ya-ktub, Perfect *kataba, *and Stative *kabura 'he is/was big'), see Zaborski (2005). An earlier hypothesis that the stative form (of the Akkadian type *iptaras*) was a source of the West Semitic perfect is unnecessary; the perfect forms with dental infix did indeed survive into the historical period but were put together with medio-passive derivatives (VIII class) by Medieval Arab grammarians (Zaborski 2004). Their later demise can be seen as a motivation for the rise of analytic perfect forms. Regarding the Perfective/Jussive *ya-ktub see under 5.1.

(10) Classical Arabic aspectual system

Imperfective	**Performative**	**Retrospective**
ya-ktub-u	kataba	kāna (qad) kataba
‘he writes/will write’	‘he wrote’	‘he had written’

In Gəʕəz there is a parallel construction combining the verb *kon-a* ‘he/it was’ (or *hallawa*) with the main verb in the Performative *kon-a katab-a* ‘he had written’ (in addition, Gəʕəz features another formation for the expressions of anteriority based on the combination of another grammaticalized lexical verb *nabara* ‘he remained’ with the main verb in the semi-finite gerund (see Weninger 1999:32).

(11) li=ðālika kānat iðā daxalat … qāma ilayhā [Haikal; in Cantarino 1974:71]
for this reason be+PFM+3SG/F when enter+PFM+3SG/F rise+PFM+3SG/M to=her
‘For this reason, whenever she (had) entered … he used to stand up …’

In Arabic the anteriority can be emphasized by the particle *qad* (cf. Section 7):

(12) kānat qad samiʕat lafẓa ’smī [Ǧibrān; in Cantarino 1974:72]
be+PFM+3SG/F PRT hear+PFM+3SG/F enunciation name =my
‘She had heard my name mentioned’

As shown in (11) the auxiliary *kān-a* and the main verb are not necessarily adjacent; and there may be “disagreement” of the type *kān-a ’l-mulūk qad xaraj-ū* ‘the kings had exited’ (versus *al-mulūk kān-ū qad xaraj-ū* ‘as for the kings they had exited’).

Further development of this construction by analytic means (auxiliaries) has resulted in the formation of the present perfect with the auxiliary in the Imperfective (competing with the Retrospective expressed by participle in *huwa kātib* ‘he has written’) and the Retrospective Future *sa(wfa) ya-kūn-u kataba*:

(13) The rise of the analytic Retrospective in Classical Arabic:

katab-a	‘he wrote’
kān-a katab-a	‘he had written’
ya-kūn-u katab-a	‘he has written’
sa(wfa) ya-kūn-u katab-a	‘he will have written’

It should be observed that the formation *yakūnu (qad) kataba* (re the particle *qad* see Section 7) corresponding formally to the English present perfect ‘he has written’ possesses actually an inferential meaning as shown in (14):

(14) qad yakūnu ’l-qitāru qad fātaka
PRT 3SG/M-be-IPFVE the=train PRT pass-PFM-3SG=you
‘It appears that / Most likely you have missed the train’ (lit. the train has missed you)

The formation of the future perfect exploits another innovation of Classical Arabic, namely the introduction of the future particle *sawfa*, shortened to *sa* (its root *s-w-f* appears in verbal Pattern 2 *sawwaf* ‘put off, postpone’ and verbal noun *masāfa* ‘interval; distance’). This particle is not used when the context clearly refers to the future (as in *abʕaθu hāðihi ’r-risāla ġadan* ‘I will send this letter tomorrow’). After all these innovations the aspectual system of Classical Arabic, diagrammed in (10) in its incipient stage, developed temporal contrasts relying on old aspectual means and innovative auxiliaries with the Retrospective and Progressive, in the right hand column in (15):

(15) Indicative forms of Arabic with temporal contrasts implemented by the auxiliary.

	Vast Present		**Analytic Retrospective**	
Performative	**katab-a**	‘he wrote’	**kāna (qad) katab-a**	‘he had written’
Imperfective	**ya-ktub-u**	‘he writes’	**ya-kūn-u (qad) katab-a**	‘he has written’
Prospective	**sa=ya-ktub-u**	‘he will write’	**sa=ya-kūn-u (qad) katab-a**	‘he will have written’

In addition to these, there are two forms where the PFM auxiliary is used to create past reference with Imperfectives, which otherwise have only Nonpast reference.

	Vast Present		**Analytic Past**	
Imperfective	**ya-ktub-u**	‘he writes’	**kāna ya-ktub-u**	‘he was writing’
Prospective	**sa=ya-ktub-u**	‘he will write’	**kāna sa=ya-ktubu**	‘he was going to write’

5.1. The Classical Arabic modal forms

As far as the modal forms are concerned, the ‘jussive’ is the main exponent of modality in Semitic languages, comparable with the optative of Ancient Greek and Vedic Sanskrit. Compared with Classical Indo-European languages the Classical Arabic system appears to be more restricted in its morphology. Ancient Greek displays its modal forms (subjunctive and optative) in all the three aspectual categories; in Classical Arabic, on the other hand, the subjunctive and jussive (precative, “Wunschform”) can only be formed in the Imperfective: *ya-ktub-a* ‘that he write’ and *wa-l-ya-ktub* ‘may he write’.

The suffixless form (apocopatus) *ya-ktub* is a remarkable morphological relic of the Proto-Semitic Perfective form *ya-ktub ‘he wrote’ which also functioned as the precative (von Soden 1952, Huehnergard 1997 for Akkadian)

to express a wish or an indirect command. In Akkadian it was preceded by the particle *lū* which contracted with the vowel of the prefix: *lū=yá-bluṭ > *PFM* 'may he live'. The parallel formation in Arabic combines the exhortative particle *li=* (after the conjunction *wa* 'and') *wa-l-ya-ktub* 'may he write'. There is another a parallel between Arabic and Akkadian in the formation of the prohibitive; instead of the negative imperative Arabic uses the jussive form after the particle *lā* (*lā taktub* 'don't write') while Akkadian uses the Imperfective form (*lā ta-šappar* 'do not send'); neither Arabic nor Akkadian can negate the imperative (cf. Latin *nē scrībās* 'do not write'). The original non-modal Perfective meaning is preserved in negative statements introduced by the negative particle particle *lam*, e.g. *lam yaktub* 'he didn't write'/ 'he hasn't written') and in the prohibitive (= negative imperative), e.g *lā taktub* 'don't write'.

Analytic modal forms are available in the Perfect: *ya-kūn-a qad kataba* 'that he have written' and *ya-kun qad kataba* 'may he have written':

(16) Arabic modal forms

	Imperfective	Perfect
Subjunctive	ya-ktub-a	ya-kūn-a qad kataba
	'that he write'	'that he have written'
Jussive	(wal=)ya-ktub	ya-kun qad kataba
	'may he write'	'may he have written

In addition, the Performative category, *katab-a*, can also be used modally to express (un)real wishes with a limited number of verbs, such as 'have mercy', 'honor', 'bless' (especially in combination with a particle *layta*):

(17) anʕama 'llāhu masāʔa-ka
make-comfortable+PFM+3SG/M God evening=your
'Good evening' (lit. may God make your evening comfortable)
layta-hu kān-a hunā
PRT=him be+PFM+3SG/M here
'I wish he were here' ~ 'If only he were here (irrealis)

The Performative is also used in the protasis and apodosis of conditional sentences with particles *law* 'if' and *la* 'truly', respectively:

(18) law šiʔta an aqūla laka la-qultu [Manf. Mag. 195,12; in Cantarino 1974:62]
if want+PFM+2SG/M that 1SG+tell+SUBJ truly say+PFM+1SG
'If you want me to tell you, I will say …'

In its expressions of the irrealis Arabic (*la=qul-ta* 'you would say' ~ 'you would have said') resembles Ancient Greek which uses the indicative forms (of either the imperfect *éleges an* 'you would say' or aorist *éleksas an* 'you would have said'), while Latin uses the subjunctive forms (*diceres* or *dixisses*). Another way of forming the conditional (in vernaculars) is to combine the past auxiliary *kāna* with the future tense *kān sa=yəktob* 'he would write'. (This strategy is reminiscent of that used for the formation of the conditional in IE languages, e.g. in MnGreek *θa γráf-i* 'he will write' 'he will write' and *θa é-γraf-e* 'he would write'). In Classical Arabic, as we saw in (6), *kāna sa=yaktubu*, is used for the future in the past 'he was going to write'.

In negative statements the three-way aspectual contrast is given prominence in the shape of three different negative particles: *lā*, *mā* and *lam*. The negative particle *lā* is used with the imperfective (with reference to the present or future).

The other negative particle *mā* is very common in colloquial Arabic, and is used with the Performative to express past completed events (but also present perfect with stative verbs). The negative particle *lam* combines with the jussive (the apocopated form) to express both aspects: past Performative and (present perfect). In the pluperfect both options (*mā kāna* and *lam yakun*) are available.

(19) ʔinnā lā narā šayʔan 'We do not see anything' (Present)
mā kataba 'he didn't write' (Past Performative)
mā nasītu-hu 'I have not forgotten him' (Present Perfect)
lam yaktub 'he didn't write' = mā kataba (Past Performative)
ʔa lam tasʔal aḥadan ? 'Haven't you asked anybody ?' (Present Perfect)
mā kāna qad kataba ~ lam yakun qad kataba 'he had not written' (Pluperfect)

According to Sībawaihi (Vol. I: 460), the difference between the aspectually ambiguous *lam ya-fʕal* 'he didn't do (it)' and 'he hasn't done (it)' and *mā faʕal-a* 'he didn't do (it)' is rather that of emphasis, esp. when an oath word *wallāhi* 'by God' is inserted'. Accordingly, the difference between these two is in the degree of certainty: *(wallāhi) mā faʕal-hu* '(By God) , he really didn't do it' or 'He did NOT do it' (versus *lam ya fʕalhu* 'he didn't do it').

6. Further differentiation of the imperfective form

6.1. Progressive aspect

In historical retrospective the rise of the analytic progressive aspect represents a major innovation of Central and South Semitic languages (GəʕəZ). As mentioned in 5. Akkadian never grammaticalized its verbum existentiae *bašûm* 'to be' as an auxiliary. Nevertheless, at this early state of affairs Akkadian could further differentiate its basic aspectual system by infix *–tan-* to derive

'iterative' counterparts to its three aspects which allow for more precise allocation of events to time zones (Imperfective *i-parras* > *i-p-tan-arras* 'he keeps separating', Performative *i-prus* > *i-p-tan-ras* 'he kept separating, Perfect *i-p-ta-ras* > *i-p-ta-tan-ras* 'he has been separating'). Iterative derivatives are close in their meaning to the progressive aspect as familiar from Middle (Mishnaic) Hebrew and Aramaic and here we encounter for the first time the "ordinary" analytic formations of the progressive aspect exploiting the copula and the active participle: Hebrew *hāyāh kōṯēb* 'he was writing' and Aramaic *həwāh kāṯi/ēb* (see Bubenik, 2011:16-17). In terms of grammaticalization, the aspectual forms of the copula were grammaticalized as temporal auxiliaries: Performative > past *hāyāh kōṯēb* 'he was writing' and Imperfective > non-past *yi-hyēh kōṯēb* 'he will be writing'.

Assuming that the same process was at work in Arabic (and Gəʕəz) we will be parsing *kāna* by was+M (instead of be+PFM+3SG/M) to allow us to concentrate on further innovations in contemporary vernaculars. The construction *kan kateb* 'he was writing' (combining the copula in the past 'was' and the present participle) is found in Western dialects. In most Arabic varieties only stative verbs and verbs of motion form the progressive aspect by combining the present participle with the personal pronouns as in (20):

(20)

huwa	nāʔim	huwa rāʔiħ
'he	sleep+PART	he go+PART
'he is sleeping'		'he is going'

The present participle with action verbs can be interpreted as a nominalized adjective or a present perfect:

(21)

huwa	kātib
he	write+PART
'he is a writer' ~ 'he has written'	
kān-a	kātib-an
was+M	write+PART/M+ACC
'he was a writer'	

The innovative double-finite construction combining the main verb in the Imperfective with the copula 'to be' is a salient feature of Classical Arabic:

(22)

kān-a	ya-ktub-u	(Classical Arabic)
was+M	3SG/M+IPFV+write+IND	
'he was writing'		

In South Semitic Gəʕəz forms its progressive aspect (called "iterative" by Weninger, 1999:32) in two fashions. The earlier (in texts dating from the Aksumite empire) used the Performative form of the verb 'to be': *hallo* 'he was' (< *hallawa*) in combination with the Imperfective form of the main verb (e.g. *wa-hallo muse yərəʕi ʔabāgəʔ* 'Moses was keeping the sheep'). According to Weninger his construction was partly motivated as "a calque of the periphrastic conjunction (sic) in the Greek *Vorlage*"). Compounds with *kona* (corresponding to Arabic *kāna* 'he was') are found in post-Aksumite texts "as a calque of corresponding Arabic compounds" (Weninger, op.cit.):

(23) za-konu yāmallәkәw=o
REL=were+M 3/M+IPFV+worship+PL=him
'that they used to worship him'
(Arabic *allaḏī kānū yaʕbudūna=hu* 'that they were worshipping him')

We assume that the bi-clausal structure of the progressive aspect is a result of the grammaticalization process which worked on the initial structure with the verb *kān-a* 'it happened/occurred' followed by the predicate describing the event:

(24) kāna N V+IPFV
kāna ummu-hu ta-qṭaʕ-u
was-it mother=his 3SG/F+IPFV+cut
'It happened (that) his mother cut'

The main verb was moved to the initial position to be next to its auxiliary which had to agree with its head:

(25) kānat ta-qṭaʕ-u ummu-hu
was+F 3SG/F+IPFV+cuts mother=his
'His mother was cutting/used to cut'

There are two options to negate the past progressive aspect: one with the particle *mā* followed by the auxiliary in the Performative and another with the particle *lam* followed by the auxiliary in the (historical) Perfective:

(26) mā kuntu arjū ʕalā ḏālika ajran
NEG was+1/SG 1/SG+IPFV+expect on this reward+ACC
'I was not expecting any reward for this'
lam akun arjū ʕalā ḏālika ajran
NEG 1/SG+PFVE+be 1/SG+IPFV+expect on this reward+ACC
'I have not been expecting any reward for this'

These two constructions are perceived as equivalent with the former being more common in spoken Arabic.

The past progressive can be reinforced by the particle *qad*:

(27) qad kuntu aḥsubu annaka ḥafiðta l-qurʔāna
PRT was+1/SG 1/SG+IMFV+think that=you memorize+PFM+2/SG the=Qurʔan+ACC
'I thought/was thinking that you had memorized the Qurʔan'.

6.2. Continuous, Prospective and Inceptive aspect

The basic Imperfective category (in the indicative) in most varieties of Modern Eastern Arabic is enlarged by the prefixed particle the *b=* (< *bi=*); e.g. in Syrian Arabic *byākol* (< **bi=ya+ʔkul*) 'he eats'. The unprefixed Imperfective possesses modal meaning: *yākol* 'may he eat'. In Western dialects the particle *ka=* is used in its stead; in Moroccan Arabic its meaning is both habitual (*ka=n+mši l=sūq kull ṣbaḥ* 'I go to the market every morning' (Abdel-Massiḥ 1973:360) or progressive (*ka=y+akul daba* 'he is eating now'). Moroccan *ka=* arose by the grammaticalization of the present participle of 'to be': *kāʔin* > *kæn* > *kæ*. On the etymologies/grammaticalization processes observable in the preverbal particles of other Arabic dialects (Moroccan, Syrian, Lebanese, Maltese) see Rubin (2005).

Further differentiation of the Imperfective category was achieved by means of various lexical auxiliaries which gave rise to new aspectual categories in all Arabic varieties. The crucial role in this 'auxiliation' process was played by grammaticalization. Syrian Arabic uses the particle *ʕam* (called the particle of 'actuality' by Cowell, 1964:320) which in combination with the Imperfective form allows us to distinguish the progressive aspect from the continuous / habitual aspect. Observe that the particle *bi-* is not used in the past indicative *kān yəktob* 'he used to write'; *kān b=yəktob* has the meaning of the conditional 'he would write':

(28)

	Past	Present (Syrian)
Progressive	kān ʕam=yəktob	ʕam yəktob
	'he was writing'	'he is writing'
Continuous/Habitual	kān yəktob	b=yəktob
	'he used to write'	'he writes'

The lexical source of the particle *ʕam-* is the agentive noun *ʕammāl* 'doer', which was reduced semantically (> 'intent on') and phonologically to *ʕamma-* and ultimately to *ʕamm-* > *ʕam-* (and also *ʔam-*), especially in Damascus; in Lebanon there are also forms *ʕan-* > *ʕa-* and *man-* > *ma-* (Cowell 1964, Rubin 2005).

The prospective aspect (point A in our diagram of major aspectual categories (3) within "Event Time") is marked by the particle *raħ(a)* (called the particle of "anticipation") which in combination with the Imperfective form allows us to distinguish progressive 'he is writing' from prospective 'he is going to write'.

(29)

	Past	Present (Syrian)
Progressive	kān ʕam=yəktob	ʕam=yəktob
	'he was writing'	'he is writing'
Prospective	kān raħ(a) yəktob	raħ(a) yəktob
	'he was going to write'	'he is going to write'

The lexical source of the particle *raħ* is the participle of the verb 'to go', *rāyeħ* 'going', which was reduced to *raħ(a)-* and ultimately to *ħa-*; there are also forms beginning with *l* (*laħa-* and *laħ-*), which, according to Cowell (1964:322), are typical of Damascus "and certain other areas".

(30)

raħa=šəf=lak	yāha	w-rədd=əllak	xabar (Cowell, 1964:322)
PRT=1/SG+see=you	ACC=her	and 1/SG+return=you	news

'I'm going to see her (for you) and let you know'

One may wonder about the source of *–a* in *raħa-*. While *–a* in the particle of "actuality" *ʕamma-* is justifiable phonologically by the erosion from *ʕammāl*, it could be suggested that *–a* in *raħa* goes back to the feminine form of the participle *rāyħ-a* > *raħa*:

(31)

ʔana	rāyeħ	rūħ	(lit. I [am] going to go) 'I must go'
I	going+M	1/SG+go	
ʔana	rāyħ-a	rūħ	
I	going+F	1/SG+go	
ʔana	*raħa=rūħ 'I must go'		(grammaticalized)
I	PRT=1/SG+go		

In Moroccan Arabic the participle of the verb *ġadā* 'to go' is used in parallel fashion as the auxiliary of the prospective aspect (point A in our diagram of major aspectual categories within "Event Time" in (3):

(32)

Past			Present	(Moroccan)
kan	ġadi	i-nʕes	ġadi	i-nʕes
was	going+M	3/SG+sleep	going+M	3/SG+sleep
'he was going to sleep'			'he is going to sleep'	

As an auxiliary of the prospective aspect *ġadi* is "usually invariable" in number and gender (the feminine form is *ġad(y)a* and the plural form is *ġad(y)in*, Harrell 1962:184). As in Syria and Lebanon the process of grammaticalization yields reduced forms: *ġadi* > *ġad* > *ġa*:

(33) ġa=nekteb=lek ġedda (Moroccan)
PROS=1/SG+write=you tomorrow
'I'am going to write to you tomorrow'

Furthermore, the participle of another verb 'to go', *mša*, can be used instead of *ġadi* as the "future tense" auxiliary (Abdel-Massih 1973: 264):

(34) maši nekteb ši bṛa (Moroccan)
going+M 1/SG+write a letter
'I will write a letter'

In Maltese the prospective aspect is expressed by *sejjer,* the participle of 'to go' or its invariable form *ser / se / sa* (Ebert 2000):

(35) sa / ser / sejjer ni-kteb 'I am going to write (Maltese)

In Ṣanʕānī Arabic the "future tense" is formed as the volitional future exploiting the grammaticalized form of the verb *šāʔ-a* 'want'; this formation, however, is limited to the 1st Sg (Watson 1993:83):

(36) anā šā=sāfir baʕd θamān (Ṣanʕānī)
I want=travel after week
'I will travel in a week'

All the other persons take the particle *ʕa* (identical, presumably, with the particle *ʕam* to mark the progressive aspect in Syrian and Lebanese Arabic):

(37) hū ʕa=ysīr (Syrian, Lebanese)
he PRT=3/SG+go
'He will go'

In Syrian Arabic the formation of compound phrases with future time reference in the progressive and continuous aspect is restricted because it results in 'triplication' on the auxiliaries; only the future progressive is available, while the future continuous and the future inceptive do NOT exist:

(38)	Future progressive	b=ikūn ʕam yəktob ‘he will be writing’	(Syrian)
	Future continuous	*b=ikūn b=yəktob	
	Future inceptive	*b=ikūn raḥa yəktob ‘he will be about to write’	

(This is not to say that the latter formation is not found cross-linguistically, witness Latin *scrīptūrus erit* ‘he will be about to write’).

Nevertheless, “surcomposé” forms are available in various peripheral dialects. For instance, Maltese can form its habitual aspect in the same fashion as Classical Arabic, but it in addition it can also form it as a surcomposé with the auxiliary *kāna* (accompanying the main verb) in the Imperfective:

(39)	Classical Arabic	Maltese
Past progressive/habitual	kāna ya-lbas-u	kien yi-lbes ‘he used to put on’
(surcomposé)	(*kāna ya-kūnu ya-lbasu)	kien i-kun yi-lbes ‘he used to be putting on’

7. Particle *qad*

The analytic Retrospective (perfect) is introduced by the particle *qad*. The discussion of its syntactic and semantic properties gave rise to three different approaches (summarized most recently by Bahloul 2008:72 ff): the first approach considers *qad* to be a temporal particle, the second one analyzes *qad* as an aspectual marker (Fradkin 1985, Fischer 2002), and the third one relates to its emphatic function (the third hypothesis goes all the way back to Sībawaihi and is quite popular among the Arab grammarians). Most recently, Michalski (2011) studied the compound particle *la-qad* in Modern Standard Arabic and suggested that its salient functions include emphasis and topic shift.

The temporal hypothesis – articulated by Gaudefroy & Blachere – highlights its use for a recent past (long ago noted by Ibn Hisham in 1359):

(40)	qām-a Zaydun	‘Zayd stood up’	(past Performative)
	qad qām-a Zaydun	‘Zayd has just stood up’	(present Perfect)

The aspectual approach – articulated most explicitely by Fradkin (1985:215-6) – pinpoints the ambiguity of the simple “perfective” (our Performative) form in examples such as (41):

(41)	hal qaraʔta	“al-ʔayyām”	(a novel by Taha Hussein)
	Q read+PFM+2SG/M	“al-ʔayyām”	
	‘Have you read “al-ʔayyām” ?		
	Naʕam, qaraʔ-tu-hu		
	Yes read+PFM+1SG=it		
	‘Yes, I read it’ ~ ‘I have read it’		

The answer is ambiguous between 'reading to the end' or 'casually leafing through'. However, the use of the particle *qad* preceded by the emphatic particle *la* stipulates that the reading has been completed:

(42) la-qad qaraʔ-tu hāðā al-kitāb
PRT=QAD read+ PFM+1SG this book
'I have (now) read this book'

Consider another pair contrasting past completed event of 'understanding' (in the past) with the present perfect 'Now I have understood' with *fahimtu* preceded by the perfect particle *qad* and the emphatic particle *la*:

(43) fahim-tu (amsi) 'I understand'
la-qad fahim-tu 'l-āna 'Now I have understood' ~ 'Now I understand'

For other functions of *(fa)-la-qad* see the recent paper by Michalski (2011).

In spoken Arabic the subtle contrast of (past) Performative versus (present) Perfect is implemented by the Performative versus the present participle with active verbs (in keeping with its meaning of the present state resulting from the past event). Consider the following minimal pair of sentences from Moroccan Arabic:

(44.a) ana ktebt ʕlih "felfel" (Moroccan Arabic; Harrell 1962:179)
I write+PFM+1SG on-it "pepper"
'I wrote "pepper" on it' -> [and perhaps the label is no longer there]

(44.b) ana kateb ʕlih "felfel"
I write+PART on-it "felfel"
'I have written "pepper" on it' -> [and the label is still there]

(44.a) expresses a past completed event without stipulating that the result of the past action still obtains in the present, while (44.b) exploiting the present participle expresses unambiguously the present result of the past action.

The particle *qad* can also combine with the imperfective to express the notion of possibility/uncertainty:

(45) qad aðhabu ilā s=sūq-i
QAD 1/SG+IPFV+go+IND to the market+GEN
'I might go to the market'

In colloquial Arabic there are various other forms of the particle *qad*. In the Asiri dialect (Saudi Arabia) the particle *gid* (< the participle *gāʕid* 'sitting') can appear before the imperfective as in (46):

(46)

gid	yu-ktub	l-walad	risala (p.c. by Ahmed Asiri)
QAD	3/SG+IPFV+write	the=boy	letter

'the boy may write a letter'

(The modal verb *yimkin* 'it is possible' can be inserted into this construction: *gid yimkin yuktub* … 'he might write')

In Maltese the particle *qed* is used in conjunction with the Imperfective to express the progressive aspect (Ebert 2000). Its full participial form is *qiegħed* (Fem *qiegħd-a*, Pl *qiegħd-in*) of the verb *qagħad* 'stay, sit, be located':

(47)

qed/qiegħed	yi-kteb
PRT/staying+M	3/SG/M+IPFV+write

'he is writing'

A propos the use of double-finite formations (of the type type *kāna (qad) kataba* 'he had written') to express anteriority in the past, it should be observed that the single-finite examples with the active participle (of the type *kāna kātib* 'he had written') are found in colloquial Arabic. Grotzfeld (1965:88) claims that in Syrian Arabic the double-finite forms are less common ("seltener"); the examples of both types are given in (48):

(48)

əžīt,	kānu	ġallū-lna dōlet əhwe (double-finite)	
come+PFM+1SG	were+3PL/M	cook+PFM+3PL/M=to us can coffee`	

'[when] I came, they had made us a can of coffee'

kənna	ʔāxdīn	bēt	bi … ('be' plus active participle)
were+1PL	take+PART+PL/M	house	in …

'we had taken a house in …'

In the past the single-finite construction with the participle corresponds to the resultative pluperfect of the IE languages while the double-finite construction indicates only the anteriority of the action with no stipulation of the resulting state (see the minimal pair of sentences in Moroccan Arabic in (44).

For Iraqi Arabic Erwin (1963:341) lists only single-finite examples with the active participle for the expressions of anteriority (*kātib* 'has written', *čān kātib* 'had written', *ykūn kātib* 'will have written'):

(49) čān mākil min xābart-a (Iraqi Arabic)
was+3SG/M eat+PART when call+PFM+1/SG=him
'He had eaten when I phoned him'
kull' yōm min arjaʕ lil=bēt
every day when 1/SG+return+IPFV to=the=house
marti tkūn ṭābxa l-akil (Erwin 1963:343)
wife=my 3/SG/F+be+IPFV cook+PART+F the=food
'Every day when I return home my wife will have cooked the food'

Given the source of the particle *qed* in Maltese Arabic (in 41) it could be that this construction in Classical Arabic arose on the basis of the serial construction of the type **kāna X qaʕada kataba* lit. it-happened [that] X sat [and] wrote. In further development the full lexical verb *qaʕada* 'he sat' would be reduced to the particle *qad* and the phrase was grammaticalized as the pluperfect *kāna X qad kataba* 'X had written'. There are numerous parallels to the grammaticalization of the verb 'sit' into aspectual auxiliaries in Modern Arabic dialects (e.g. in Egyptian and Syrian Arabic the verb *ʔaʕad* < *qaʕad* 'sit down' in combination with the imperfective is used to express the continuative aspect: *ʔaʕad yəktob* 'he kept (on) writing < lit. he sat [and] he wrote) and in other languages (for instance, Hindi may combine the past participle of the lexical auxiliary 'sit' with the bare form of the main verbs to express sudden events such as *laṛkī ro baiṭhī* girl cry sit+PP/F 'The girl started crying'). Another potential source of *qad* could be the grammaticalized form of the verb *qada/im* 'precede' (cf. also the same root in the Akkadian preposition *qudmu* 'before'). This root is apparently the source of the (Eastern) Neo-Aramaic particle *qam* (<*(qād)m 'before') which marks the perfect (*qam-pātix* 'he has opened').

8. Further development of the aspectual system by means of serial constructions

In the final section of this paper we will turn our attention to the further development of the inherited aspectual system by means of serial constructions. As is well known many languages possess syntactic constructions in which verbs are strung together, one after the other, but the construction represents a single grammatical unit. These constructions, called serial verbs, quite often do not display regular verbal morphology on one of the members of the constructions. A number of terms are available to capture the semantic nuances conveyed by these aspectual auxiliaries.

Modern Indo-Aryan languages offer some of the most studied examples of serial verbs (cf. Nespitals's *Dictionary of Hindi Verbs,* 1997). It will be observed that the main verb in Indo-Aryan serial constructions carries no grammatical morphology but appears in its bare form (as root); all the grammatical morphology

(of gender and number) is carried by the grammaticalized lexical auxiliary in its reduced lexical meaning.

Serial constructions in spoken Arabic are fundamentally different in that both the lexical verb and its lexical auxiliary are fully finite. Thus in Arabic the fully finite aspectual auxiliary is followed by non-embedded main verbs in asyndetic construction. Mitchell and El-Hassan (1994:113) qualify this phenomenon as "simple coordination", but as observed by Brustad (2000:193) "no other verbs may be coordinated asyndetically in this manner". To establish this point let us contrast the Syrian serial construction involving the lexical auxiliary 'remain' (*bʔa* in Syrian Arabic) with its Hindi serial counterpart involving the lexical auxiliary *rah-nā* 'remain:

(50) b-yəbʔa yəktob (Syrian Arabic)
IPFV=3SG/M+remain 3SG/M+write
'He keeps on writing' (lit. he remains he writes)

vah likh rahā hai (Hindi)
he write remain+PP/M is
'He is writing'

Unlike Hindi, in Syrian Arabic both the main verb and its lexical auxiliary carry the full grammatical morphology of person, gender and number (prefix *yə-* 3/SG/M) while in Hindi it is only the lexical auxiliary *rahā* (remained+PP/M) and the grammatical auxiliary *hai* 'is' which display it while the main verb *likh-nā* 'to write' appears in its bare form of a root.

In Arabic dialects asyndetic combinations with basic verbs of motion, 'go' and 'come', indicate that the action of going somewhere is followed immediately by the realization of its purpose as expressed by the following verb. As the absence of the conjunction *wa* 'and' indicates, the motion and its end result are perceived as a single individuate event (following Hopper and Thompson's informational principle (1984) "only the event *as a whole* has full information".)

(51) mša šrā lha mskīn l-ʕṭūr (Moroccan, Brustad, 2000:194)
went+3SG/M bought+3G/M to-her poor the-incense
'He went (and) bought her, the dear, incense'

rāhit gābit il-mōv (Egyptian)
went+3SG/F got+3SG/F the mauve
'She went (and) got the mauve'

rāħ	džāb-il-na	ʔakil	(Jordanian)
went+3SG/M	got+3SG/M-to-us	food	
'He went (and) got us food'			

Notice that the English translation with the conjunction does not do the justice to the original since Arabic can contrast the asyndetic with the syndetic construction: *rāħit wa-gābit il-mōv* 'she went off and got the mauve' versus *rāħit gābit il-mōv* 'she went (and) got the mauve'.

The verb 'to come' is used similarly in various dialects, but differs from 'to go' in the dimension of *versive* versus *ablative* exemplified in (52):

(52)

iǰa	axað	ktāb	(Jordanian)
came+3SG/M	took+3SG/M	book	
'He came (and) took a book'			

A list of basic aspectual auxiliaries (called "temporal verbs") in four dialects (Moroccan, Egyptian, Syrian and Kuwaiti) is available in Brustad (2000:193 and 215). Based on our own fieldwork (carried out by Osama Omari in Jordan) we also examined parallel and different constructions in Jordanian, Palestinian (North and South), Saudi and Algerian dialects, and the regional varieties spoken in the United Arab Emirates and Oman (Shihhi dialect). In what follows we will distinguish five fundamental aspectual notions realized by a number of lexical auxiliaries displaying various degrees of grammaticalization. They include aspectual notions of (i) inception, (ii) continuity, (iii) completion, (iv) resumption and (v) subitaneity). It will be observed that several of them are verbs of motion ('go', 'walk', 'come back', 'return') and that there is the pair 'get up' and 'sit down'.

(53) Auxiliaries of lexical aspect in Arabic dialects

	Moroccan	Algerian	Egyptian	Syrian	Palestinian	Jordanian
Inception						
('go')	ġadi	rāħ	ħa	raħ(a)	ʔija rāħ (N)	raħ
('walk')	mša				maša (S)	
Continuity						
('remain')	bqa		baʔa	bʔa		
('keep')		ḍall		ḍall	ḍalluh (N)	ḍall
					ḍallah+gāʕid (S)	
('sit down')			gaʕad	ʔaʕad		

	Moroccan	Algerian	Egyptian	Syrian	Palestinian	Jordanian
Completion						
('complete')	təmm			tamm		
Resumption						
('come back'/ 'return')	ʕāwəd	ržaʕ willa	rigiʕ	rižiʕ ʕād	rijiʕ (N) ʕāwad (S)	rijiʕ
Subitaneity						
('get up')	nāḍ	nāḍ	ʔām	ʔām	gām (N) kām (S)	gām

8.1. Inception

The lexical verb *rāḥ* 'go' grammaticalized in the meaning of inception 'start/ begin' is found across the whole geographic spectrum from Algeria to Oman.

(54) rāḥ-at fawt-at li-mtiḥān (Algerian)
went+3SG/F entered+3SG/F the=exam
'She went (and) did the exam'

rāḥ ištara sayyārah (Jordanian)
went+3SG/M bought+3SG/M car
' He went (and) bought a car'

In Shihhi Arabic (Oman and United Arab Emirates) the same verb appears in Pattern II:

(55) rawwaḥ jeyb ʔakil (Shihhi)
went+3SG/M brought+3SG/M food
'He went (and) brought food'

Another common lexical verb grammaticalized in the meaning of inception is *maša* 'walk'.

(56) maša sāwa li-mtiḥān (South Palestinian)
went+3SG/M did+3SG/M the=exam
'He went and did the exam'

In North Palestinian a combination of two lexical verbs, *ʔija* 'came' and *rāḥ* 'went', can be used in the same meaning:

(57) ʔijī-t ruḥ-it sāʕadt-uh (North Palestinian)
came+1SG went+1SG helped+1SG=him
'I went (and) helped him'

Yet another lexical auxiliary is *sār* 'walk', used alternatively (as confirmed by the native speaker) with *maša* in UAEA:

(58) sār jāb ʔakil (UAEA)
walked+3SG/M brought+3SG/M food
'he went and brought food'

As we saw in 6.2 the auxiliaries of the prospective aspect, *mša* 'go' in Moroccan Arabic, ***se*** / *sa* / *ser* in Maltese 'go', can supply the grammatical means for referring to future time events.

Thus in the Moroccan example in (34) the serial construction *maši ne-kteb* going I+write was grammaticalized as FUT I+write 'I will write'. Similarly, in Maltese example in (35) the serial construction *sejjer ni-kteb* going I+write was grammaticalized as FUT=I+write with the participle of lexical verb 'go' reduced to the future tense particle (*sejjer* > *ser* > *se*) *se=nikteb* 'I will write'.

8.2. Continuity

In Algerian, Syrian, Palestinian (North) and Jordanian Arabic asyndetic combinations of the main verb in the Imperfective with the verb *ḍall* 'he continued' are used in the meaning of continuity:

(59) ḍall-at tu-drus ṭūl il-leil (Jordanian)
kept+3SG/F 3SG/F+study all-long the=night
'She kept studying all night'

(Its classical counterpart would be *ḍall-at ta-drus-u* or *ḍall-at dāris-at-an* … 'she continued studying …).

In Egyptian and Syrian Arabic the verb 'sit down', *gaʕad* and *ʔaʕad* , respectively, can be used in the same meaning:

(60) ʔaʕad yəktob (Syrian)
sat+3SG/M 3SG/M+write
'He kept writing' (also habitual 'He used to write)'

In the area of UAEA the synonym *gaʕad*, namely *jalas* 'sit' can also be used to express the notion of continuity:

(61) ʔana jalast/gaʕadt ʔdris ṭūl il=lel (UAEA)
I sat+1SG 1SG+study long the=night
'I kept studying all night'

In the Shihhi dialect the auxiliary 'sit' appears in the participial form, i.e. unlike (61) the construction is not double-finite:

(62) ʔānu jeilis ʔaðukkir ṭūl il=lel (Shihhi)
I sitting+M 1SG+study long the=night
'I kept studying all night'

At variance with Egyptian and Syrian Arabic, in Jordanian Arabic the verb *gaʕad* 'he sat' is not used in the meaning of continuity. Here the combinations with the participial form *gāʕid* 'sitting' and the main verb in the imperfective conveys the meaning of the progressive aspect:

(63) ʔana gāʕid baktub (Jordanian)
I sitting 1SG+write
'I am writing'

In Palestinian (South) it is possible to combine the two lexical auxiliaries *ḍall* 'kept' and the participle *qāʕid* 'sitting' in the meaning 'he kept X-ing:

(64) il-walad ḍallah gāʕid yigrah kul il=leil (South Palestinian)
the=boy kept+3SG/M sitting 3SG/M+study+3SG/M all the=night
'The boy kept studying all night'

In Moroccan Arabic and Syrian Arabic there is another lexical aspectual auxiliary for the notion of continuity, namely *bqa* and *baʔa* 'he remained', exemplified in (65):

(65) bqa ka-yakol (Moroccan; Harrell 1962:182))
remained+3SG/M PRT=3SG/M+eat
'he kept on eating'

byəbʔa yzūrha kəll yōm (Syrian; Cowell 1964:453)
3SG/M+remain 3SG/M+visit=her every day
'He keeps visiting her every day'

In Classical Arabic in addition to the combination *baqiya yabk-ī* 'he kept weeping' there are examples of the combination with both auxiliaries, *qaʕada* 'he sat' (in the participial form) and *baqiya* 'he remained' to indicate the "intensity" of the event:

(66) fa=baqītu qāʕidan abkī
and=remained+1SG sit+PART+ACC 1SG+weep
'and I kept weeping'

The combination of two auxiliaries is also found in Algerian. It appears that Algerian may distinguish between a continuous event that is happening at the time of speaking and an event that is unfolding but not necessarily at the moment of speaking:

(67.i) rā-ni gāʕd n-ktib ðurka (Algerian)
AUX+1SG sitting 1SG-write now
'I am writing now' (the action is unfolding at the time of speaking)

(67.ii) rā-ni n-ktib ðurka
AUX+1SG 1SG+write now
'I am writing now' (the action is unfolding but not at the time of speaking)

It would seem (as confirmed by our Algerian informant) that the source of the auxiliary *rā-* is a combination of the form *ʔarā* 'I see' and the complementaizer *ʔan-ni* 'that I/me' by the process of grammatization: *(ʔa)rā (ʔan)-ni > rā-ni.* It should be observed that *rā-ni* can still be used in its original lexical meaning 'I see that' as in (68):

(68) rā-ni taʕbān
(1SG)+see-me tired
'I see that I am tired'

rā-h taʕbān
(1SG)+see-him tired
'I see that he is tired'

rā-hum taʕbānīn
(1SG)+see-them tired+PL
'I see that they are tired'

8.3. Completion

The notion of completion – earlier expressed by a single Performative form of the verb -- can be reinforced by the verb *tamm* 'he finished' used as a lexical aspect verb (followed by the main verb in the Performative form). Brustad (2000:197) gives the following isolated example from Kuwaiti Arabic for the sequence of *tamm* and the main verb in the Performative:

(69) tammat ṭāhat al=marīḍa (Kuwaiti)
completed+3SG/F fell+3SG/F the=sick
'(The girl) fell sick'

We cannot confirm this option of combing *tamm* with the main verb in the Performative from Levantine or Saudi varieties where the lexical auxiliaries *xallaṣ* or *kammal* 'finish, complete' can only combine with the verbal noun (*maṣdar*), as in (Jordanian) *xallaṣ ktāb-ih* 'he finished his writing', *kammal grāyit ktāb-uh* 'he finished reading his book' (Classical *anhā qirāʔat-a kitābi-hi*).

But the combination of the lexical auxiliary *tamm* with the main verb in the participle is available in Moroccan (*təmm*) and Egyptian Arabic (*tann*). In Moroccan Arabic this combination is limited to the verbs of motion exemplified in (70):

(70) temm maži l=ʕendhom (Moroccan)
completed+3SG/M coming to=them
'He came up to them'

(*maži* is the participle of the verb *ža* 'come', Classical *jāʔ-a*)

In spite of Harrell's observation (1962:184) that "such phrases are interchangeable with the simple tense of the specific verb" we want to emphasize that there is an aspectual difference between these two constructions which can be captured by the English translation:

(71) ža l=ʕendhom
came+3SG/M to=them
'He came to them'

In the East, however, the situation is different. In Syrian Arabic the combination of the lexical aspect verb *tamm* 'he finished, completed' with participles of main verbs allows for the combination of Performative with continuous aspect:

(72) tammēt rāyiḥ (Syrian)
completed+1SG going
'I kept going'

tammēt ʔāʕed
completed+1SG sitting
'I have remained sitting'

The combination of *tamm* with the Imperfective form of the main verb is ungrammatical (**tammēt rūḥ*).

Our inquiries into the use of *tamm* revealed that it is not used as a lexical auxiliary in Algerian, Palestinian, (North) Saudi and Shihhi Arabic.

In Egyptian Arabic there is the verb *tann* (apparently related to *tamm*) which according to Badawi and Hinds (1986:139) indicates the "the immediate succession of one action or state to another". According to Brustad (2000:196) their examples (of the type *tann-i dāxil* 'further and further in I went', *tann-u-hum ṭayrīn ʕa š-širka* 'they rushed straight off to the company') show "the combination of continuousness with the perfectivity of completion" (with the completion being physical not temporal).

8.4. Resumption

To express the notion of resumption of action the lexical auxiliary 'come back, return' is used across the whole geographic spectrum (Algerian *rjaʕ*, Egyptian *rigiʕ*, Syrian and Jordanian *rižiʕ*, North Palestinian *rijiʕ* and North Saudi *rijaʕ*).

(73) ʕamm-i rijiʕ yištɣil bi-s-sayyārat (North P)
uncle-my returned+M 3SG/M+work with-the cars
'My uncle resumed working with the cars'

Another lexical auxiliary is *ʕāwad* 'return' (third pattern of *ʕād* 'return, come back') is used in South Palestinian:

(74) ʕamm-i ʕāwad yištɣil f-id-dukānih (South P)
uncle-my returned+M 3SG/M+work in the store
'My uncle resumed working in the store'

In Syrian Arabic in addition to *rižiʕ* 'he returned' the form *ʕād* 'he returned' is used:

(75) ʕād yəktob
returned+3SG/M 3SG/M+write
'he resumed writing'

In Jordanian Arabic, the lexical auxiliary *rijiʕ*, not *ʕād*, is normally used to express the notion of resumption, as illustrated in (76)):

(76) riǰiʕ yištaɣil b-il-maħal (Jordanian)
returned+3SG/M 3SG/M+work in-the-store
'He resumed working in the store'

The negation of riǰiʕ can express both the negation of resumption and the notion of 'no longer' as shown in (77) and (78), respectively:

(77) mā-riǰiʕ-iš yištaɣil b-il-maħal
NEG-returned+3SG/M-NEG 3SG/M+work in the store
'He didn't resume working in the store'

(78) mā-riǰiʕt-iš ʔašūf Aħmad bi-l-maħal
NEG-returned+1SG-NEG see+1SG Ahmad in-the-store
'I no longer see Ahmad in the store'

(79) will-a ya-xdm f-l-ħānūt (Algerian)
returned+3SG/M 3SG/M-work in-the-store
'He resumed working in the store'

Yet another auxiliary, *radd-* 'return' (in addition to *rijiʕ*) is found in Shihhi Arabic:

(80) radd yidris b-il-jemʕu (Shihhi)
returned+3SG/M 3SG/M+study at=the=university
'He resumed studying at the university'

8.5. Subitaneity

Subsequent events of sudden or surprising nature are often introduced by lexical auxiliaries whose meaning is 'rise, get up': *nāḍ* (Algerian, Moroccan), *ʔām* (Egyptian, Syrian), *gām* (Jordanian, North Palestinian, UAEA, Saudi), *kām* (South Palestnian), *gəm* (Shihhi).

(81) wāħəd r-rāžl ʕənd-u l-mra tatəwləd ġir l-bnāt, mā ʕndhāš
one the=man at=him the=wife 3SG/F+bear only the=girls not at=her

l-wəld. nāḍ gāl līha ʔāna xəṣṣni l-wəld
the=son got-up+M said+M to=her I necessary=me the=son

'[There was] a man who had a wife who bore only daughters, she had no son. He (got up and) told her: 'I need a son'.' (Moroccan, Brustad 2000:194).

An example from Jordanian Arabic is in (82):

(82) (… a beggar has asked a man for some money)
gām ʔaʕṭāh kul il-maṣāri illi maʕuh (Jordanian)
got-up+3SG/M gave+3SG/M=him all the=money that with=him
'He (up and) gave him all the money he had'

As a typological parallel for the expression of subitaneity in Hindi we can mention the pair of verbs *paṛnā* 'fall' and *uṭhnā* 'rise' which are often used for sudden events with verbs which do NOT denote events of falling or rising:

(83) laṛkī ro paṛī (Hindi, McGregor 1977:102)
girl cry fall+PP/F
'The girl burst into tears'

laṛkī ro uṭhī
girl cry rise+PP/F
'The girl began to sob bitterly'

9. Conclusions and desiderata for further research

In Section 1 the necessity of using a coherent terminology for tense and aspect studies was emphasized: it is essential that the same term should always name the same category, so that similar categories that are not identical are always distinguished, and never confused. It was shown that there are two different cognitive experiences of time: (1) time that is recorded by the memory, which necessarily flows out of the future into the past (Descending Time), and time that is used by the mind to observe or imagine the different phases of an event: beginning, middle, and end (Ascending Time). Consequently there are, in the languages of the world, two different incompletive aspectual forms, Imperfective (DT) and Progressive (AT), and two different completive aspectual forms, Perfective (DT) and Performative (AT), all four of which occur with great frequency, sometimes all four in the same language, e.g. Chinese.[10]

Since aspectual forms represent the temporal shape of the event, there are necessarily five cardinal positions for the representation of event time, as in (84), a diagram from Hewson and Bubenik (1997:14).

(84) **A [B---------- C ----------D] E**

[10] Xiao and McEnery 2004, Chapters 4 and 5.

The two external positions A and E, represent the prospective and retrospective views of the event, and the three internal positions B, C, D, the beginning, middle, and end of the event. The parallelism of A and E allows us to replace the unsatisfactory Latinate term *Perfect* (often confused with *Perfective*) for position E with a more naturally descriptive term *Retrospective*.

For Arabic we adhered to the view that the familiar morphological opposition *katab-a* versus *ya-ktub-u* is best described by double temporo-aspectual labels past/Performative versus non-past/Imperfective (paralleling Cohen's 1989 "accompli" vs, "inaccompli"). The distribution of the *katab-a* form is that of a Performative: it is used in ways that a Perfective can *not* be used: (1) it is used in performative function; (2) it is used in proverbs, with a present sense, to indicate eternal truths: and (3) it is used with stative verbs in a present, rather than a past sense: *fahim-tu* "I understand", (see (43) above).

In Section 2 it is shown that Vendler's four different kinds of Aktionsart also correspond to four cardinal static phases that mark the progress of an event from initiation to result, and in 3 a further chart (Table 1) illustrates the distribution of four major aspects representing completive and incompletive forms in Ascending and Descending Time, leading to a review of terminology that shows that three of the four terms used are traditional. The fourth, Performative, was developed to describe a form that has either had no name at all, and been massively confused with the Perfective, or has been given names (Nonprogressive, Factative) that are descriptively unsatisfactory. This name was chosen because (a) the form is used in performative function, where a Perfective can *not* be used, and (b) it represents the complete performance of all phases of the event, and (c) this means that with verbs of stative Aktionsart it represents the event as phasally complete from the very first instant (such verbs are monophasal), which results in the radically different distribution of Perfective and Performative in Table 1.

In Section 4 the basic paradigms of Classical Arabic verb are presented and in 5 the paradigms of the analytic double-finite Retrospective in Arabic (of the type *kāna kataba* 'he had written') which was the most significant innovation of Arabic (and Ethiosemitic Gəʕəz). It is not to be found in the other two Central Semitic languages (Hebrew and Aramaic).

In Section 6 it was argued that Classical Arabic completely remodeled the inherited aspectual system by creating the progressive aspect and analytic perfect on an analytic basis and forming the future by the particle *sa(wfa)*. These aspectual formations are double finite with both the copula and the main verb inflected: *kāna yaktubu* lit. he-was he-writes > 'he was writing'. As was shown in (13) the innovative future in combination with these analytic formations establishes the

Arabic verbal system as capable of representing three time zones (present – past –future) with two synthetic aspects (Imperfective and Performative) and two analytic aspects (Prospective and Retrospective) in both non-modal and modal forms (jussive and subjunctive).

Various problems surrounding the source and use of the particle *qad* (used with both Performative and Imperfective categories) were discussed in Section 7. Its use is typical of Modern Standard Arabic while in the Arabic vernaculars its presence is not required. In some of the regional vernaculars the use of double finite constructions in the formation of the Retrospective tends to be less common than that of single finite constructions combining the verb 'to be' with the present participle of active verbs (in Moroccan, Syrian and Iraqi Arabic).

The whole discussion can be summarized by the diagram in (6) above, repeated here for convenience. It shows the basic systemic values of the main aspectual contrast of Imperfective (ongoing present and therefore non-past) versus Performative (complete and therefore past), where the Performative also had retrospective function. Classical Arabic (and Ethiosemitic Gəʕəz) created the analytic (double finite) Retrospective, and the double finite Prospective which represents the future segment of the non-past. The *kāna* form was also used to create a past auxiliary for the Imperfective and Prospective forms, creating past representations to supplement these non-past forms.

(85)

	Vast Present		**Analytic Retrospective**	
Performative	**katab-a**	he wrote	**kāna (qad) katab-a**	he had written
Imperfective	**ya-ktub-u**	he writes	**ya-kūn-u (qad) katab-a**	'he has written'
Prospective	**sa=ya-ktub-u**	'he will write'	**sa=ya-kūn-u (qad) katab-a**	'he will have written'
	Vast Present		**Analytic Past**	
Imperfective	**ya-ktub-u**	he writes	**kāna ya-ktub-u**	'he was writing'
Prospective	**sa=ya-ktub-u**	'he will write'	**kāna sa=ya-ktubu**	'he was going to write'

In Sections 6 and 8 we studied further differentiation of the main aspectual categories: Prospective (A) in our diagram, Imperfective (C) and Retrospective (E). We discussed the dynamic processes of grammaticalization whereby the lexical verbs of motion (and the verb 'to be') end up as grammatical auxiliaries and ultimately as aspectual prefixes, e.g. Syrian *rāʔiħ yarūħ* 'going 3SG/M+go' > *raħa=yarūħ* > *ħa=yrūħ* FUT=3SG+go 'he will go'.

All the above (Prospective, and the subcategories of the Imperfective) can also be located in the past time zone (by the auxiliary *kān-a* 'was') but their location into the future time zone is restricted. In Syrian Arabic it is possible to form the future progressive (*b=ikūn ʕam yə-ktob* 'he will be writing') but not to

form the future continuous ('he will keep writing') or a future inceptive ('he will be about to write').

We also noted that it is possible to combine two aspects, for instance continuous with Performative as in Syrian *tamm-ēt ʔāʕed* 'I have remained sitting', reminiscent of the English perfect progressive 'I have been sitting'. (The other aspectual categories in 6.4-5 (resumption and subitaneity) cannot be represented by the above diagram). On the whole, the differentiation of the inherited aspectual categories by means of the grammaticalized lexical auxiliaries in Arabic deserves a deeper cross-dialectal study and a further elaboration on the interesting crosslinguistic parallels with other languages.

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