

# Tense, Aspect and Modality in Jewish Palestinian Aramaic

Camil Staps\*

First submitted 15th August 2019  
Revised version 23rd August 2019

Supervisor: prof. dr. H. Gzella  
Second reader: dr. B. D. Suchard



# Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
1.1	Jewish Palestinian Aramaic and the Palestinian Targum . . . . .	3
1.2	Tense, Aspect and Modality . . . . .	5
1.2.1	Tense, Aspect and Modality in Biblical Hebrew . . . . .	7
1.2.2	Tense, Aspect and Modality in Achaemenid Official Aramaic . . . . .	8
1.3	Methodology . . . . .	9
<b>2</b>	<b>Tense</b>	<b>11</b>
2.1	Past Tense . . . . .	12
2.2	Present Tense . . . . .	16
2.2.1	Background Events . . . . .	17
2.3	Future Tense . . . . .	19
<b>3</b>	<b>Aspect</b>	<b>21</b>
3.1	Copular הוּי . . . . .	22
3.2	Periphrastic Constructions . . . . .	23
3.2.1	Non-Imperfective Meanings . . . . .	23
3.2.2	Related Constructions . . . . .	26
3.2.3	Diachronic Perspectives . . . . .	27
<b>4</b>	<b>Modality</b>	<b>31</b>
4.1	Dynamic Modality . . . . .	31
4.2	Deontic Modality . . . . .	32
4.2.1	Obligative . . . . .	32
4.2.2	Prohibitive . . . . .	35
4.3	Epistemic Modality . . . . .	35
4.4	Evidentiality . . . . .	36
4.5	Generalising Relative Clauses . . . . .	37
<b>5</b>	<b>Conclusions</b>	<b>39</b>
5.1	Differences with Achaemenid Official Aramaic . . . . .	39
5.2	Possible Influences from Biblical Hebrew . . . . .	40
	<b>Bibliography</b>	<b>41</b>



# Chapter 1

## Introduction

This study describes the realization of Tense, Aspect and Modality (TAM) in Jewish Palestinian Aramaic (JPA), a specific variety of Western Aramaic, roughly attested during the first 1,500 years of the common era.<sup>1</sup> It compares it to the realization of TAM in both Biblical Hebrew (BH) (with which JPA was in contact through the legacy of the Bible) and Achaemenid Official Aramaic (AOA) (which is more closely related in a genealogical sense).

The comparison with AOA mainly helps us to understand how the verbal system of Aramaic developed over time and thus serves purely linguistic purposes. Whereas the influence of BH on JPA is also interesting from a linguistic point of view, it also has a bearing on cultural-historical matters. Because the concepts of Tense, Aspect and Modality require a deep understanding of a language to be expressed correctly, a precise analysis of in what ways and to what extent JPA was influenced by BH helps to answer questions like how proficient JPA speakers were in BH.<sup>2</sup> The latter is, however, not the aim of the present study. This work is meant to be primarily descriptive and to contribute to reduce the current lack of syntactic-semantic descriptions of post-Achaemenid strands of Aramaic (for this lack, see e.g. Gzella 2015, 300), in the hope that it can be used in the future to answer more cultural-historical oriented questions.

The remainder of this chapter provides the necessary background information: a description of the cultural-historical and linguistic context of JPA (section 1.1) and a brief introduction to Tense, Aspect and Modality (section 1.2). More in-depth descriptions of each of these three concepts are provided in the following chapters. The topic of TAM has been studied extensively in BH, so the relevant findings and open questions will only be summarised here. This study does not aim to make a contribution to our understanding of TAM in BH. Additionally, an overview of these concepts in AOA will be given. The final section of this chapter describes the methodology followed in this study.

### 1.1 Jewish Palestinian Aramaic and the Palestinian Targum

JPA is a particular strand of Western Aramaic, whose origins can be traced to the first century B.C.E. (Gzella 2015, 296). However, it is probable that its ancestor already existed as a distinct dialect centuries before-

---

1. I am grateful to Holger Gzella and Benjamin Suchard for comments on and corrections of earlier versions of this thesis. Any remaining errors and omissions are my own.

2. Empirical studies in first and second language acquisition of TAM systems show that the ability to express these concepts correctly emerges rather late. A useful review on L1 acquisition is given by Weist (2002), who notes that ‘the research shows that the capacity to utilize complex temporal constructions emerges ... when children are between about 4 to 5 years old’ (p. 68), because only then have they integrated the concept of reference time (rather than speaking time) into their temporal system. Reviewing L2 acquisition studies, Ayoun and Rothman (2013) write that ‘the studies that tested near-native speakers also arrived at the conclusion that ultimate attainment was possible, while stressing that TAM appears to be a sensitive domain of L2 language acquisition that may be subjected to some critical period and/or learnability effects’ (p. 143).

hand, but remained invisible behind the highly standardized language of AOA (Gzella 2015, 282), and, later, the Hasmonaean literary language (234). JPA as a distinguishable variety of the larger group of Western Aramaic languages thus first appears after the fall of the Hasmonaean dynasty in 37 B.C.E. From the oldest stratum of the language, termed ‘Old Judaeen’ by Beyer (1984–2004, I: 50) and spanning 37 B.C.E. through 200 C.E., a small number of inscriptions and letters remains; the collection used here is that edited by Beyer (1984–2004, I: 335–362; E: 204–224, 233–234; II: 267–290, 300). This earliest corpus yields only around 150 verbal forms.<sup>3</sup> Of these, two forms appear in a targum to Leviticus 18:21a (E: 233) and must therefore be assumed to be as influenced by BH; the rest appears to be ‘pure’.

After 200 C.E., but particularly after 400 C.E., a ‘powerful renaissance of Jewish religious and communal life’ leads to a large amount of literature produced in this period until Arabic eventually assumed the slot of the main vernacular in the end of the first millennium (Gzella 2015, 296). Unfortunately, the literature produced in this era has been influenced heavily by later redactors and copyists (297). It is excluded from this study, since it is not a reliable source for the linguistic reality at the time of composition. However, from the same period, a number of original inscriptions and papyri remain, and these have been included following the editions by Beyer (1984–2004, I: 362–371; E: 234–248; II: 300–310), who called their language ‘Middle Judaeen’ (I: 65). These texts yield around 160 verbal forms, six of which are translations of biblical texts.

With the exception of a few biblical allusions, the texts in Old and Middle Judaeen can be considered ‘pure’ JPA in the sense that they are originally compositions rather than translations and hence cannot be influenced by a source text. Besides this corpus, we have a second collection of texts which is formed by biblical translations or texts that otherwise draw heavily upon biblical texts: these are the Genizah manuscripts of the Palestinian targum to the Pentateuch. This collection, which was preserved for around a millennium in a number of synagogue storerooms in Cairo, forms ‘the earliest extensive attestation of the ancient Aramaic translations of the Bible’ (Klein 1986, I: xx). Although later manuscripts are sometimes more comprehensive,<sup>4</sup> the Genizah fragments remain the most reliable linguistic witness for the historical reality (Kutscher 1976, 3; Klein 1986, I: xxi; Gzella 2015, 300 n. 1005). On the other hand, however, it is known that the Genizah fragments are influenced by the Hebrew original, as can for instance be seen in the Hebrew definite article in *הארמיייה* ‘the Aramaean’ in MS C, Gen. 31:24.<sup>5</sup> What is not known is the extent of this influence, especially in conceptually more complex realms such as that of the realization of TAM.

There have been studies on the interaction of Hebrew and Aramaic in translations (e.g. Bombeck 1997 on Targum Onqelos, Jonathan, Neophyti and Pseudo-Jonathan as well as the Peshitta, and Kuty 2008 on Targum Onqelos and Jonathan), but to the best of my knowledge little work has been done on the Palestinian targum. Unlike the other targumim mentioned here, the dialectal background of the Palestinian targum is relatively simple, but somewhat under-researched as far as syntax is concerned. While a study of its language may therefore not contribute as much to biblical and cultural-historical studies as research into these other translations (or, at least, not directly), it is easier to integrate it into a discussion of the development of the Aramaic verbal system.

The present study is based on the collection of Genizah fragments edited by Klein (1986), consisting

3. We use the term ‘verbal form’ somewhat freely here. Some compound forms (like periphrastic constructions) are counted only once, even though they consist of more than one verbal form. For infinitives and participles, it is not always clear whether their primary function is verbal, nominal, or adjectival, or indeed whether they have a primary function at all. The number of verbal forms reported here is an upper bound for most sensible definitions of verbal forms; it includes all infinitives (though *לא למספר* ‘not to lament’, repeated throughout the Scroll of Fasting [xyMT], has been counted only once) and excludes only those participles which have little to no verbal force (e.g., *א/הכלה בנה/א* ‘Simon, the (master-)builder of the temple’ in yJE 25a,b).

4. Note must especially be made of the *Codex Neophyti*, a sixteenth century copy, in the previous century rediscovered and published by Díez Macho (1968–79). It is complete (Golomb 1985, 1), but ‘as a witness to Palestinian Aramaic, however, the Geniza fragments, incomplete though they are, deserve clear preference’ (Gzella 2015, 300 n. 1005).

5. As noted by Fassberg (1983, 209).

of 38 manuscripts. Klein (1986, I: xxii–xxix) distinguishes a number of different genres based on function and adherence to the source text. The fine distinctions need not concern us here (nor can they always be upheld, as Klein himself acknowledges); what is important, however, is that the material contains both direct translations of the Hebrew text and (semi-)original material drawing on the biblical source in various degrees. The present study looks at those parts of the Genizah fragments that are closest to the Hebrew text, that is, primarily what Klein (1986, I: xxii) terms ‘targum proper’ (running translations into Aramaic interspersed with the original Hebrew or a lemma thereof), and secondarily the festival-liturgical collections and fragment-targums (which are similar but consist of several shorter passages put together). It is the assumption that in these texts the influence of the Hebrew original on (morpho)syntax will be the strongest and most easily visible. The material from the *toseftot* (i.e., legalistic interpretations and explanations of the biblical text) is expected to be less directly influenced, and also to have undergone linguistic updating;<sup>6</sup> it is therefore not rigorously investigated here — the same holds for the introductory poems, which are also difficult to compare due to differences in genre.

Summarizing, this study looks at the following corpora:

**Biblical Hebrew** The BH translated in the Palestinian targum, which happens to be limited to the Pentateuch. Data from this corpus will be cited using common abbreviations for the biblical books and using the BHS (Elliger and Rudolph 1967–1977) unless the Hebrew quoted in the targum differs.

**‘Pure’ Jewish Palestinian Aramaic** The Old and Middle Judaeae inscriptions, parchments, and papyri, and the Old Judaeae surviving in the Talmud. These texts are cited according to the edition by Beyer (1984–2004), using his abbreviations (thus e.g. ‘ySK 1’ for the first Bar Kosiba letter; Beyer 1984–2004, I: 351).

**Jewish Palestinian Aramaic influenced by Biblical Hebrew** Direct translations of the BH original in the Genizah fragments of the Palestinian targum, occasionally including additions. Citations follow the edition by Klein (1986); using both manuscript siglum and biblical reference to refer to them (e.g. ‘MS C, Gen. 35:10’).

Occasionally, reference will be made to Porten and Yardeni (1986–1999) as ‘TAD’.

In principle, comparisons with other related varieties of Western Aramaic and the Hasmonaeen literary language would be useful, however, this is outside the scope of the present study. The choice to compare with AOA instead was made because it has a large enough corpus and its TAM system has already been described in detail (in Gzella 2004).

## 1.2 Tense, Aspect and Modality

This section introduces the concepts of Tense, Aspect and Modality. These are semantic notions relating to the expression of what is most broadly termed *situations* (including events, states, processes, etc.). As we will see below, each of these three categories can be defined relatively well independent from the others. However, there are strong conceptual relations between them, which means that there is almost never a one-to-one correspondence between a particular morphological or (morpho-)syntactical pattern in some language and a single well-defined, typologically responsible, semantic notion. This, and the fact that these concepts are so central to human thought that they are part of virtually all sentences, are among the main reasons why scholars continue to be intrigued by TAM (Saussure et al. 2007).

First, *tense* is the term used by many language learners to refer to specific verbal conjugations (English *simple past*, Latin *perfectum*, etc.). In this study, however, here we take the term in the semantic sense,

---

6. See the discussion around Gen. 44:18 on page section 3.2.3.

namely as ‘relat[ing] the time of the situation referred to to some other time, usually to the moment of speaking’ (Comrie 1976, 1–2). This concept can be briefly introduced by way of the following example:

- (1) a. When walking down the road, I often meet Harry.  
 b. When walking down the road, I often met Harry. (Comrie 1976, 2)

As is well-known, example (1a) is in the present tense while (1b) is in the past tense. In both sentences, the main clause ‘I often meet/met Harry’ is placed temporarily relative to the moment of speaking (simultaneous with or before, respectively). This is called an *absolute* tense. The background clause ‘When walking down the road’ is placed temporarily relative to the main clause; this is called *relative* tense. In both cases, the background clause is contemporaneous with the main clause, and in that sense similar to the (absolute) present tense.

*Aspect* is less well-known. It can be defined as ‘[a way] of viewing the internal temporal constituency of a situation’ (3). This can be exemplified by example (2):

- (2) John was reading when I entered. (Comrie 1976, 3)

Here, ‘when I entered’ is presented as a single, non-compositional event, which does not distinguish between beginning, middle and end. Verbs with this meaning are said to have *perfective* aspect. On the other hand, ‘John was reading’ explicitly refers to the actual reading activity without referring to its beginning or end; the speaker has thus decomposed the event. When a verb looks at the situation ‘from within’ in this way it is said to have *imperfective* aspect.

Related to this concept of *grammatical* aspect is that of *lexical* aspect. While grammatical aspect is a property of a particular situation, lexical aspect is an inherent property of verbs relating to the presence of limits or boundaries on the event described by the verb. Filip (2012, 726–728) recognises three binary properties of verbs: whether they imply a change of situation; whether they imply some kind of end or limit; and whether the event is extended in time. Taking into account the logical impossibility of some combinations, this gives rise to four verb classes: (atelic) states with [-change] [-limit] [+temporal extent]; (atelic) processes with [+change] [-limit] [+temporal extent]; (telic) protracted events with [+change] [+limit] [+temporal extent]; and (telic) momentaneous events with [+change] [+limit] [-temporal extent]. Of course, lexical aspect is not unrelated to grammatical aspect. For example, without overt marking or contextual clues to the contrary, temporal extent tends to correlate with imperfective aspect.

Lastly, the concept of *modality* is harder to define. It covers, roughly, the semantic modifications of the English modal verbs (will, can, may, must, etc.) and the Latin moods (indicative, subjunctive, imperative) (Palmer 1986, 1). Examples are modifications relating to ‘attitudes and opinions, speech acts, subjectivity, non-factivity, non-assertion, possibility and necessity’ (4). In the second edition of his textbook, Palmer gives a more precise definition: ‘Modality is concerned with the status of the proposition that describes the event’ (Palmer 2001, 1). However, what is included under this umbrella remains somewhat vague, and the author relies on more precise definitions of subcategories (propositional and event modality on pp. 7–8; epistemic and evidential modality on pp. 8–9; deontic and dynamic modality on pp. 9–10) rather than a definition of the overarching term. In the first edition however, he narrows his definition of modality down with two observations. First, modality concerns the speaker’s attitude towards the propositional content of the sentence rather than that content itself (e.g., ‘ought’ in ‘he ought to be here’). However, we limit ourselves to main clause modality, thus excluding cases where the propositional content is embedded so deep that the attitude becomes content in its own right (e.g., ‘required’ in ‘he is required to be here’). Second, it is clear that modality is basically concerned with subjectivity, although objective modality cannot be excluded (e.g., ‘required’ in the previous example may refer to some general rule).



According to most authors, the most basic subdivision of different types of modality is that between *propositional* and *event* modality (7–8). These are expansions of the earlier terms *epistemic* and *deontic* modality (e.g. Palmer 1986, 18), respectively. The definitions for these given by Lyons (1977) are that epistemic modality ‘is concerned with matters of knowledge, belief’ while deontic modality ‘is concerned with the necessity or possibility of acts performed by morally responsible agents’ (793, 823 in citation by Palmer 1986, 18). The distinction can be clarified using the following example (adapted from 19):

- (3) a. Julie can’t be in her office.  
b. Julie mustn’t be in her office.

The propositional content of both sentences is the same (Julie not being in her office), and in both sentences the truth of this proposition is left undetermined. However, in the first sentence, the speaker focuses on the mere possibility of this truth by asserting its logical impossibility, while in the second sentence, some kind of rule or judgement is presupposed (e.g., ‘Julie mustn’t be in her office; she should take rest’). For this reason, (3a) is said to have epistemic modality whereas (3b) is said to have deontic modality.

Propositional modality is a generalization of epistemic modality and also includes evidentiality, where the source of knowledge or belief is expressed (thus, for example, distinguishing between first and second-hand information). They are grouped together because they are both ‘concerned with the speaker’s judgement of [a] proposition’ (Palmer 2001, 7). On the other hand, event modality is ‘concerned with the speaker’s attitude towards a potential future event’ (8), and besides deontic modality also includes types of dynamic modality, which express whether a subject is able or (non-deontically) necessitated to do something.

### 1.2.1 Tense, Aspect and Modality in Biblical Hebrew

To the best of my knowledge, the most comprehensive study into the Biblical Hebrew TAM system to date is that by Cook (2012). To avoid needless repetition of the existing literature, no history of research is given here; the second chapter of the aforementioned work can be consulted for an extensive overview.

In Cook’s view, the BH verbal system is centred around a primary opposition between the perfective ‘perfect’ and the imperfective ‘imperfect’ (200).<sup>7</sup> However, these aspectual grams have a ‘default temporal interpretation’ (256, 265–268), which in the post-biblical period caused a development into a tense-prominent system (200). The question whether the BH verbal system is primarily aspect-prominent or tense-prominent is a controversial one. It is not the place of this study to adopt any point of view on the matter. Instead, examples will be analysed on a case-by-case basis. What is important here is that the ‘perfect’ can be used both to express perfective aspect (201–217) and to express the past (268); which of these is original is primary is not our concern. On the other hand, the ‘imperfect’ is primarily an imperfective form (217–223), albeit less markedly so than that the ‘perfect’ is perfective. Its default temporal interpretation is non-past (268). Cook argues that the ‘imperfect’ developed from the Central Semitic progressive (long) ‘imperfect’ (222), a cross-linguistically common development (Bybee et al. 1994, 141). The participle would follow the same path, but lag behind and therefore still mark progressive aspect in BH (Cook 2012, 223–233).<sup>8</sup>

Noteworthy of the BH TAM system is that past tense can be expressed by its *wayyiqtol* conjugation, besides by the ‘perfect’. This is a remnant of the older *short* ‘imperfect’. According to Cook (2012, 263–

7. Based on the examples given for the ‘perfect’ on p. 201, it is not a ‘true’ perfective, however, because it includes, among others, statives and performative function. In languages with a ‘true’ opposition between perfective and imperfective aspect (that is, Slavonic languages, in whose study the terms originate), these are expressed by the imperfective form. For discussion and references, see section 3.1.

8. As such, it does not appear to be ready yet for a default temporal interpretation, although the author does not mention this explicitly.

264), this form moves along a path from resultative, through perfect and perfective into past. The ‘perfect’ would move along the same path, but lag behind (just as the participle lags behind on the path of the ‘imperfect’). By the time of BH, then, *wayyiqtol* has lost perfective aspect (Cook 2012, 256–265), besides having become largely restricted to narrative texts.

Following Holmstedt (2011), Cook (2012, 235–237) understands the BH verbal system to have subject-verb (SV) order by default.<sup>9</sup> This is the word order used for realis modality, whereas irrealis clauses have (X-)SV order. The term *irrealis* here is expressly broad, ‘including subordinate modalities, habituality, volitive, and positive and negative directive meanings’ (234) and even ‘contingent modality’, that is, that of final and conditional clauses (256).<sup>10</sup> In this analysis, the irrealis ‘perfect’ includes the *wəqatal*, which then does not need special treatment any more (249). It covers conditionals, final clauses, directive modality and habituality (250). The irrealis ‘imperfect’ has a wider range, also including volitive, epistemic, and dynamic modality (255). This is in part due to the (originally long) ‘imperfect’'s near-complete merger of, and subsequent confusion with, the historically short ‘imperfect’. In Cook's analysis, the jussive, imperative, and cohortative forms constitute a subsystem of the irrealis ‘imperfect’, specifically marking directive and volitive modality (237).

### 1.2.2 Tense, Aspect and Modality in Achaemenid Official Aramaic

The TAM system of AOA was the topic of Gzella's 2004 Habilitationsschrift. He analyses this system as tense-prominent (Gzella 2004, 111<sup>11</sup>), but stresses that no form has only one function (109) and that the three concepts of TAM are not independent (107–109).

Instead of BH's past/non-past opposition, AOA has developed a three-way division into past, in most basic contexts usually expressed by the ‘perfect’ (113–151), present, expressed by the participle, ‘imperfect’, or nominal clauses (194–203), and future, usually expressed by the ‘imperfect’ (216–225). However, already in AOA the distinction between present and future temporality starts to decline again, and the participle can also be used for the imminent future (225–232) and occasionally the simple future (219–220). Aspectual nuances are most often left implicit and inferred from the lexical aspect of the verb and the overall context. Modality is primarily expressed by the ‘imperfect’, which covers both epistemic (assumptive) and several types of deontic modality (270–276). Naturally, the imperative can also be used for obligative and optative modality (271–272).

Unlike BH, there are no remnants of a narrative short ‘imperfect’ in AOA (272, 314). Also the ‘waw-inverted’ ‘perfect’, *wəqatal*, is lacking; the ‘perfect’ is used for modality only rarely (302). On the other hand, AOA developed new periphrastic constructions where a finite verb of *הוי* ‘to be’ is combined with an active participle or a participle of a derived stem to overtly mark imperfective aspect (245–254). It thus becomes clear that there are several interesting choices involved when translating the biblical text into Aramaic.

9. He thereby makes a distinction between the *default* and the *most frequent* word order, noting that ‘the overwhelming majority of scholars have held that BH syntax is basically a verb-subject (VS) order because this is statistically the most frequent order’ (Cook 2012, 235).

10. On the inclusion of habituality as a modal category, see Cook (2012, 222). The other option is to see it as a subtype of imperfective aspect, as Comrie (1976, 26–32) does; this is the approach followed here as well, because habituality is compatible with realis modality. This can be seen in yyEN 4:2: *לשמנה דרהמנה סגי סגי אנון עברו לשמה* ‘they have done greatly for the sake of the merciful’. See section 2.1 for further discussion on this case.

11. ‘Dieser Entscheidung liegt die Überzeugung zugrunde, daß aramäische Verbformen durchaus etwas mit Zeit zu tun haben, ja daß die Markierung des Zeitstellenwertes sogar einen wesentlichen Bestandteil ihres Funktionsumfanges darstellt, wenn auch nicht den einzigen.’ ‘This decision (to treat temporality first) is based on the belief that the Aramaic verb forms overall have something to do with time, indeed, that the marking of positions in time is even an essential part of their functional scope, if not its only.’

### 1.3 Methodology

It must be noted here, following Gzella (2004, 59–64), that there rarely is a one-to-one correspondence between a semantic notion and a particular form, in spite of the impression one sometimes gets from primers on linguistic concepts such as TAM (of course, such works try to exploit languages in which the form-function correspondence is as neat as possible, for example by explaining the concept of aspect using examples from Slavic languages). This is especially the case for the Aramaic verbal system which is relatively small (63). Therefore, an analysis of the interaction between TAM and the JPA verbal system can broadly take two forms. It can describe the different forms and the functions each form can have, or it can discuss the different points on the three TAM axes and the forms that can be used to express them. In the first approach, we aim to answer the question ‘given a certain form, what are the possible meanings?’, whereas in the second approach, we ask ourselves: ‘given this situation, how can it be expressed?’ — we may therefore characterize these approaches as interpreter-primary and producer-primary, respectively. However, these two approaches are not independent. In order to choose an appropriate form, a producer must take into account the possible ambiguities it may create. On the other hand, an interpreter may exclude certain possible meanings in particular contexts if there are more appropriate ways to express the situations corresponding to those other possible meanings.

While either approach should in principle lead to the same results, and the first approach is the one taken by traditional grammars, we take the second approach here, following, for instance, Gzella (2004, see especially p. 109) for AOA and Cook (2012, especially pp. 190–191) for BH. The reason for this approach is threefold. First, this approach avoids the tendency one sometimes finds in the study of ancient languages to focus on how sentences should be translated rather than what they mean. The goal of this study is not to improve the existing translations of the JPA texts we have but to contribute to a better understanding of the language itself. Second, the producer-primary approach is better suited given that a large part of this study considers translations from BH to JPA. In this context, the JPA producer is the BH interpreter. Taking a (JPA-)producer-primary approach positions us in the middle of the transmission from BH producer to JPA interpreter. From this point of view, it is therefore easier to explain the interaction between BH and JPA, than from the point of view of the JPA interpreter. Lastly, because there are more semantic notions than forms to express them, the function-to-form approach gives a flatter subsection structure which is easier to navigate.

The following chapters thus look at Tense, Aspect and Modality one by one, discussing how the various semantic notions in those fields can be expressed formally, depending on the ‘purity’ of the language (i.e., the amount of influence from BH). This is then compared to the expression of the same semantic notion in AOA, which serves as a point of reference.

The targumim originate from a time where the main portion of the Jewish population did not speak Hebrew any more. Because one had to understand the Torah, instead of simply listen to it, translations into the vernacular were required (Flesher and Chilton 2011, 4). The importance that was ascribed to this internalisation of the law suggests that the authorities at that time still had good command of Hebrew, and that the same would have held for the earliest targumic translators. The working hypothesis will therefore be that the targumic translators had near-native command over the BH TAM system.

However, because the translators were highly familiar with the meaning of the text and would have been deeply concerned with conveying the right meaning in the translation, we expect few calques (which would arise more often in a more mechanical translation style). For this reason, an attempt should always be made to explain even the ‘impure’ JPA texts as a part of a coherent verbal system for JPA, i.e., to explain away as little as possible with possible influence from BH. This is different from the approach taken by Bombeck (1997) in his study on the understanding of the BH verbal system of the translators of Targum Onqelos, Jonathan, Neophyti and Pseudo-Jonathan as well as the Peshitta. He begins by establishing a translation scheme which determines how each Hebrew form is translated, after which any translation

deviating from that scheme must be explained on extra-linguistic grounds (e.g., a different Vorlage) or the semantic value of the Hebrew verb, sentence or context (Bombeck 1997, 17).<sup>12</sup> This is because he is primarily interested in how the Aramaic translators understood the verbal system of their source text. In the present study I aim to describe the TAM system of the target language, so we must look at the Hebrew original when a form is used oddly compared to its normal usage in that target language. We therefore treat every form as correct JPA until proven otherwise. After all, the goal of the targumim was to provide understandable translations (e.g. Fleisher and Chilton 2011, 4–5), rather than to reflect the source text as closely as possible, like the translations of Aquila of Sinope or, more recently, Robert Young.

Finally, we must pay some attention to the way ambiguous forms are handled. Except for the two verbal forms found in an inscription written in Greek script (yWG 1), all Old and Middle Judaeen material is written in unvocalised consonantal script with restricted use of *matres lectionis* (Beyer 1984–2004, I: 409–422). As for the Genizah fragments, only parts of them are vocalised. As a result, a number of forms is ambiguous, particularly in the case of the (third person) masculine singular ‘perfect’ and the participle. At least theoretically, we cannot depend on common sense or intuition to decide which form it is, because this would lead to circular reasoning. After all, common sense and intuition would take into account such notions as TAM. For instance, in yySU 2, a synagogue inscription recalling a donation, we find PN דכיר ... דיהב ... ‘may PN ... be remembered, for he gave ...’, where יהב could morphologically be a participle. Tagging it as a ‘perfect’ would be based on the intuition that the ‘perfect’ is often associated with perfective aspect, whereas the participle is commonly associated with imperfective aspect. In some cases, we have a parallel that can disambiguate. Such is the case for יהב in yySU 2, which finds a parallel in the unambiguous ‘perfect’ form ארתחזק in yySU 7 (and numerous similar texts from different locations): כל קהלה ... קדישה דאתחזק [may the whole] holy [comm]unity [be remembered], for it donated ...’. In other cases, we do not have a parallel, but received knowledge makes it abundantly clear which reading is to be preferred. For instance, in yyZZ 36, a marriage contract, we find twice the form יהב (lines 20 and 21). Since a single ‘giving’ situation cannot be stretched out in time, the participle of יהב would be reserved for habitual aspect, i.e., ‘X used to give ...’. However, since these two occurrences describe the dowry that is being given, such a habitual reading is excluded, and a ‘perfect’ form must be preferred. In cases like this, the clearly preferable reading is used here, despite the theoretical impurity this causes. When something is ‘clearly’ preferable exactly remains subjective and is open to debate; this is not the place for extensive epistemological arguments, so it has been attempted to err on the side of caution in these matters. Sporadic cases of ambiguity remain, as for a saying of Hillel in Mishnah Abot 1:3 (xyRH 1): נגד שמא אבד שמא can be read with participles as ‘when fame spreads, it (soon) passes away’ or with ‘perfects’ as ‘fame has spread, fame has passed away’; without ascribing to a particular Mishnaic vocalisation both interpretations make sense. These cases are, fortunately, few enough so as not to influence our method; they will be dealt with on a case-by-case basis.

12. The translation scheme is purely based on morphology, as becomes clear on p. 59: BH ‘perfect’ maps to Aramaic ‘perfect’; ‘imperfect’ to ‘imperfect’; *wayyiqtol* to (*wa-*)‘perfect’; *wəqatal* to (*wa-*)‘imperfect’; active participle to active participle; passive participle to passive participle.

## Chapter 2

# Tense

Of the three terms Tense, Aspect and Modality, tense is the one most well-known due to its use in standard grammars and textbooks. It is therefore all the more important to clearly demarcate the term *tense* as it is typically used in such contexts from how it is used here (and in other studies on TAM). As already alluded to in section 1.2, the term *tense* as it is used in standard grammars refers to a morphological class, whereas we are here interested in conceptual distinctions; when it comes to tense, distinctions with regards to time reference. These two uses of the term do not always coincide. Take, for instance, the English *simple present* which refers to an event in the future (rather than the present) in ‘the train leaves at 10am’. In what follows, we take tense to ‘relat[e] the time of the situation referred to to some other time, usually to the moment of speaking’ (Comrie 1976, 1–2).

Cross-linguistically one finds that languages usually have up to three different tenses, where the past tense is the first to be differentiated (leading to a two-way distinction between past and non-past) and the distinction between present and future is secondary. Indeed, we can see this very development in Aramaic, where the participle came to be used as a present tense marker in an originally binary past/non-past system (Gzella 2004, 201–203).

It should further be noted that the verbal systems under consideration here have overall less different tense and aspect markers than verbal systems in most European languages. In Ancient Hebrew and (Old) Aramaic the verbal system is founded on the two pillars of the ‘perfect’ and (long) ‘imperfect’ (leaving aside for the moment the Hebrew-specific so-called inverted forms *wayyiqtol* and *wəqatal*, as well as the Aramaic development of the participle into a present tense, which was only completed in AOA), whereas English has a matrix of binary (past vs. non-past) tense and ternary aspect (with the unmarked ‘writes’/‘wrote’ and the auxiliary verbs ‘to be’ and ‘to have’) giving rise to six productive forms.

In the most basic contexts (i.e., foregrounded main clauses), the ‘perfect’ usually describes events in the past while the (long) ‘imperfect’ describes events in the non-past.<sup>13</sup> However, in other contexts both can be used to express other tense and aspect values. Thus both the ‘perfect’ and the ‘imperfect’ can be used for certain aspectual nuances, as opposed to the situation in, for example, English, where forms in the tense-aspect matrix have clear counterparts (such as ‘writes’ vs. ‘wrote’).

Noteworthy of the Aramaic verbal system is the development of the participle into a finite form as early as in AOA. This is a reasonably straightforward development from attributive usage through a marker of

---

13. This is not the same as saying the Semitic ‘perfect’ and ‘imperfect’ forms are primarily markers of tense. With only two forms, the relative past naturally correlates with complete events, as does the relative non-past with incomplete events (Hewson 2012, 520). The goal here is not to establish either property as primary. The correlation of past tense and completive aspect on the one hand, and non-past tense and incomplete aspect on the other, is not an unexpected or uncommon one. One can recognise the same correlations in the earliest stage of acquiring the English language, where children use a relatively simple system of past participle, present participle, and infinitive. These forms are used finitely, as in ‘I drawing’, ‘Paul want cookie’, and ‘car broken’ (in the active sense of ‘car has broken’; ‘the car broke down’) (519–520).

contemporaneity and eventually into a marker for present tense and a narrative form (Gzella 2004, 201).<sup>14</sup> The question is then how this form gets integrated into the originally binary tense system and how it comes to relate to the ‘imperfect’ with which it overlaps in function, both marking present tense. In the AOA corpus studied by Gzella (2004) it seems that the ‘imperfect’ is used more frequently for modal functions, conditional clauses and relative clauses (197–201). The participle, considering its attributive origins, would be less suited for these functions. This is, however, a distinction of modality, not of aspect or tense. This immediately underlines the redundancy in this system. It is therefore not surprising that in most, if not all, post-Achaemenid varieties of Aramaic, the functional range of the ‘imperfect’ is further reduced, thereby also reducing the overlap between this form and the participle (202–203).

## 2.1 Past Tense

The Old and Middle Judaeen corpora provide ample evidence for the past tense. Although the formulaic nature and the conciseness of many of the texts (such as grave inscriptions or honorary mentions of synagogue donors), must lead one to be somewhat careful with making generalizing claims, the fact that the past tense is by and large expressed in the same way as in AOA suggests that the corpus studied here is representative of a wider range of JPA texts.

A large part of the evidence consists of momentaneous events, which are described using ‘perfects’:<sup>15</sup>

- (4) a. xyPJ: PN נצחו טליא דאזלו לאגחא קרבא ב  
*Victorious were (G pf.) the young men who had gone (G pf.<sup>16</sup>) to make battle (C inf.) against PN.*
- b. xyMT 35: אתת בשורתא טבתא ליהודאי די לא יעדון מן אוריתא ...  
*The good news came (G pf.) to the Judaeans that they would not (have to) deviate (G ipf.) from the law (cf. 1 Macc. 6:55–62, as noted by Beyer 1984–2004, I: 358).*
- c. yyES 1: ... דכיר לטב PN דיהב חד טר[ימ]יסינ ...  
*May PN be remembered for good, for he gave (G pf.) a tremissus.*

As can be seen in (4ab), the event described by the ‘perfect’ can be used as a new point of reference for other forms. Thus, the **אזל** event in (4a) was prior to the **נצח** event whereas the **קרבא אגחא** event follows the **אזל** event; the **לא עדי** event in (4b) on the other hand follows the **אתי** event. The ‘perfect’ has the same function in AOA (Gzella 2004, 113).

In this corpus, only two or three times a protracted event in the past is described. The uncertain case is **אזל** in (4a) above. This verb probably describes the entire journey to the battle (albeit without putting too much emphasis on its duration), because ‘to leave’ would normally be expressed with **נפק** instead of **אזל**.<sup>17</sup> The more certain cases are in xyMT 2 on the preparation for Sukkot and a saying in xyRE on the gradual downfall of intellectual class since the destruction of the temple. Since all three events are described using the ‘perfect’, there is no reason to assume that these events are handled any differently. This is also the case for the one attestation of what might be a habitual event in the past, in yyEN 4:2 (**דכירין לטב דסגי סגי**) PN **אנון עבדו לשמה דרחמנה** ‘May PN be remembered for good, for they *did* [G pf.] greatly for the sake of the merciful’).

14. This is essentially comparable to the English progressive ‘is writing’ for the present tense when one realises that the present tense copula is implicit in Semitic.

15. This usage is also found in: xyJE 16c1; 201; 27:2; 80:7; ySK 1:3; 2:8; 815; 14:8; 15:1; xyMT 1, 5, 6, 7, 8, 9, 10, 12, 14, 15, 16, 17, 18, 19, 24, 26 (bis), 27, 36; xyRH 5 (bis); yyBG 1:5; yyHG 1:1; yyHH 1:2; yyMA 1:2, 4; yyOX 1:5, 6, 7; yySU 2:3; 7:1; yyZO 1:3; 2:3; 3:2; 4:2; 6:4; 7:2; 8:3; 9:2; 10:3; 11:2; 12:2; 13:3; 14:2; 15:3; 16:2; 17:2; 18:1; 19:3; 20:2; 21:3; 22:2; 23:2; 25:3; yyZZ 6:8; 11:4, 5, 7; 32:2.

16. This is probably not a momentaneous but a protracted event; see below.

17. The Genizah fragments overall translate BH **יצא** by **נפק** (once with **אזל** in MS B, Gen. 8:7, but this case is idiomatic), whereas **אזל** normally translates BH **הליך** or **בוא**.

Also identical to AOA is the expression of sequentiality. Because most texts in the Old / Middle Judaeian corpus are relatively short, we only have eight distinct sequences in seven different texts, all using ‘perfect’ forms and the conjunction *wa-* to chain events together into a storyline. This is attested, for example, in one of the lengthier tomb inscriptions:<sup>18</sup>

- (5) yJE 80:2–7: בגטה דזבנת דזבנתה במערטה וקברתה PN ואסק ולבבל ואסק ... PN אנה  
I, PN, who *was born* (G pf. P) in Jerusalem and *went into exile* (G pf.) to Babylon and *brought (back)*  
(C pf.) PN — and I *buried* (G pf.) him in the cave that I *had bought* (G pf.) in writing.<sup>19</sup>

It also becomes clear here that JPA has no dedicated form for the pluperfect, i.e. a past tense relative to another past tense such as English ‘had written’. The form used to express this temporality is the ‘perfect’; context and syntactic environment disambiguate whether the form is to be understood as a simple past or a pluperfect. Thus the fact that *זבנת* in (5) occurs in a relative clause to a phrase of which the verbal head (*קברתה*) is a ‘perfect’ as well leads to it having pluperfect temporality. This expression of pluperfect semantics is the same as in AOA (Gzella 2004, 152).

In another case of sequentiality, the marriage contract in yyZZ 36, we can also see that this chain of ‘perfect’ forms can be interspersed with other forms, which then describe events in time relative to the ‘perfect’ forms surrounding them. The ‘perfect’ chain here describes the legal acts performed to complete the marriage (line 6: *אמר*; *בעי*; 8: *אמר*; 11: *קבל*; 13: *פרן*; 20: *יהב*; 21: *יהב*).<sup>20</sup> Events off the main storyline, like the contents of the wish in lines 6–8, the contents of the promise in lines 11–12, and the purpose of an action in the chain in line 20, are described using the infinitive and ‘imperfect’ forms; these indicate time after the corresponding ‘perfect’ form.<sup>21</sup>

- (6) a. yyZZ 36:6–8: *אמרת ובעית* ... *למסב לי יאת* PN *לאתה*  
*I have said* (G pf.) and *declared to want* (G pf.) to *take* (G inf.) PN as wife.
- b. yyZZ 36:11–12: PN ל *ומשמה* [ה] *קבלת למ[ה]וי מוק[רה] ... ומשמה* [ה]  
And the bride *has taken (upon herself)* (G pf.) to *‘be honouring’* (inf. הוי + C pt.<sup>22</sup>) and *serving* (D pt.) PN.
- c. yyZZ 36:20: *ותרי ד[י]ג[ר]ין דדהב יהב [לה]* PN *דתעבד לה שאירין*  
And PN (her father) *gave* (G pf.) her (the bride) two gold dinars so that she *may have clasps made* (C ipf.).

It should be noted that, like most forms, *wa-* with a ‘perfect’ can have other functions and is not necessarily part of a storyline, even when there are other identical forms in the vicinity. For example, it is difficult to regard both *אמרת* and *בעית* in (6a) as part of the same chain, as there would not be two distinct

18. Six other cases are found in ySK 2:4–5; yMT 33; 34; xyNG 3; yyXX 16:3; yyZO 24:2–3; the last case in yyZZ 36 will be discussed below.

19. The third ‘perfect’ could be an ‘imperfect’, but it is unclear what the meaning would be. The first two ‘perfects’ could be participles, but are taken to be ‘perfects’ for analogy with the third form. Unlike the last form, which is in the first person, these first three are in the third person due to the relative clause: ‘I am the one who ...’

20. Vogt (1994, 73) and Gzella (2004, 208) use terms like ‘perfectum contractus’ and ‘Vertragsperfekt’ for this usage of the ‘perfect’. This particular instance, which is the only case in JPA, can also be analysed as the *recording* of a speech act that was performed in the past (as argued on p. 17), so such terms are not necessary to describe the situation attested for JPA. However, this is in part a terminological matter.

21. The conditions for the choice between an ‘imperfect’ and an infinitive in cases such as these have not been investigated, although they may be related to the distinction between them in prohibitive clauses (see section 4.2.2).

22. Periphrastic constructions with a form of הוי and an active participle or a participle of a reflexive stem are discussed in section 3.2.

speaking events involved. It would be too easy to say that sequential ‘perfect’ chains allow contemporaneous events in them; this would normally be the function of the ‘imperfect’ (see e.g. in Dan. 4:2 with Gzella 2004, 136–147). Cases like this must be explained on a case-by-case basis, depending on the actual function of the ‘perfect’ form. In this particular case, there are several options. First, one might argue that אמרת is used in the sense of ‘speak up’, ‘begin to speak’. We may rather expect a form of עני for this meaning (as in Dan. 4:30, e.g., and numerous other examples), but this meaning can indeed not be excluded for אמר. Second, we might note that verbs of speaking often come in pairs, both in Aramaic (ענה ואמר) and related languages (e.g. BH לאמר [ויקרא, ויצו, ...] and thus form a standard construction. However, in these examples the form of אמר is the more general one, appears second, and thus function as a direct speech marker, which is incompatible with the example here. Perhaps the best explanation is then to say that אמרת is not actually part of the chain, but rather encompasses everything that has been said during the entire marriage ceremony (similar to ‘gave’ in ‘I gave a speech and showed a slide with ...’, i.e., ‘I gave a speech in which I showed a slide ...’). This is similar to the ‘konstatierenden Perfekt’ (118–119), which also condenses a number of other events into a single summarising form, but usually appears at the end of or after a ‘perfect’ chain. In this sense, the construction could perhaps be used in legal texts like this one to identify a party of the contract and confirm something that has been said out loud in writing and with a signature: ‘I, PN, said ...’ in the sense of ‘it was I, PN, who indeed said’ (for this reading, also note the fronting of PN אנה and the inclusion of his place of residence for identification purposes in lines 5–6). Reading בעית with prospective aspect (‘I have said to be about to take ...’; on this meaning cf. Gzella 2004, 229) is compatible with all these explanations and may very well be the correct interpretation, but does not resolve the problem of the ‘perfect’ chain with two speaking events on its own.

Depending on the lexical meaning of the verb, a ‘perfect’ with clear reference to an event in the past can ‘push into’ the present (cf. Gzella 2004, 163–164). Examples are ו גנובין (ח) התשכ ‘there are thieves’ (lit. ‘thieves have been found’) in ySK 1:6 and מטא זמן ‘the time is here’ (lit. ‘the time has come’) in xyNG 1, 2, and 3 (in xyNG 3, this phrase even stands parallel to two participial constructions; see example [9b] below). This secondary usage of the ‘perfect’ is quite transparent (the state reached in the past continues into the present), and since it depends on the lexical meaning of the verb and is limited to certain verb classes (in this corpus all verbs used in this sense are telic, as is to be expected and conforming to the situation in AOA described by Gzella 2004, 169) it should not be analysed as a different usage pattern of the ‘perfect’. A well-known case of this usage of the ‘perfect’ is that of the root ידע, which is, at least synchronically, analysed as having the meaning ‘to come to know’, thus leading to the ‘perfect’ meaning ‘to have come to know’ = ‘to know’. This is also attested in JPA, e.g. in MS D, Gen. 44:15: הלא ידעתון? ‘do you not know (that a great person [like me] practices divination)?’

The passive participle can also be used this way, in which case the focus is more on the state resulting from the event than on the completion of the event (cf. Gzella 2004, 173). Thus we have in yyXX 16:1 [ק]מיע ‘working and tested amulet’ rather than an amulet that ‘has been tested’ (note that the participle stands next to the adjective טב), and perhaps in yJE 16c:2 אבה קבר בדנה ‘our father lies (instead of: has been) buried herein’ (if this is indeed a participle). Such an attributive meaning is also to be found in yyMA 2:6 and 3:2, describing properties of angels, and lastly in the final line of an amulet in yyZZ 11:11:

- (7) yyZZ 11:11–12: תמ[י]כה היא וקטיל[ה דלא] בנין  
 She (the demon) is (hereby) under control (lit. *has been seized*, G pt. P) and dead (lit. *killed*, G pt. P) without offspring.

The Palestinian targum provides some more varied material, thanks to the larger literary variation of the source text. The traditional Classical Hebrew narrative style using *wayyiqtol* chains to move the story forward is paralleled with ‘perfect’ forms chained together with *wa-*, just as seen in yJE 80 ([5] above).<sup>23</sup>

23. As is common in other targumim as well, but unlike the situation in the Peshitta, where the conjunction is usually



Examples abound; see for example MS B, Gen. 4:4–6 or MS C, Gen. 32:22–29. We also find parallels for the ‘perfect’ with pluperfect meaning (e.g. MS A on Ex. 4:7).

However, in the Palestinian targum we find much fewer passive participles, and they are not used for events in the past whose resulting state continues in the present. While they can still be used this way (e.g. MS C, Gen. 32:19: *עָשׂוּ לְרִבּוֹנִי לְעֵשׂוּ* ‘it is a gift *sent* [D pt. P] to my master Esau’), this is also the territory of the ‘perfect’, as can be seen in example (8). Transitive verbs can use the ‘perfect’ of a derived stem so that the Agent does not need to be expressed, as with the passive participle.

- (8) a. MS B, Gen. 4:6: *וּלְמָה־כָּעַן אֶשְׁתַּנֵּי זֹהֵיִן*  
 ..., and why, now, *has* your manner *become affected* (Dt pf.; i.e., *have you become angry*)?
- b. MS C, Gen. 32:27: *אֲרוֹם־סֶלֶק עֲמוּד־שְׁחָרָא אֲרוֹם־מְטָא קְצָהוֹן דְּמְלֵאכֵי מְרוֹמָא לְמִשְׁבָּחָא*  
 ..., for the morning star *has risen* (G pf., i.e., *it is morning*), for the fixed hour *has arrived* (G pf., i.e., *is here*) for the angels on high to give praise.
- c. MS A, Ex. 21:29: *וְאִתְאַסְּהֵד בְּ[מ]רוֹי*  
 (If an ox has been a gorer ...), and its owner *has been warned* (Ct pf.), ...

To be sure, the same ‘perfect’ form is also used for resultative aspect where the focus lies primarily on the completed event, just as in AOA (Gzella 2004, 164–172) and the Old and Middle Judaeen corpora studied above. For example, MS A, Ex. 21:13 *אֲתַכּוּן [וְדִי לֹא]* ‘but if he did not do it (beat someone to death) intentionally’ clearly focuses on the event that has occurred rather than the state of ‘having done something unintentionally’ that resulted from it. This occurs also much more frequently, although in some cases it cannot be said with confidence whether the focus is primarily on the event or the resulting state (e.g. MS B on Gen. 4:14, *טְרַדְתָּ יָתִי* ‘You have banished me’: in the larger context, Cain describes his present situation; on the other hand, the active construction seems to draw attention to God as active Agent and hence to the original event).

There do not seem to be roots which occur with a passive participle for present significance of a past event in the Old/Middle Judaeen corpus and with a ‘perfect’ with the same function in the targum, which makes it difficult to be sure whether the situation is different in the Genizah fragments compared to Old/Middle Judaeen. However, there are still some parallels if we look at semantically similar roots. For instance, in yyZZ 11:11 ([7] above) we find the passive participle of *קטל* in the sense of ‘put to death’, and in MS B, Gen. 7:21 we have *וְאֶשְׁתִּי־כָל־בְּשָׂרָה* ‘and all flesh *was wiped out* (Qt pf.)’. A parallel to what is supposedly a passive participle of *עבד* in yJE 4:1 (‘this coffin *has been made*’) might be seen in MS B, Gen. 2:23 *דִּי־אֶתְבְּרִית דָּא מִינִי* ‘for this one [Eve] *was created* [Gt pf.] from me [Adam]’, MS B, Gen. 8:6 *חַרְבָּה* (חַרְבָּה) *דִּי עֲבַד* ‘the window of the ark, that he *had made* [G pf.]’, or MS C, Gen. 31:51 *דִּי־אֶקִּימָת* ... ‘[the cairn and the stele, which I] *have erected* [C pf.]’, although admittedly the present significance of the event remains the largest in yJE 4:1.

Influence from Biblical Hebrew may well account for this difference in distribution between ‘perfect’ and passive participle with Old and Middle Judaeen. In general, BH uses fewer passive participles, favouring derived stems instead. For instance, the Ct ‘perfect’ in MS A, Ex. 21:29 ([8c] above) is a Cp ‘perfect’ in MT. The ‘perfect’ of the Ct-stem may have felt to be closer to the original than a passive participle of the C-stem. On the other hand, the difference may also have to do with genre. In much of the epigraphic material the passive participle is used to describe the inscribed object. Hence, the property is immediately evident to the reader, whereas the ‘perfects’ found in the Hebrew Bible typically describe stories from the past.<sup>24</sup> This explanation would simultaneously account, at least partially, for the small number of passive participles in BH.

dropped (Bombeck 1997, 60).

24. H. Gzella (2019), personal communication.

## 2.2 Present Tense

Due to the nature of the texts, present temporality (that is, the temporality of events which are at some point contemporaneous to reference time) is attested far less in Old and Middle Judaeae; we only find it in letters and amulets.

The attested cases are predominantly statives. These will be discussed first, with two derived functions (speech acts and the *extratemporalis* or *general present*) discussed below. We have already seen how past events with a result ongoing in the present can be expressed using the ‘perfect’ (p. 14). This is however only possible when there *is* a clear event in the past leading to the present state — the more frequent situation is that the present state does not result from one particular event, or this event is not in focus. In this case a nominal clause or a participle is used, as can be seen in (9) below.<sup>25</sup> There is no difference in function with a ‘perfect’ with this function, judging from example (9b), where two nominal clauses and a ‘perfect’ stand parallel to each other. Rather, it depends on the lexical aspect and broader semantics of the verb which form is more appropriate. Conceptually it seems likely that events higher on the transitivity scale select for a verbal form (i.e., the participle) whereas events lower on the transitivity scale tend to be expressed with nominal clauses. However, with the data currently available this cannot be verified.

- (9) a. yyZZ 30:7: [אנ שיילין ושלמכון יסגי לעל]ם  
We *pray* (G pt.) that your well-being ever *increases* (G ipf.).
- b. xyNG 3: ... דאמריא רכיבין וגוזליא דקיקין וזמנא דאביבא לא מטא  
Since the lambs *are (still) soft* (nominal) and the doves *are (still) little* (nominal) and the time of ripening *is not yet here* (lit. *has not yet come*; G pf.<sup>26</sup>), ...

Existential expressions (‘there is/are [not]’), which are not necessarily extended in time, are expressed by *ūt* and *lēt*, as in yyZZ 11:5 (אתבדרו דאיתוי [הן] ‘wherever you are, dissipate!’) and yyZZ 30:2 (לית משרית ‘there is no residence available’). Especially in yyZZ 11:5 it would be odd to find a participle, since the situation is condensed into a single moment due to the perfective aspect of אתבדרו. However, with only two cases it cannot be said whether participles can be used for existential expressions as well.

The corpus also witnesses to five speech acts, expressions like ‘we hereby inform you’ or ‘I hereby bewitch you’ whose content is identical to their surface form. Since a speech act becomes reality only when the letter is read or the spell is pronounced, we must understand these verb phrases as present rather than past tense. The present tense is furthermore fitting, because the text thus directly invokes the personality of the author (i.e., the letter-writer or the sorcerer) in the mind of the receiver (the addressee or the demon). In all cases we find the participle used for these speech acts.<sup>27</sup>

- (10) a. xyNG 1: ... מהודעין אנחנא לכון  
We (hereby) *let you know* (C pt.) (that the time has come to take the tithes of the sheaves of the ears).
- b. yyMA 3:1: ... [משב]ע אנה על כול רוח ...

<sup>25</sup> Similar constructions can be found in e.g. ySK 11:7 and yyZZ 36:6,7. On the counterparts of nominal clauses in the past and the future, see section 3.1.

<sup>26</sup> Morphologically, a participle of מטא is possible here, but this would have the meaning ‘the time of ripening *will not come*’; cf. section 2.3 and 4.3.

<sup>27</sup> Similar cases are found in xyNG 2; 3; and yyZZ 35:3. The ‘perfect’ is not attested for present tense in letters, as it is allegedly in Ezra 14:4b (Gzella 2004, 209–210): על־דְּנָה שְׁלַחְנָא וְהוֹדֵעְנָא לְמַלְכָּא ‘therefore we send and inform the king’ (ESV). On the other hand, I would argue that neither of the ‘perfect’ forms in Ezra 14:4b are to be analysed as present tense. The verse describes the reason the authors decided to send the letter. The proper temporality expressed here is thus in the relative past to the opening and reading of the letter. With this analysis, all speech acts in written communication in AOA and JPA use participial forms. On its own, however, the JPA material is not enough to exclude this function for the ‘perfect’ form, given the low number of verbs in such contexts overall.

I (hereby) *adjure* (C pt.) all spirits ...

In the marriage contract in (6) above we have seen that speech acts can also be described with the ‘perfect’. As shown by Gzella (2004, 206–207), this is restricted to the legal register. This can be explained when we recognise that the reference time is that of reading rather than that of writing. When a legal contract is read, the performative speech acts (as in [6]) have happened in the past; the contract merely describes the transaction, the establishment of the marriage, or whatever other legal deed. On the other hand, the performative ‘we (hereby) let you know’ (as in [10a]) happens upon reading the letter, it is therefore expressed in the present tense with a participle rather than a ‘perfect’.

Finally, we have two instances of the so-called *extratemporalis* or *general present*, i.e., describing matters that are the case regardless of context. These two cases are found on amulets and expressed using participles — hence they are not distinguishable from the simple present (as in AOA; see 203–205) nor from purely adjectival participles: yyZZ 11:6–7 [מ]צלה לכלבה דנכת לפלוי[טס] תוא ‘the mark *protects* (C pt.) against the dog that bit Plo[tius]’ and yyMA 2:8 ‘in the name of ..., who ... and say ([ו]אמ[רין]), “may ...!”’, if the reading is correct and this describes the angels that are invoked by the incantation.

The Genizah fragments contain but few instances of present tense in the sense covered here. These cases are limited to the simple present in direct speech (e.g. MS C, Gen. 32:18: לְהֵי-אֵת אֲזֹל ‘where *are you going* [G pt.]?’; for a ‘perfect’ pushing into the present see MS B, Gen. 4:6: לְמָה-רָעַן בְּאֶשׁ-לִי ‘why, now, are you [G pf., lit. *have you become*] distressed?’); they do not show any difference with the Old and Middle Judaeen corpus.

### 2.2.1 Background Events

Background events and states are often contemporaneous to the main event, and therefore have present temporality. This kind of events is not found in the Old and Middle Judaeen texts, presumably due to genre, but many examples can be found in the Genizah fragments. The normal way to express background information contemporaneous to the main event is the participle, as can be seen in (11a) and the second participle in (11b):

- (11) a. MS A, Ex. 22:9: וְלִית דְּחַמֵּי יָתֵהּ  
(If someone gives his fellow [something] for safekeeping, and it dies, is injured, or stolen,) without anyone *seeing* (G pt.) it, ...
- b. MS C, Gen. 31:40: ... הָוִינָא בְּאִימָמָא אֶבְיִלִי-יָתֵי שְׂרָבָא  
(31:38: These twenty years I have been with you. ...) I *would be* (G pf.) (as follows): in the daytime, the heat *devoured* (G pt.) me, ...

These cases also show that the expression is the same regardless of the absolute tense (i.e., the temporality of the main event). While (11b) is clearly in the past, example (11a) is best explained as atemporal or non-past. Besides the participle, a ‘perfect’ can be used:

- (12) a. MS B, Gen. 4:4: [וְהָבִיל אֵתֵי לְהוֹדֵהוּא [מִן] -בְּכִרֵי עֲאֲנִיָּה וּמִן-שְׂמִינִיָּהוּן  
(After some time Cain brought an offering to YHWH from the fruits of the earth.) [And A]bel also *brought* (C pf.) [some of] the firstborn of his sheep and some of their fat ones.<sup>28</sup>

28. In MT, ‘brought’ is a ‘perfect’ following a *wayyiqtol* clause in which Cain is said to bring the fruits of the earth as an offer. Hence, the traditional understanding is that Abel’s offering is backgrounded (and the non-acceptance of Cain’s offer in the following verse is backgrounded against the acceptance of Abel’s offer). Since both the two *wayyiqtol* forms and the two ‘perfect’ forms are translated as ‘perfects’, this distinction is not reflected in this targum. Cook (2012, 296–297) disagrees with the traditional understanding of these verses and claims that the events are all foregrounded but the ‘perfect’ forms are contemporaneous with the *wayyiqtol* events. Although he is correct that the ‘perfect’ *can* be used for foregrounded events, Gen. 4:3–4(5) is a poor example of this since the tradi-

- b. MS A, Ex. 22:20: אַרְוֹם גְּזֹרִיִּיא הוֹיִתוֹן בְּאַרְעָה דְּמִצְרַיִם  
(You shall not afflict or oppress strangers,) for you *were* (G pf.) strangers in the land of Egypt.
- c. MS D, Gen. 37:24: וְגַ[וּבְאָ] הַיְוָה רִיקוֹן לֹא הָיָה בְּיַהּ מַיִם  
(And they took him, and cast him into the pit.) And the pit *was* (G pf.) empty, there *was* (G pf.) no water in it.

It appears that the choice between participle and ‘perfect’ depends primarily on matters of both grammatical and lexical aspect. The participles in (11) are used for (telic) events. As far as the subordinate clause is concerned, these events are unbounded in time; they therefore show affinity with imperfective aspect, for which the participle is a good fit. These events are time-wise only bound by the main event. On the other hand, the ‘perfect’ in (12a), which also describes a telic event, is not bound by the main event (which is Cain’s offer): it may have occurred somewhat earlier or later, and still be backgrounded. It is described with perfective aspect, for which the ‘perfect’ is a good fit. The ‘perfects’ of הוֹי in (12bc) do not express events but states. The question whether they have perfective or imperfective aspect is not really relevant here: it is clear that the state is ongoing longer than the event of the main clause, but that we are only interested in the state at the moment of reference (or, in the case of [12b], we are only interested in the fact that there was *one* moment at which the Israelites were strangers in Egypt). The matter of aspect and stative verbs is revisited in section 3.1.

It should be noted that the use of the ‘perfect’ for background events (rather than states) is quite rare. The two are not incompatible (as shown by [12a]), but backgrounding and imperfectivity tend to coincide. This is a common phenomenon (see e.g. Hopper 1979) and ties into the relationships between transitivity and lexical and grammatical aspect. Background events are often not essential for the main storyline, so they are often low in transitivity (because a transfer of energy, high telicity or volitionality, etc. would have a significant impact on the main storyline), and hence are often durative.

Background events can also be described with a periphrastic construction:<sup>29</sup>

- (13) a. MS C, Gen. 31:46: וְאָמַר יַעֲקֹב לְבָנָיו [וְ]הָיוּ קָרְאוּ לְהוֹן אַחֵי  
And Jacob said to his sons, whom he *used to call* (pf. הוֹי + G pt.) his brothers, ...
- b. MS C, Gen. 35:7: כִּדְהָוָה עָרִיק ...  
(...because there God had revealed himself to him), when he *was fleeing* (pf. הוֹי + G pt.) ...

In example (13a), this is clearly the case to mark habituality. The second example is not as clear-cut, however. Like the examples with a ‘perfect’ of הוֹי in (12bc), an atelic situation is described. However, עָרִיק is not a stative verb; its ‘perfect’ would here have the sense of ‘when he *had fled*’. On the other hand, a participle would be bounded by the temporal limits of the main event (as seen with example [11]) — because the main event (God’s revealing) is momentaneous here, this does not fit either. It thus seems that הוֹי is used to ‘wrap’ the process verb so that its durativity can be maintained.

tional understanding makes good sense: up until Abel’s offer is accepted, the fact that Abel brings an offer is not important (hence backgrounded), and when Abel’s offer is accepted, this takes the foreground in Cain’s perception against the background of his own offer not being accepted.

29. These constructions are discussed in more detail in section 3.2. The Hebrew ‘periphrastic infinitive’ in the MT of Gen. 8:5 (וְהָיָה הַיָּם הִלָּךְ וְהַיַּם הָיָה הִלָּךְ וְהַיָּם הִלָּךְ) ‘and the water continued to recede’, unique in the Hebrew Bible, appears to be translated as a periphrastic construction as well (וּמֵי־הַיָּם הִלָּךְ וְהָיָה הִלָּךְ in MS B). However, if we accept Gzella’s (2008) thesis that the form of הִיָּה (and hence הוֹי) is essentially unrelated to the double infinitive absolute (and hence the participles in the Aramaic translation), this verse requires no special treatment as a periphrastic construction here. The use of the infinitive absolute of הִלָּךְ to express continuity is well-established in BH (see e.g. Joüon and Muraoka 2006, §1238), and the construction found in MS B, Gen. 8:5 (i.e., a participle of אָזַל followed by another participle) is found also elsewhere in Aramaic (for example in Targum Jonathan on Zeph. 3:5: כְּנִהוֹר צַפְרָא וְתִקֵּין דְּאִיל וְתִקֵּין ‘like the morning light, getting ever stronger’).

## 2.3 Future Tense

The expression of events that lie, time-wise, after the point of reference, necessarily interacts with modality, since the future is uncertain and hence any utterance about it is either uncertain or deontic. Events that are primarily marked for modality will be discussed in chapter 4 below, but here we can already discuss those events which are most neutral with respect to modality. We must restrict ourselves to events without deontic modality, then, and look only at sentences where the epistemic nuance is not in focus.

The remaining clauses in Old and Middle Judaeen use both the ‘imperfect’ and participles. That the participle takes on future territory is a development with parallels in other varieties of Aramaic, and usually goes hand in hand with a further restriction of the functional domain of the ‘imperfect’ (Gzella 2004, 202; 217–218). This is what we see here, too, as is reflected by the following examples:

- (14) a. ySK 8:9: שגר ל(י) די ואנה איתפרד  
Send (D imp.) (Jonathan) to me, and I *will separate* (Gt ipf.) myself from him.
- b. ySK 11:7–9: ועמרו (עמר) על מלחה די לא יפרק מרהון ית דברי כפוריה כ[נו] מוסה  
And *tie up* (D imp.) (wool) on salt, so that their owner *does not make impossible* (D ipf.) the instructions for reconciliation according to the law.
- c. xyRH 4: דישתמש בתגא חלף  
One who *makes (unworthy) use* (D ipf.<sup>30</sup>) of the crown (of learning) (*thereby*) *passes away* (G pt.).
- d. yJE 21:1: כל די אנש מתהנה בחלתה דה  
Whatever one *should take* (Gt pt.<sup>31</sup>) from this grave (is an offer to God from the one who [lies] in it).
- e. ySK 11:4–5: ואנה מתפרע יאות מן רהומיה  
And I *will be well-avenged* (Gt pt.) on the Romans.

The ‘imperfect’ forms in (14ab) appear in purposive clauses; clauses which are dependent on a main clause and express purpose.<sup>32</sup> These clauses interact with modality in various ways. Their content can be a wish or desire and thus relate to optative or voluntative modality, but because they can only be fulfilled when the main clause is fulfilled they also interact with abilitative modality. Furthermore, because it is unknown whether the purposive clause will be fulfilled, it can also relate to various forms of epistemic modality. Such relationships are immediately visible in languages that mark modality more overtly, such as in English, where purposive clauses often contain modal auxiliary verbs (for example, we may rephrase [14b] as ‘lest their owner *should* make ... impossible’). As we will see in chapter 4, the ‘imperfect’ (rather than the participle) is normally used for various modal nuances. Therefore it is only fitting that the ‘imperfect’ is also used in purposive clauses.

From examples (14cd) it appears that the participle can describe events starting in the present and continuing in the future. It thus reflects the *imminent future* known from other Semitic languages like Biblical Hebrew (e.g., *by making unworthy use of the crown one already starts to pass away*), and has general non-past temporality rather than pure present temporality specifically. Unfortunately, this corpus contains only three participles with clear future time reference.<sup>33</sup> With this amount of data, the instance

30. On this use of the ‘imperfect’ in generalising relative clauses, see section 4.5.

31. On this use of the participle in generalising relative clauses, see section 4.5.

32. Other purposive ‘imperfects’ are found in ySK 15:4; xyMT 35; xyRA (all four); yyZZ 36:20.

33. In many cases, present temporality cannot be excluded. For example, in Gen. 32:26, MS C translates the original ‘perfect’ of ככל with a participle: וַחֲמַא אַרוּם-לָא יָכַל לֵיהּ ‘and (the angel) saw that he *could not prevail* (G pt.) against him (Jacob)’. An imminent future would read very pleasantly here (in the sense of: ‘the angel saw that he was not going to overpower Jacob anytime soon’,

in (14d) cannot be clearly distinguished from the ‘imperfect’ in (14c) (see also section 4.5). This may also be the result of an intermediate state of the language, in which both participles and ‘imperfects’ can be used in this kind of generalising relative clauses. Because it is unknown whether such a generalising relative clause will be instantiated (i.e., whether people will make unworthy use of the crown in [14c] or whether people will take from the grave in [14d], and if any, how many), the decision to use a participle or an ‘imperfect’ may then reflect the speaker’s expectations regarding this.<sup>34</sup>

It would be reasoning from within the system to say that the participle in example (14e) is also used as an imminent future, since Simon bar Kosiba’s avenging presumably depends on the realisation of the commands that he gives the recipient of this letter in the preceding sentences (namely, to come with more armed forces). It is therefore not certain to happen. Perhaps this participle is chosen over the ‘imperfect’ for its attributive nature, thus focusing on the property of being avenged rather than the action. Another option is that the participle is used for assertive modality (see section 4.3): ‘then I will *certainly* be avenged!’ However, one should also note that the reading is paleographically uncertain, and an ‘imperfect’ (אתפרע) is another option (Yadin et al. 2002, 320).

Note that both examples of the imminent future with a participle describe telic events. It appears that states beginning in the (near) present and continuing indefinitely are marked with the ‘imperfect’ instead. It seems that the participle, developing from a present tense, cannot reach that far into the future. We find such cases for example in amulets:<sup>35</sup>

- (15) yyMA 3:9–10: ... דל (א) תבין ... [אש] בעת עליך ...  
I have adjured (C pf.) you ... that you *will not harm* (C ipf.) ...

The same distinction between telic and atelic events in the future is found in the Genizah fragments. Examples of the atelic imminent future with the ‘imperfect’ abound, for instance in MS B, Gen. 4:12 (גל א קין ומטלטל יהוי קין ‘Cain *will be* [G ipf.] an exile and a wanderer’). However, in some cases where the end of the event is anticipated, a participle is used, even when the Hebrew has an ‘imperfect’. Conversely, there are also atelic cases where a Hebrew participle is translated with an ‘imperfect’:

- (16) a. MS C, Gen. 32:18: למן אאת ולהן אאת אגל  
To whom do you belong, and whereto *are you going* (G pt., against an ipf. in the Hebrew), and ...?  
b. MS B, Gen. 4:11: וכדון ליט יהוי קין מן ארעא  
And now Cain *will be* cursed (G ipf., against a pt. P. in the Hebrew) from the earth.

This tense change does not occur in all cases that we may expect it to happen: we find instances of telic ‘imperfects’ which remain translated as ‘imperfects’ as well as atelic future participles which remain participles in the translation. It is tempting to ascribe this to BH influence, but this is not necessary. For instance, in MS B, Gen. 2:17 we have ביום די יתאכל מניה תמות וְיָמוּת ‘on the day you *eat* (G ipf.) from it, you *will surely die* (G inf. + ipf.)’. The last ‘imperfect’ may be an imminent future with respect to the first one, but is not an imminent future with respect to the time of utterance, since Adam may eat from the tree much later on, or not eat from it at all. Atelic participles on the other hand may for example be retained when they are used attributively (e.g. MS C, Gen. 41:35: א עלתא האליין ‘these good years that *are coming* [G pt.]’) or to mark durativity (e.g. MS C, Gen. 32:21: דורון דמהלקה קדמי ‘a gift that *is going* [D pt.] before me’). Hence, these examples rather show a great awareness of the fine nuances of future expressions on the part of the targumic translators.

anticipating the next verse), but a simple present tense is possible as well.

34. See section 4.3 on epistemic nuances of the participle.

35. Other examples are found in yyMA 2:4, 8; 3:13, 33; yyXX 17:9.

## Chapter 3

# Aspect

The strong correlations between certain temporalities and types of aspect, which have already been mentioned briefly in section 1.2, are well visible in JPA. The ‘perfect’, primarily used for the relative past (section 2.1, thus often has perfective aspect, because events in the past tend to be viewed as complete. On the other hand, imperfective (or incomplete) aspect can be expressed in various ways: with the participle, the ‘imperfective’, and periphrastic constructions (section 3.2). However, the correspondences between particular verbal forms and aspectual notions are less strong than is the case for temporalities. Lexical aspect often has an influence on the grammatical aspect of the clause as a whole as well. The basic verbal forms (‘perfect’, ‘imperfect’, and participle) are not productive enough as an aspect marker to overtly mark a durative verb as perfective or a (near-)punctual verb as imperfective. It is only in combination with the syntactic environment and overall context that such an aspectual nuance arises. This supports the idea that the TAM system is tense-primary (as for AOA: Gzella 2004, 111): there are more ‘perfect’ forms with imperfective aspect than with non-past temporality, and more ‘imperfect’ forms with perfective aspect than with past temporality.

As will be discussed in section 3.1, the ‘perfect’ is not a ‘true’ perfective marker (in the sense of Hewson 2012, 518). This means it can also be used for classes of verbs that are not usually compatible with perfective grams, such as statives. It may furthermore be neutral with respect to aspect when it is primarily used to mark tense. These are well-known characteristics of the ‘perfect’, and the issue is partly terminological; there is no reason to dwell on it here.

Conversely, perfective (or, at least, non-imperfective) instances of the ‘imperfect’ appear quite regularly when the event described is punctual; it is then incompatible with imperfective aspect (Comrie 1976, 42). If it is indeed the case that the participle is not normally used for the far future, as has been argued in section 2.3, the ‘imperfect’ is the only way to express punctual events in the far future.<sup>36</sup>

Perhaps surprisingly, the participle is the most flexible of these three: most often, it is used with imperfective aspect, but example (17) below shows that it is definitely not incompatible with perfective aspect. Similar instances can be found in the use of the participle with punctual verbs in generalising relative clauses, such as in (35b) in section 4.5.

- (17) MS D, Gen. 44:22: **לֹא יָבִיל טְלִיאָ לְמִשְׁבַּק יִתְּאֲבֹי דְאִין שְׂבִיק טְלִיאָ יִתְּאֲבֹי שְׂעָה־חֲדָא זְעִירָא מִיִּית**  
The boy *cannot* (G pt.) *leave* (G inf.) his father, for if the boy *is to leave* (G pt.) the father, (even only) a short while, he is *to die* (G pt.).

---

<sup>36</sup> If a periphrastic construction with an ‘imperfect’ of הוּי and subsequent ‘perfect’ existed (by analogy of the same construction with a ‘perfect’ of הוּי; see section 3.2.2), it would presumably have the sense of ‘he will *have done* such and such’, thus focusing on the state resulting from the event rather than the event itself.

The last participle here is used with a punctual verb. This, in combination with the assertion that Jacob will die even if Benjamin is gone for a short while, points to perfective aspect for the participle of מות. The participle is used to make an assertion (section 4.3) — it is thus chosen for its affinity with matters that are certain, a result of its development into a tense marker.

Overall, then, the marking of aspect does not seem to differ much from that in AOA. To avoid repetition of Gzella (2004, 243–268), it will not be treated extensively here. However, the use of periphrastic constructions seems to be somewhat different; this will be the topic of section 3.2. The related issue of copular הוי will be discussed first, however.

### 3.1 Copular הוי

The verb הוי, when used as a copula, behaves differently than expected with respect to aspect. This is well-known, to the extent that even publications adhering to an aspect-prominent theory of the Semitic verbal system acknowledge that the choice of conjugation used for הוי is primarily governed by considerations of temporality rather than aspect (Thacker 1963, 157 in citation by Gzella 2004, 245, n. 3).

It has already been noted that the ‘perfect’ of הוי can have imperfective aspect in AOA (255–256). Examples of this also abound in the Genizah fragments (there are no instances of copular הוה in the epigraphical material), three of which have already been mentioned in section 2.2.1 in example (12bc). We also find instances of the gnomic perfect (MS B, Gen. 3:1 חִיתָּהּ מִן־כָּל־בְּהֵמָה עָרִים הָיָה הַחֹרֵץ הַזֶּה ‘now the serpent was the shrewdest of all animals ...’), a domain closely related to imperfective aspect.

This unusual aspectual value is the result of the fact that copular sentences usually describe states — it is hence not the verb itself which determines the imperfective aspect, but rather the context. At this point the analysis of Hewson (2012, 517–518) may be useful. According to him, there are two types of complete forms (next to two types of incomplete forms: imperfectives and progressives). The perfective is the most well-known and covers complete activities and achievements; the other is what he calls the *performative* (here an aspect, not to be confused with speech acts), which covers complete activities and achievements as well as statives, performative *function*, instant presents, habitual function, and proverbs. It then becomes clear that the West Semitic ‘perfect’ is such a *performative* form and not a ‘true’ perfective.<sup>37</sup> The additional functions it has can be selected by the lexical meaning of the verb and context.

In subordinate clauses, the verb can often be explained both as having imperfective aspect, and as having perfective aspect. For instance, in ואשלחו ית יוסף ית פרגודה ית פרגודה מצויה דהוה עלוי ‘and they stripped Joseph of his tunic, that ornamented tunic that *was* (G pf.) on him’ (MS D, Gen. 37:23), it cannot be denied that Joseph was wearing the tunic for an extended period of time,<sup>38</sup> but because the stripping event is instantaneous only one particular moment is relevant (see also section 2.2.1). It seems that by being semantically void (in which it differs from stative verbs), copular הוי could grammaticalise into a tense marker neutral with respect to aspect which also explains its use in periphrastic constructions with the participle (section 3.2 below).

Because the copula does not appear in the present tense, for which nominal clauses are used (Gzella 2004, 256), the participle is free to take on finer nuances. It appears rather infrequently, but then seems to express assertive modality:

- (18) a. MS B, Gen. 2:24: הווי[ו] בְּאֶתְתֵּיהָ וּמַדְבֵּק בְּאֶתְתֵּיהָ  
תְּרִיהוּן לְבִשְׂר־חַד

37. This was also recognized for Arabic by Comrie (1976, 78–81). Despite its issues, we will continue to use the term *perfective* here to describe this form. The additional functions of the ‘perfect’ are relatively infrequent, and the term *performative* leads to confusion with speech acts, while the term *perfective* is well-established in the field.

38. A habitual reading, ‘that ornamented tunic that he used to wear’, seems unlikely. Such an event is high in volitionality, so we would expect a more specific lexical item like לבש, instead of simply עלוי, literally ‘on him’.



For this reason *will* a man *separate* (C ipf.) his bed from his father and his mother, and he *is to cling* (Dt pt.) to his wife, [and] the two of them *are to become* (G pt.) one flesh.

- b. MS C, Gen. 31:40 (repeated from [11b]): ... הוֹיֵנָא בְּאִמְמָא אֶכְיִלְתִּי שְׂרָבָא  
(31:38: These twenty years I have been with you. ...) I *would be* (G pt.) (as follows): in the daytime, the heat *devoured* (G pt.) me, ...

In both examples, a sense of necessity breaks through. In (18a), man must leave his parents to produce offspring;<sup>39</sup> in (18b) Jacob has no other choice than to work for Laban. This is somewhat similar to the use of the participle for the imminent future (cf. section 2.3) in that it describes events that are necessary. However, it is different because (18a) is more of a general statement than a particular event in the near future and in (18b) there is not one particular reference time to which the event is imminent. This feature of the participle is not restricted to this root; it is discussed in more detail in section 4.3.

Lastly, the ‘imperfect’ of this root behaves naturally: it expresses future tense (section 2.3) and various modal nuances (chapter 4).

## 3.2 Periphrastic Constructions

Already anticipated in the previous section, we here discuss the use of periphrastic constructions common to all Aramaic dialects, consisting of a form of the verb הוֹי ‘to be’ and an active participle or a participle of a reflexive stem. These constructions (at least those with a ‘perfect’ of הוֹי) are usually explained as marking some (subset of) imperfective aspect: ‘iteration or habit, or an ongoing process’ (Muraoka and Porten 2003, §55g); the repetition or durativity of an event, or sometimes marking an event as ‘in progress’ (Gzella 2004, 248–250); ‘progressive past’ (Gianto 2008, 20); and on JPA specifically a combination of progressiveness, repetition, ‘preterite future’, and ‘past conditional’ (Stevenson 1962, 57–59). The JPA data provide some interesting instances that cannot be explained satisfactorily with this traditional analysis. Gzella (2019) already mentions the use of this construction for a punctual event in MS C, Gen. 31:47 (example [19b] below). To this, several other examples will be added in section 3.2.1. In section 3.2.2 some related constructions are discussed, while section 3.2.3 focuses on diachronic developments.

### 3.2.1 Non-Imperfective Meanings

As noted by Hopper (1979, 216), imperfectivity often correlates with ‘simultaneity or chronological overlapping’ rather than ‘chronological sequencing’, backgrounding rather than foregrounding, and events ‘whose completion is not a necessary prerequisite to a subsequent happening’. These are features that are commonly found in literary compositions, but it should not be a surprise that they occur far less in the brief and to-the-point texts in the Old and Middle Judaean corpora. Indeed, the only text with periphrastic constructions is yyZZ 36, a marriage contract. The following discussion therefore focuses on the Genizah fragments. Clear-cut cases that can be analysed as imperfective aspect will not be reviewed here, since they do not add new data to the debate.<sup>40</sup>

First of all, we have examples with the verb קָרַי, which is punctual and therefore incompatible with continuous aspect:

39. The distinction between the ‘imperfect’ on the one hand and the two participles on the other is not entirely clear. It may be that the ‘imperfect’ also has some deontic modal nuance (‘a man *should* separate’). We can also relate it to the imminent future that the participle can express, the whole sentence thus forming a chain of events (closely mirroring the Hebrew, which has two *wēqatals* following the ‘imperfect’).

40. Following the categories of Gzella (2004, 249–250), we have examples of (1) iterativity/habituality in MS C, Gen. 31:46 ‘his sons, whom he *called* his brothers’ (see [13a] above); (2) durativity in MS B, Gen. 4:7 ‘you *shall rule* over [the evil inclination]’ and 4:8 ‘and they *were arguing* in the open field’; and (3) a short event stretched out and marked as ‘in progress’ in MS D, Gen. 38:25 ‘as she *was going out* (to be burned in the fire):

- (19) a. MS B, Gen. 2:19: **וְאֵתֵי יְתִהוֹן לְוֹת־אָדָם לְמַחְמֵי בְּאֵלָיו שְׁמָהּ הוּא־קָרָא לְהוֹן וְכָל־מָה דְּהוּהָ נְפִישׁ דְּחִיתָהּ הוּא שְׁמֵיהּ**  
 ...And [YHWH God] *brought* (C pf.) them (the animals) to Adam to *see* (G inf.) by what name he *called* (G pt.) them, and whatever Adam *called* (הוה + G pt.) the living creature is its name.
- b. MS C, Gen. 31:47: **וּקְרָא לֵיהּ לְבָן יְגָר שְׁהַדוּתָא וַיַּעֲקֹב־הוּוּהָ קְרָא־לֵיהּ בְּלִשָׁן בֵּית־קְדִישָׁא גְלֵעַד**  
 And Laban *called* (G pf.) it 'Yegar-Sahadutha' (lit. cairn of testimony), whereas Jacob *called* (הוה + G pt.) it, in the language of the sanctuary, 'Gal-Ed' (idem; in Hebrew).

Example (19a) gives us a minimal pair with a simple participle. The first participle appears in a purposive clause. It concerns multiple animals, so the calling event is stretched out in time (otherwise we would probably have found an 'imperfect' with epistemic modality: 'what he *would* call them'). In the clause with the periphrastic construction the indirect object is in the singular: only one animal (נְפִישׁ דְּחִיתָהּ) is concerned, so an iterative reading would be somewhat forced here. This issue could potentially be resolved with reference to the concept of semantic agreement (Corbett 2006, 155–160). A form of the verb usually expected for a plural object could then be used for what is syntactically singular, but semantically plural. However, in that explanation, the singular indirect object would have a distributive function, while in the clause as it stands it is כָּל־מָה 'whatever' (not: 'everything') that serves this function. The verb and its indirect object are bound by כָּל־מָה and therefore cannot serve another distributive function.

A minimal pair with the 'perfect' is found in (19b). Here, Laban establishes the name of the cairn (a punctual event in the past; clear 'perfect' territory). The periphrastic construction used for Jacob cannot have continuous aspect because in combination with the earlier 'perfect' that would suggest Jacob had been calling the cairn by that name already before Laban established its name (and, indeed, before that name would have made sense, because the testimony refers back to v. 44). Furthermore, the two constructions are so markedly different that we cannot simply attribute the difference to stylistic variation.<sup>41</sup>

Second, we have an example where a durative event is concerned, but the larger context makes an imperfective reading unlikely:

- (20) MS B, Gen. 8:7: **וְשָׁלַח יַת־עוֹרְבָא וְהוּהָ אָזִיל וְחָזַר אָזִיל וְחָזַר עַד־זְמַן דֵּי [יב]ש[ו] [מ]י א מְוַעֲלָאוּי אַרְעָא**  
 And he *sent* (D pf.) the raven, but it *would go back and forth, back and forth*<sup>42</sup> (4 × G pt. sharing one הוה), until the waters *would dry up* (form uncertain) from upon the earth.

It is important to realise here that the story continues with sending out the dove before the waters have dried up. The event described by the periphrastic constructions therefore continues beyond the next event in the overarching storyline. If it were to describe an imperfective background event, it should be backgrounded to the next event ('And while the raven was going back and forth ..., he sent a dove'), but that is not how the sentence is structured. At its current place in the narrative, between the sending of the raven and that of the dove, this phrase cannot be used to express duration. That would imply that the dove was sent out when the waters had already dried up, which is not the case.

41. Stylistic variation in general does not seem to be one of the main considerations of the targumic translators, as they tend to try to represent the content of the biblical text as accurately as possible. Variations and additions are introduced for clarification, not aesthetics. Alternatively, one may explain the lack of stylistic variation with the adherence to a translation scheme (in the sense of Bombeck 1997; see section 1.3), but conversely the mere existence of (or tendency towards) such a scheme again shows that variation is not a primary goal here.

42. According to Joüon and Muraoka (2006, §123m) the BH construction with two infinitive absolutes, וַיֵּצֵא וַיָּשׁוּב, expresses 'simultaneity or quasi-simultaneity': 'and he went out just to come back again (soon)'. This is clearly not how the targumic translator understood the phrase, and an adverbial reading must be preferred (following e.g. Waltke and O'Connor 1990, §35.3.2c: 'and it kept flying back and forth').

Third, there are cases that may traditionally be explained as iterative or habitual, while this is not actually necessitated by the context:

- (21) MS C, Gen. 31:39: **קְטִילָא לֹא־אֵיִיתִית לְוֹתֵךְ וְאִידָא דְהוּת טְעִיא מִן־מְנִינָא מִן יְדֵי הוּתָּתָּתָּבַע יְתָהּ**  
**יְתָמָה דְהוּן גְּנָבִיא גְּנָבִין בְּאִמְמָא אָנָּא הוּנָּא מְשָׁלִם וְיְתָמָה דְהוּת חִיּוֹת־בְּרָא מְתַכְּלָא בְּלִילִיא אָנָּא**  
**הוּנָּא מְשָׁלִם**  
*I have not brought (C pf.) you anything that was killed (G pt. P), and what was missing (הוה + G pt.; lit. 'straying') from the count you would demand (הוה + G pt.) from my hand. That which thieves would steal (הוה + G pt.) in the daytime I would repay (הוה + D pt.), and that which wild beasts would devour (הוה + Dt pt.) at night I would repay (הוה + D pt.).*

Consider the second part of this example, from ‘That which thieves ...’ onwards. Clearly, a continuous reading is excluded, but an iterative reading is not necessitated. This sentence does not strictly imply that several animals had been stolen and that several animals had been devoured; one may use this expression as well if several animals had been stolen and only one animal had been devoured, for instance. Indeed, it does not even seem to imply that any part of the flock was stolen or devoured at all. Bergström (2015, 611) calls this ‘potential pluri-occasionality’ (as opposed to ‘actual pluri-occasionality’; emphasis original).<sup>43</sup> The intended meaning appears to be: ‘I would have repaid anything (that was missing), no matter the cause’. This inclusiveness (‘no matter the cause’) is highlighted by the contrast between day and night as well as that between human and animal causes. It is quite clear that Jacob repaid items of the flock on several occasions (otherwise, why would he mention this?), but the exact reasons are not important and therefore not articulated precisely. Hence, we must not take the stealing and devouring events overly literally, and tend to a reading with potential pluri-occasionality instead of one with iterative-habitual aspect.

Finally, the following minimal pair shows that הוה may simply be used to add past temporality to some eventuality, without the resulting periphrastic construction having any semantic value of its own:

- (22) MS D, midrash on Gen. 44:18:<sup>44</sup> **לְדִינָה אַחַךְ [תְּנָא דְלֹא] הָוּת מְתָמַ [נִי עֵמֵן] מִן־שְׁבָטֵי [יָא וְלֹא הוּת] דְהוּא [מִן] תְּמִנִּי עַ [מֵן] מִן**  
**מְקַבְּלָא [חַו] לְ[ק וְאִחְסָנָא] עֵמֵן בְּפָל [וּג אִרְעָא עַל] חַד־כַּמְ[ה בְּנִימֵן] דְהוּא [מִן] תְּמִנִּי עַ [מֵן] מִן**  
**שְׁבָטֵיא וּמְקַבְּל־חֹלֶק וְאִחְסָנָה עַ [מֵן] בְּפָלֹג אִרְעָא**  
*(Don't you know ... what our two brothers Simeon and Levi did? ... They killed all of its male inhabitants by the edge of the sword, because they had defiled) [our] sister Dinah, [who] was [not] counted (הוה + Gt pt.) [with us] among the tribes [and was not] to receive ([הוה] + D pt.) a portion [and inheritance] with us in the division [of the land] — [how] much more so [Benjamin], who is counted (Gt pt.) with [us] among the tribes and who is to receive (D pt.)<sup>45</sup> a portion and an inheritance with [us] in the division of the land?*

The periphrastic constructions describing Dinah stand parallel to simple participles of the same verbs describing Benjamin, with no apparent aspectual difference. The ‘perfect’ הוה is merely used to add past temporality and is needed because it describes events relevant to an event in the past (namely, that Simeon and Levi killed Hamor and Shechem; see Gen. 34:26). Particularly noteworthy are the events with the D-stem forms of קבל ‘to receive’. While the Gt-stem of מני ‘to be counted’ should be understood as a stative, D-stem קבל is a punctual event here, and is therefore like קרי above incompatible with imperfective aspect.

43. See also the references in his notes 16 and 17. Comrie (1976, 27–28) already noted that habitual aspect does not necessarily imply iterativity, but rather describes characteristic features (thus explaining the English habitual ‘used to’ in ‘the Temple of Diana used to stand at Ephesus’, which does not involve iterativity).

44. This passage occurs with periphrastic constructions in proper targumim, but with other constructions in *toseftot*. See section 3.2.3 for discussion.

45. On this use of the participle, see section 4.3.

What examples (19–22) have in common is that the adjectival nature of the participle comes to the fore at the expense of the verbal tendency it so strongly developed in Aramaic. Thus, in (20), it is not the event of flying back and forth that is described, but rather Noah's realization that the raven is strong enough to remain flying for a long time, and therefore cannot be used for this test (thus also explaining why the dove must be sent).<sup>46</sup> Similarly, in (19b), it is not an actual calling event that is described: the cairn's name has already been established by Laban (and this can only be done once). We can explain the construction attributively, however, if we take it in the sense of 'for Jacob *it was normal to* call the cairn by its Hebrew name'. The meaning in (19a) is similar: 'whatever was *fitting* (logical, appropriate, etc.) for Adam to call the living creature' would be its name. Again, in neither instance repetition or durativity is implied. As mentioned above, example (21) does not describe events which necessarily happened, but similarly focus on a property of the subject, in this case describing Jacob as being generous. Finally, in (22), the participles describing Benjamin are primarily adjectival — this is also the main point of the speaker: that Benjamin is even dearer to his brothers than Dinah, not because of his actions but because of certain properties.

Periphrastic constructions with an 'imperfect' of הוּי occur, but there are not enough instances to judge whether they are used differently than in AOA, where they mark imperfective aspect in the future or various types of modality (Gzella 2004, 261–266).<sup>47</sup>

### 3.2.2 Related Constructions

We now turn to some closely related constructions. Example (23) is significant in that infinitives of הוּי are used:

- (23) MS C, midrash on Gen. 35:9: [אֲלִיפַת יְתוּ-לְמַהוּי-מְבָרְכִין לְחַתָּנָא וְלְכַתָּא ... אֲלִיפַת-יְתוּ לְמַהוּי [י] ... מְבָרְכִין יְתוּ לְמִנְחָמָא יְתוּ אֲבִילִיא  
(You have taught us seemly laws and beautiful statutes:) You *have taught* (D pf.) us to *bless* (inf. הוּי + D pt.) the bridegroom and groom, ...; you *have taught* (D pf.) us to *visit* (inf. הוּי + D pt.) the sick, ...; and you *have taught* (D pf.) us to *comfort* (D inf.) the mourners.

This is also found in the Middle Judaeen corpus in yyZZ 36:11 (already given in [6b] on page 13), but apparently not attested in the AOA material from Egypt (Muraoka and Porten 2003, §55g). If not due to historical accident, this may therefore represent a later development. The lack of periphrastic constructions in the Old Judaeen corpus may be due to genre, but the Egyptian AOA texts we have are many and varied enough to reasonably expect this construction to be encountered here, too. The commandments in (23) clearly cannot be understood to have continuous aspect, but also with an iterative understanding of the periphrastic construction it is difficult to explain this case: similar to example (22), one can fulfil the commandment without ever blessing a bride or groom, namely if one is never in the opportunity to do so. It may therefore be better to explain these examples attributively. God did not teach how to repeatedly bless and visit others in a technical sense, but rather to have the character(istic) of blessing and visiting

46. Cf. Sarna (1989, 57): 'The raven is a wild bird that is not discriminating in its diet. It feeds on carrion as well as vegetation and could thus obtain its food from among the floating carcasses...The dove is a gentle, timid bird. When it returned, Noah took it in his hand to see if there was clay on its feet.' (While Sarna comes to the conclusion that the raven 'made repeated forays from the ark', i.e., an iterative reading, the same knowledge about the birds is useful to understand the verse if we ascribe to a continuous reading. In any case, it seems unlikely that the raven returned *inside* the ark, since then Noah could have checked its feet for clay as well.)

A durative reading could perhaps be salvaged by suggesting that there is a seven day interval between the sending out of the raven and the first sending out of the dove, based on 'another (עוד) seven days' in v. 10 (so already Rashi). However, in this reading it is unclear how the raven fits into the story (indeed, Rashi has to adduce quite some extra-biblical material to explain v. 8, and the raven plays no role in the main storyline in his reading).

47. In Middle Judaeen: [וְיִהוּן אַחַרְיִין] (everything that the groom has) *will guarantee* (יהי + G pt.) and *vouch* (id.; יהי elided) (for food, clothes, etc. of the bride)' (yyZZ 36:25); modal, in a midrash: [וְיִהוּן אַחַרְיִין] ('o God of the world,) *may your name be blessed* (יהי + D pt. P) (for all eternity)' (MS C, Gen. 35:9).

when appropriate.<sup>48</sup> The case in yyZZ 36:11 is similar ('the bride has agreed to honour [... and serve] PN [i.e., the groom]').

We also have a periphrastic construction with a participle of הוּי, in MS B, Gen. 4:14: וּמִטְלָטֵל וְהוּי קִנְיָן גָּלָא. The participle is presumably used for the imminent future (cf. section 2.3) to emphasize the suddenness of Cain's exile: 'and from now on Cain is an exile and a wanderer!'

Lastly, we have one instance of a 'perfect' of הוּי with another 'perfect'. Based on this one case, no special meaning needs to be attributed to this construction. The 'perfect' of הוּי causes a tense shift (section 2.1) and thus forces a pluperfect reading for the other 'perfect':

- (24) MS C, Gen. 35:9: וְעַד־כָּעַן לֹא־הָיוּ אֶתְגִּיחַ מִן־צַעֲרָהּ דְּכַפֵּי־יָרְכִיבָהּ  
And he *had* not yet *been relieved* (Gt pf.) from the pain of his hip-bone, ...

A related construction is a certain negated periphrastic construction with *lēt* 'there is/are not' and an independent personal pronoun:

- (25) a. MS C, Gen. 32:27: לִית־אַנָּא מְשַׁלַּח יָתְךָ אַרוֹם אֵילֵא־הֵן בְּרִיכַת יָתִי  
I *will not release* (אנא לית + D pt.) you, until you *have blessed* (D pf.<sup>49</sup>) me.  
b. MS C, Gen. 34:14: לִית־אַנָּא יְכַלִּין לְמַעַבְדַּד פִּתְגָּמָא הַדִּין לְמִיתָן יִתְאַחַתָּן לְגַבְרָה דְּאִית לִיהָ עֶרְלָה  
We *cannot* (אנא לית + G pt.) *do* (G inf.) such a thing, to *give* (G inf.) our sister to an uncircumcised man!  
c. MS D, addition to Gen. 38:25: אֶפְעֵל־גַּבְדִּיקָדָא לִית־אַנָּא מְפָרְסֵי־לִיהּ  
Even if I *am to be burned* (G pt.), I *will not publicise* (אנא לית + D pt.) him (his identity).

While these examples can in principle be understood to have continuous aspect (although an attributive reading is more fitting in [25b]), it is clear that the primary function is modal; it strongly asserts that the speaker is not planning to do something. This distinguishes it from negated periphrastic constructions with הוּי, as found for example in (24) above, which has no modal nuance. The modal semantics of the construction with *lēt*, which are analysed in more detail in section 4.3, can be explained if the core meaning of the periphrastic construction is attributive. Similar expressions are found in English: 'I'm not one to ...'; 'I'm not the kind of person who ...'.<sup>50</sup>

### 3.2.3 Diachronic Perspectives

It is important to realise that the periphrastic constructions are transparent throughout the corpora studied here.<sup>51</sup> This explains how it could be extended to the infinitive and participle of הוּי, if this is indeed an

48. Unfortunately, however, it remains unclear why the last command is given as a plain infinitive rather than a periphrastic construction.

49. This use of the 'perfect' as a *futurum exactum* or *future perfect* is well-established (e.g. Gzella 2004, 232–237) and mirrors the Hebrew; we will not discuss it here.

50. The construction is also found in Biblical Aramaic in Dan. 3:14 (הֲצִדָּא ... לֹא־לֵהִי לָא אִיתִיכּוֹן פְּלִחִין וְלִצְלָם דְּהֶבֶא דִּי הִקִּימַת) 'is it true, ..., do you not serve my gods nor worship the golden statue that I have set up?' and 3:18 (לֹא־לֵהִי דִּי לֹא־אִיתְנָא) 'we do not worship your gods, nor will we worship the golden image that you have set up'). To reconcile these examples with assertive modality we could translate 3:14 as 'are you *really not going to* ...'; 3:18 is similar to the examples seen in (25). The non-negated construction appears in Dan. 2:26 (הֲאִיתְךָ כְּהֵל) 'are you capable [to tell me the dream that I have seen, and its interpretation?]' and may have a dubitative nuance. As for Muraoka's question whether there are 'different ways of comprehension of Daniel and the king' (Muraoka 1966, 158): since 3:14 has a participle of גַּד and 3:18 an 'imperfect': perhaps the 'imperfect' indicates a longer time span, so that we should translate, 'nor will we *ever* worship ...!' The 'imperfect' would then take over the assertive modality from the construction with אִיתִי, but add future temporality. This is well beyond the scope of the present study, however.

51. Unlike, for instance, in Syriac, where the construction with the 'perfect' *hwā* takes on optative and subjunctive meaning (Nöldeke 1966, §260–261), something that cannot be explained as a simple combination of some meaning of *hwā* and some

innovation in JPA (or perhaps Western Aramaic more broadly), as well as why the same form can be used in situations where *הוה* adds past temporality but the construction as a whole does not have any specific semantics (as demonstrated by the parallel to simple participles in [22] above). The question asked here is how this attributive usage of the periphrastic constructions can be unified with the imperfective meaning found across the dialect spectrum, and to what extent it is unique to JPA.

To address the second point, let us return to the midrash on Gen. 44:18 in example (22) above. This passage occurs in six manuscripts, with slight syntactic variations. MSs D and Z use periphrastic constructions to describe Dinah and participles for Benjamin, as quoted above. However, MS X uses *דליתא דאיתיה ממניין שבטייא ודאית ליה עמנא* 'who is not (included) in the count of the tribes and for whom there is no portion and inheritance' for Dinah and *דליתא דאיתיה ממניין שבטייא ודאית ליה עמנא חולק ואחסנא* 'who is (included) in the count of the tribes and for whom there is a portion and an inheritance' for Benjamin. Here, the only difference is negation (*לית* for Dinah vs. *אית* for Benjamin); there is no difference in the verbal forms that are used. MS FF is syntactically identical to MS X; MS R is similar in describing Dinah but does not qualify Benjamin; and MS M describes Benjamin similarly to MSs X and FF but the part about Dinah has been lost. We see here a dichotomy of genre: MSs D and Z are running translations (i.e., 'targum proper'), while MSs X, FF, R, and M are targumic toseftot. According to Klein (1986, I: xxii–xxiii), the toseftot most likely have their origin in the running translations, but have undergone 'a *conscious* dialectal transformation to the language of Onqelos' (I: xxvii, emphasis original). It is therefore likely that the removal of the periphrastic constructions from the running translations was part of this transformation as well.<sup>52</sup>

If correct, this irrefutably shows that periphrastic constructions are indeed used differently in JPA than in other dialects. However, it does not prove that a certain semantic value was connected to these constructions, because in this particular example the construction does not have any meaning of its own: *הוה* merely shifts the situation to the past (as argued above). The rewording by the editors of the toseftot then does not tell us much about a particular usage in JPA but rather shows that the construction had grammaticalized further (to a marker of imperfectivity) in the Onqelos dialect, perhaps taking on other functions but excluding ones such as these where the underlying event is punctual.<sup>53</sup> This conforms to the remark above that in the corpora under consideration here, periphrastic constructions remain transparent.

One wonders how the situation in JPA came to be. Are the instances described here the result of innovations in the western branch of post-Achaemenid Aramaic, or do they reflect the retention of forms which were dropped in AOA but remained under the radar in spoken language until JPA appeared? The apparent transparency of the constructions in JPA suggests, as has been mentioned, an earlier stage of grammaticalization than is found elsewhere. We can indeed trace an attributive meaning back to the earliest attestations. An often referred-to example from the Hermopolis letters is TAD A2.5:8: *והות מית* '(A snake had bit me) and I *was dying* (*הוה* + G pt.)'. This situation is very low on the transitivity scale.<sup>54</sup> It therefore does not necessarily presuppose the verbalization of the participle, and may be derived from the adjectival usage of the participle instead.

---

meaning of the participle — although there, too, the construction is sometimes still quite loose, for example when it denotes 'something on the point of happening in the past' (Nöldeke 1966, §277; translation J. A. Crichton): the participle is then essentially an imminent future, shifted back in time by *hwā*.

52. Most of the discussion of the linguistic affiliation of Targum Onqelos has so far focused on phonology, morphology and the lexicon rather than syntax (cf. the feature lists in Gzella 2015, 309 and Koller, forthcoming), but this is not to say that there are no syntactic differences whatsoever (this state of research is largely due to the lack of descriptions of the syntax of these various variants of the language; cf. Kutý 2008, 15; Gzella 2015, 300).

53. Note the constructions of *הוה* with 'perfect' and 'imperfect' in Syriac (Nöldeke 1966, §263, 268), betraying a further stage on the grammaticalization path. However one wants to explain the origins and status of the language of Onqelos, it is clear that it is 'more Eastern' than JPA, so it should be no surprise that Onqelos may also be further on this grammaticalization path already.

54. See e.g. the list in Hopper and Thompson (1980, 252). The situation has one participant and is a non-volitional, non-punctual, atelic non-action.

Another example is Dan. 5:19:

- (26) Dan. 5:19: בָּל עַמְמֵיָא ... הוּוּ זִיעֵין וְדַחְלִין מִן־קְדָמוּהִי דִי־הוּוּ צָבָא הוּוּ קָטַל וְדִי הוּוּ צָבָא הוּוּ מַחָא  
 וְדִי־הוּוּ צָבָא הוּוּ מְרִים וְדִי־הוּוּ צָבָא הוּוּ מְשַׁפִּיל  
 All peoples ... *were worried* (הוּוּ + G pt.) and *feared* (elided הוּוּ + G pt.) before him, for he *would kill* whom he *wanted*, and *let live* whom he *wanted*; and he *would raise up* whom he *wanted*, and *humble* whom he *wanted* (8× הוּוּ + G/C pt.).

The first two periphrastic constructions are quite clearly attributive. Their imperfective meaning is the result of the verbs being stative: it is therefore not necessarily an inherent property of the construction. The last eight periphrastic constructions in this verse are similar to examples (22) and (23) in that pluri-occasionality is not implied.

Examples like this show that the distinction between habituality and iterativity can be quite blurred — it is therefore easy for one to develop into the other. It is important to realise, however, that such a development involves a change of the function of the participle. Whereas the participle in a habitual construction is primarily adjectival, with iterativity it is more likely to be verbal (inasmuch either pair of categories can be clearly differentiated). This is because a habitual describes ‘a situation which is *characteristic* of an extended period of time’ (Comrie 1976, 27–28, emphasis added), while iterativity is compatible with semelfactive verbs (which are, in turn, high in transitivity [cf. Hopper and Thompson 1980, 252] and thus ‘more verbal’). Gzella (2004, 253), who does not find an attributive meaning for periphrastic constructions in his AOA corpus (or, at least, not primarily so), argues that the invention of the periphrastic constructions presupposes that the participle had already taken on verbal functions.<sup>55</sup> Based on my analysis, however, one could also argue that these constructions were originally based on adjectival uses of the participle and extended to imperfective aspect following the integration of the participle into the verbal system.

On the other hand, even if no hard evidence for an originally attributive meaning of the periphrastic construction could be found for AOA, the subsequent development of this meaning in JPA can also be explained quite easily. It then indicates that by the end of AOA, the construction was still so transparent that speakers could (re)analyse *hwā* + verbal participle as *hwā* + adjectival participle.

Further research is needed to see whether the earliest periphrastic constructions we have can be analysed as attributive instead.<sup>56</sup> This could point to a development from habituality to iterativity (and, eventually, imperfectivity).<sup>57</sup> Cross-linguistically speaking, it is unclear whether there is an *a priori* preference for a development from the verbal nature of the participle or from its adjectival nature. Admittedly, Bybee et al. (1994) apparently found no languages with a development of habituals into imperfective grams,

55. This would simultaneously explain the lack of periphrastic constructions with imperfective meaning in related languages, like Arabic. However, the lack of a particular development is not something that typically requires explanation (unless there is strong cross-linguistic evidence that it is likely to occur) and can only to a very limited extent be used to recover the reasons behind this development in Aramaic. Also the simple fact that the start of the development of the participle into a full-fledged conjugation can be observed earlier than periphrastic constructions in itself does not imply that there is any relationship between the two developments.

56. Possibly relevant here is Gianto's suggestion (2008, 20) that *hwā* + active participle developed from *hwā* + passive participle. If correct (no references or data are given), this can be explained either way: in such passive constructions, the participle is usually used verbally; on the other hand, the construction is used to express a property rather than an event.

57. This could potentially also explain the use of participles in periphrastic constructions with an imperative of הוּוּ. The semantics of these constructions are not yet agreed upon (Gianto 2008, 21), but have something to do with politeness (Gzella 2004, 266–268) and/or conativity (*‘try to send ...’*; Gianto 2008, 21). Although this can be explained through durativity and/or iterativity (21, n. 32), a simpler explanation is through the attributive nature of the participle. The literal meaning becomes something like ‘be one for whom it is normal to do X’ rather than ‘do X!’ This can be construed as more polite because the request is generic, and the addressee can still fulfil the request without doing X in a particular instance (cf. the above distinction between potential and actual pluri-occasionality, which can be generalised to potential and actual simple occasionality). For example, when someone is asked in TAD D7.610–11, הוּוּ יִקָּא שְׁלָם יִקָּא (please) *send* (imp. הוּוּ + G pt.) news about the child’ (see Gzella 2004, 266), the sender of the ostrakon signals that he understands that the command may not be fulfilled due to unforeseen circumstances. In a similar way it can also be understood in a conative sense.

but ‘view progressive meaning as the specific meaning that feeds into the chain of developments leading eventually to the highly generalized imperfective or present meanings’ (Bybee et al. 1994, 127) — but on the other hand, Dik (1987, 68–71) describes the development of ‘property-assigning expressions’ with participles into aspect distinctions in Basque and Latin.

Finally, it should be noted that even if an early attributive meaning can be shown for periphrastic constructions, this would still not prove a development from habituality to imperfectivity; Gzella’s analysis (2004, 253) may still apply. As mentioned above, this explanation has the added explanatory power that the lack of similar constructions in related languages is accounted for; on the other hand, the reanalysis of JPA speakers and the expansion to adjectivally used participles is somewhat counter-intuitive in this scheme. A development starting in attributive usage does not require this reanalysis, and could perhaps even explain periphrastic constructions with the imperative, but on the other hand might be somewhat less common cross-linguistically. At least until more evidence is brought to the table, it would depend on how one weighs these pros and cons, which explanation is to be preferred.



## Chapter 4

# Modality

Whereas Palmer (2001, 1) starts the second edition of his earlier study (Palmer 1986) with the positive note that '[i]t has come to be recognized in recent years that modality is a valid cross-language grammatical category that can be the subject of a typological study', fierce debates on the exact scope and inner classifications of different types of modality remain (Nuyts 2016, 32–33). This is not the place, however, for a precise definition of the overarching concept. It will be sufficient here to understand modality to be 'concerned with the status of the proposition that describes the event' (Palmer 2001, 1), as opposed to tense, which is concerned with time, and aspect, which is concerned with 'internal temporal constituency' (Comrie 1976, 3), and to clarify the term *modality* further with more in-depth descriptions of its subcategories. In the typological literature, one now typically distinguishes between (at least) three main types of modality: dynamic, deontic, and epistemic (Nuyts 2016, 33–39). We will discuss these in turn in sections 4.1 through 4.3. Although it is disputed whether the notion of evidentiality should be included as a type of modality as such (33), it is included here in section 4.4, following, e.g., Palmer (2001, 8–9). The interaction of modality with purposive clauses has already been discussed on p. 19; this will not be repeated here. Finally, section 4.5 looks at the verbal forms used in generalising relative clauses introduced by (variations on) *kol mā/man dī* 'everything that/everyone who'.

### 4.1 Dynamic Modality

Dynamic modality is concerned with with the capacity or ability of the subject, as well as (non-deontic) necessity (Nuyts 2016, 34). In the languages discussed here, this category is not normally marked in the verbal system, but rather with certain lexical items like *יכל* and *כהל* 'to be able' and *צרך* 'to need', 'to be necessary'. The following verbal form, which carries the content of the event, does not of itself have dynamic modality.

As for the 'imperfect', Gzella (2004, 274) notes that it is uncertain whether it can express abilitative modality on its own in AOA. The same is true for JPA; this is a generic problem related to the large variety of types of modality the 'imperfect' can surely express and the large amount of overlap between them. For instance, Klein (1986) translates MS D, Gen. 44:16 ([*נְמַלְלֵנוּ לֵיל וּמָא*] [גזדכי]) as 'what *can* we say? how *can* we [acquit ourselves]?', but it may just as well have an optative nuance ('what should we say? how would you like us to acquit ourselves?') or dubitative modality in the future ('how would we ever acquit ourselves?'). A negated instance may be found in MS C, Gen. 32:13: *יְתַמְנוּן מִן־סוּגֵי בְּחַלְיָהּ דִּי־מָא דִּי־לָא* '... like the sands of the sea, which are so numerous, they cannot be counted'. However, the expression is somewhat odd and follows the Hebrew so closely that it may also be a calque; after all, for BH we know that the 'imperfect' can express abilitative modality (Gianto 1998, 191).

A participle with abilitative modality is found in the Joseph story:

- (27) MS C, Gen. 41:38: וַיֹּאמֶר פַּרְעֹה לְכָל־שְׁלֹטְנָיו הֲיִשְׁפָּחִין מִשְׁפָּחִין כְּוֹת דִּין גְּבֵר דִּי רוּחַ [דַּנ] בּוּ  
 And Pharaoh said to all his officials: ‘Where *could* we *find* (D pt.) one like this one (Joseph), in whom is a prophetic spirit?’

Pharaoh’s question appears to be rhetorical: immediately afterwards, Joseph is appointed. This is odd, because the participle is normally used for assertive and declarative modality, when an event is certain (see section 4.3). Because the Hebrew original has an ‘imperfect’ (הִנְמַצָּא), we cannot ascribe this to BH influence. In this case it may be used to exclude a reading too far in the future. After all, in v. 32 it says: ‘the matter has been determined by God, and God hastens to bring it about.’ In that case, the rhetorical nuance may in fact arise from the combination of an interrogative with assertive-declarative modality. The question then has the sense, ‘where are we absolutely sure to find someone like him?’, to which the answer can only be ‘here: Joseph himself’.

## 4.2 Deontic Modality

Deontic modality is similar to dynamic modality in that it concerns factors relating to an event (rather than a proposition, as epistemic modality), but differs from it because these factors are now external to the subject rather than internal. Common subtypes are *obligative* (stating that something is obligatory), *optative* (expressing that something is desirable), *exhortative* (inviting someone to do something together with the speaker: English inclusive ‘let’s’), etc. For our purposes, it is not necessary to distinguish very precisely between these subcategories. Previous studies have shown that most forms of the prefix conjugation can express a large variety of these meanings. For instance, Gianto (1998) looks at the possible modal nuances of various forms in BH. His chart on p. 195 shows which forms can be used for which modal nuances. If we limit ourselves to deontic nuances (excluding the abilitative, which in our typology is a subcategory of dynamic instead of deontic modality) and forms building on the prefix conjugation, most of the combinations that are not attested are conceptually incompatible. For example, exhortative modality necessarily occurs in the first person and does therefore not co-occur with the imperative. Gzella (2004, 273), too, finds that the AOA ‘imperfect’ can express obligative, optative, precative, and tolerative modality. This is largely the case for JPA as well.<sup>58</sup> For this reason, only a few of the more noteworthy aspects of the deontic modality system are highlighted here.

### 4.2.1 Obligative

Obligative modality signals that someone must (is obliged to) do something. It is commonly expressed by the imperative form, as also in Aramaic:

- (28) xyRA: עביד דיעבדון לך לוי דילוונך ספוד דיספדונך קבור דיקברונך  
*Commemorate* (G imp.) (the dead), so that they (those who outlive you) *will commemorate* (G ipf.) you. *Accompany* (G imp.) (them), so that they *will accompany* (G ipf.) you. *Mourn* (G imp.) (for

58. Besides obligative and prohibitive, which are described in more detail, the Old and Middle Judaeen corpus has cases of the optative (e.g. yWG 1:2: ου ιαεβ λαχ hu yāhēb lak ‘may he [God] give [the treasures] to you’; also the numerous variations on ‘may PN be remembered for good’ as in yyES 1, example [4c] above). On amulets, it is not always clear (or requires more knowledge of the cultural background) whether a form has obligative, precative, or optative modality. For instance, in yyMA 3:4 טור ולדה ‘*protect* [G imp.] the child’) it depends on the way people interact with supernatural beings what kind of modality is concerned: can these beings be commanded (obligative), must they be asked (precative), or does a human have no influence on them whatsoever (optative)? Thanks to their literary background, the Genizah fragments show some more types of deontic modality: permissive (e.g. MS B, Gen. 3:2: מִן־פִּירֵי־אֵילִן גִּנְתָּא נֹאכְל ‘we *may eat* [G ipf.] from the fruits of the trees of the garden’); volutative (e.g. MS B, Gen. 2:8: זוג בְּדִנְפֶק בְּה ‘*shall create* [G ipf.] for him [Adam] a partner like himself’); and exhortative (e.g. MS B, addition to Gen. 4:8: אתא וְנִפּוֹק תְּרִינּוּ לְאִפִּי בְּרֵא ‘*come, let us both go out* [G imp. אתי + G ipf.] to the open field’).

them), so that they *will mourn* (G ipf.) for you. *Bury* (G imp.) (them), so that they *will bury* (G ipf.) you.

However, in several contexts, the (historically long) ‘imperfect’ can or must be used. As is well-known and demonstrated in (29a), this is the case when the command is negated with *lā* (a cross-linguistically common phenomenon; cf. Malchukov and Xrakovskij 2016, 211–212).<sup>59</sup> Since the imperative only appears in the second person, the ‘imperfect’ is also used for obligative modality in the third person. Such cases are rare because they are not often needed in daily life. They also cannot always be distinguished from optative modality because no direct command is being given. However, in (29b) such a reading (‘so that he may come here with you’) is unlikely, though not excluded, because of ‘for we need him’ (on the first ‘imperfect’ in [29b], see below).

- (29) a. xyRH 6: **ומנה לא תזוע**  
 And *do not be frightened* (G ipf.) by it.
- b. ySK 11:5–6: **ותדברון ית PN ויתה עמכון די אנחנה צריכין לה**  
 And *fetch* (G ipf.) PN and he *must come* (G ipf.) with you, for we need him.

In the Bar Kosiba letters one also finds the ‘imperfect’ for non-negated commands to the addressed, i.e. in the second person — even predominantly so. There is no apparent difference in meaning.<sup>60</sup> For instance, the two ‘imperfects’ in (29b) above are followed by an imperative **ועמרו** ‘and tie up (<wool>)’. We thus find a chain of two ‘imperfects’ and one imperative, which makes a difference in for example politeness unlikely.<sup>61</sup> Differences in distance in time and place or strength of command, other concepts commonly related to the expression of obligation (Aikhenvald 2016, 144), are equally unlikely (but see the discussion on [31] below).

It rather seems that these alternations, too, are governed by context. These letters follow a very rigid scheme, where the salutation is followed by *dī*, after which the actual contents are written in a subordinate clause.<sup>62</sup> This ‘epistolary *dī*’ can govern long sequences of instructions, as seen in ySK 1 where it governs fourteen ‘imperfects’. In these clauses, an imperative is syntactically impossible, so an ‘imperfect’ must be used.<sup>63</sup> When the structure becomes more complex and the *dī*-governed ‘imperfect’ chain is broken, an imperative is used immediately, which shows that the imperative is the preferred way to express obligative modality (presumably because it is less ambiguous). This is the case when an object is fronted, as in (30ab), or when a new sentence, which is not governed by *dī*, is started, as in (30c).

59. Prohibitive patterns are discussed in more detail in section 4.2.2.

60. Cf. Gzella (2004, 271) on AOA: ‘Beide Formen [Imperativ und „Imperfekt“] scheinen dabei in ihren deontisch-modalen Verwendungen größtenteils funktionsäquivalent und sind in ähnlichen Formulierungen sogar austauschbar’ ‘The two forms [imperative and “imperfect”] appear by and large functionally equivalent in their deontic usages and are in similar expressions even interchangeable.’

61. Given that there are already several ways to indicate politeness distinctions in direct speech, one perhaps also would not expect another formal distinction. One such distinction, between a simple imperative and a periphrastic construction, was briefly mentioned in footnote 57. Another polite construction is the well-known **הן על מראי/ן טב** ‘if it is good to my/our lord’ (Muraoka and Porten 2003, §57), whose non-occurrence in our corpus can be explained by genre, this construction being used mostly in official petitions.

62. Beyer (1984–2004, I:350–352; E:213–216; II:286–287) therefore adds ‘Hiermit wird euch mitgeteilt’ (‘Herewith you are informed’) in parentheses. This seems to be patterned after other letters, such as hSK 16:4 (... **ידוע יהא לך שה** ... ‘may it be known to you that ...’). On the other hand the initial **ש** in hM 42:2–3 ... **ש** ... **יהי לך ש** ... ‘that it is known to you that ...’ would at least suggest that there was another shortened introductory formula. The more verbose **ד** **אגרתה** **ד** (lit. ‘a letter, that ...’) in ySK 14:2 may be the trace of such a different original formula (see also ySK 41:2: ... **ד** **PN<sub>2</sub> שלם** **PN<sub>1</sub> אגרתה** ‘Letter of PN<sub>1</sub>: peace unto PN<sub>2</sub>! That ...’); Beyer there translates ‘Brief (des Inhalts), daß ...’. Regardless of the underlying formula, the function of this *dī* is clear, and its exact origins do not have a direct bearing on the following discussion.

63. See: ySK 1:2, 3, 4, 5, 8, 14 (bis), 16; 8:4, 6; 10:2 (bis); 11:3 (bis), 5, 6; 14:4; 15:1, 2, 3.

- (30) a. ySK 4:2-4: דכל דאלישע אמר לך עבד לה והתשדר עמה [בכ]ל עבידה  
Concerning all that Elisa tells (G pt.) you: *do* (G imp.) it! And *concentrate yourself* (Dt imp.) with him on all the work.
- b. ySK 8:7-9: ומן די יצחבנכן על די כדן שגרה ל(י)די  
And whoever *resists* (G ipf.): *send* (D imp.) (him) to me!
- c. ySK 15:1-4: די תשלח עמהן תר(י) גברין ... די יעמרן וישלחן למחניה לותך ללבין ואתרגין ואת: ושלה אחרנין מלותך וימטון לך הדסין וערבין ותקן יתהן ושלח יתהן למחניה  
That (epistolary *dī*) you *must send* (G ipf.) two men with them (two donkeys) ..., who *must tie together* (D ipf.) palm branches and lemons and *send* (G ipf.) them to you in the camp. And you: *send* (G imp.) others out from you so that they *will bring* (C ipf.) you myrtle and poplar willow branches. And *prepare* (D imp.) them and *send* (G imp.) them to the camp.

Following these rules, the only deviating case is ySK 11:7, where the ‘imperfect’ chain is not broken but an imperative is used nevertheless:

- (31) ySK 11:7-9: ועמרו (עמר) על מלחה די לא יפרק מרהוץ ית דברי כפוריה כ[נו]מוסה  
(And fetch PN and he must come with you, for we need him [from 29b].) And *tie up* (G imp.) (wool) on salt, so that your lord *does not prevent* (G ipf.) the commandments of the reconciliation according to the law (Greek νόμος).

It is not fitting to draw far-reaching conclusions from this instance given the reconstructed object and the obscurity of the passage. However, one possible explanation is that this command is an afterthought and should be executed before the preceding ones. This would suggest that a difference in time in the sense of Aikhenvald (2016, 144) *can* be indicated by alternating the ‘imperfect’ and the imperative. Still, it is not the primary force behind such alternations (since the imperative can perfectly be used in letters, as long as permitted by the sentence structure; see [30c]).

In the Genizah fragments, however, the expression of obligative modality shows a clear dichotomy. When the command is immediate and absolute, an imperative is used; otherwise, an ‘imperfect’. This is quite clear from the following example:

- (32) MS D, Dt. 27:1-2: תעברון די תעברון יוֹמָהּ הַדִּין וַיְהִי בְיוֹמָהּ דִּי תַעְבְּרוּן  
[ות]ק[ימון] לכוֹן אבנין רברבן [יתיוֹרְדְנָה לְאַרְעָהּ דִּי סִי אֲלֶהֶכּוֹן יְהִיב לְכוֹן יְהוָה  
(And Moses and the wise men of Israel commanded the people, saying:) *Observe* (G imp.) all of the laws that I *command* (D pt.) you now, on this day. And it *will be* (G ipf.) on the day that you *will cross* (G ipf.) the Jordan into the land that YHWH your God *gives* (G pt.) you, that you *must set up* (C ipf.<sup>64</sup>) large stones (and *coat* [G ipf.] them with plaster).

The second obligative here (‘you must set up’) is similar to the first in (30a) and the one in (30b) in that it only applies when some prerequisite condition has been met: ‘as for ... (what Elisa tells you/whoever resists/the day you will cross the Jordan), do ...!’ However, it is expressed by an ‘imperfect’ in the Genizah fragment rather than an imperative, as in the Bar Kosiba letters. There is a clear correspondence between the form used in the targum fragments and the Hebrew original. BH imperatives are always translated as imperatives, whereas ‘imperfects’ and *wəqatals* are always translated as ‘imperfects’. This can be explained in several ways. One may for example suggest that תקִימוֹן is not truly obligative here, but rather optative or precativ. However, there is a second oddity here, namely the *waw* prefix to the ‘imperfect’. In similar sentences in AOA, no *waw* is used in the apodosis (see the examples in Muraoka and Porten 2003, §84fg).

64. Although reconstructed, it is certain that a *waw*-prefixed ‘imperfect’ was used given that the same form is found in vv. 4, 5, 7 (ter), 8.

Unfortunately, no comparable case can be found in the Old and Middle Judaeen corpus (usually, the word order in the apodosis is reversed, as in ySK 8:11–12: תהוה מנך רבה [ה] יצחב פרענת[ה] ומן די יצחב פרענת[ה] 'and if someone resists, his punishment by you must be high'), so it cannot be said whether this is restricted to the Genizah fragments or a feature of JPA at large. In the absence of such evidence from 'pure' JPA, it seems quite likely that it is related to the BH *wəqatal* underlying many of these cases.

#### 4.2.2 Prohibitive

Unlike in older strands of Aramaic, there is no 'prohibitive <sup>3</sup>*al*' at this stage of the language any more (Beyer 1984–2004, I: 152), and *lā* with (historically long) 'imperfect' has assumed its semantics. We also find the use of *lā* and the preposition *l* with an infinitive for prohibitions, which seems to be used for more general prohibitions than *lā* with (long) 'imperfect':

- (33) a. yJE 4 (cf. 5:3; 12b:1; 20:4): כוכה דנה עביד לגרמי אבהתנה ... ולא למפתח עליהון  
This burial chamber *has been made* (G pf. P) for the bones of our fathers, ..., and one *may not open* (G inf.) it (from) over them.
- b. xyMT 0: אלו יומיא די לא לאתענאה בהון ומקצתהון די לא למספד בהון  
These are the days on which one *may not fast* (Dt inf.), and on some of them one *may not mourn* (G inf.).

Since example (33a) is from a grave inscription, the fact that the prohibition is specific to a particular grave rather than graves in general does not require that the prohibition is marked as specific (with an 'imperfect'). Apart from being specific to a particular grave, the prohibitions are as general as can be, since they apply to all visitors at all times. Similarly, the fact that the prohibitions alluded to in (33b) are bound to particular days does not make them specific, since they are still applicable to all people and in every year.

### 4.3 Epistemic Modality

As has been mentioned above, epistemic modality relates to a proposition rather than an event. It is used to indicate to what extent the speaker deems something possible or probable.

In section 4.1 we have seen that the participle often has an assertive or declarative force, i.e., it describes events that are (believed to be) certain to happen. Gianto (1998, 188–189) describes these two types of modality as follows (emphasis original): 'In *declarative* modality, the source identifies the event as certain, since this is what normally happens. ... With *assertive* modality the situation is different. Whereas declarative modality proceeds from experience and perception, assertive modality relies more on belief or conviction that what is said must be true.' Because assertive modality is subjective, it can be expressed with the imperative and cohortative (besides the 'imperfect', jussive, and 'perfect'), whereas declarative modality cannot.

This function of the participle is related to the role it plays in the temporal system: events that happen in the present or the near future are more certain to happen than events in the further future, which are more typically described with the 'imperfect'. In chapter 3 we saw an example in (17): '(Jacob) *will* (surely) *die*' (MS D, Gen. 44:22); and three more in (18): 'man *is to cling* to his wife' and 'the two *are to become* one flesh' (MS B, Gen. 2:24); Jacob '*had to be*' such that the sun devoured him (MS C, Gen. 31:40). In example (22), we also had Benjamin, 'who *is to receive* a portion and inheritance' (MS D, midrash on Gen. 44:18). This usage is also related to the expressions with *lēt* and an independent personal pronoun, seen in (25): 'I *will* (definitely) *not release*' (MS C, Gen. 32:27); 'we (certainly) *cannot do* such a thing' (MS C, Gen. 34:14); 'I *will* (certainly) *not publicise* his identity' (MS D, addition to Gen. 38:25). With the possible exception of

הַיְאִינְ מִשְׁפָּחִין ‘where *could* we find (one like him)’ in MS C, Gen. 41:38, dealt with in section 4.1 above, all non-past participles are either neutral with respect to epistemic modality, or are assertive-declarative. This is also true for Old and Middle Judaeic, although the evidence there is somewhat scarce. The participle may add a sense of surety to ySK 11:4–5 (‘and [then] I *will* [finally] *be well-avenged* on the Romans’; example [14e] above) and xyRH 4 (‘one who makes unworthy use of the crown *will* [definitely] *pass away*’; example [14c] above).

The ‘imperfect’ can also indicate assertive modality, but no instances of declarative modality have been found. Although looking purely at the total number of attestations this could theoretically be due to historical accident, it is more likely that this reflects the actual language situation. Otherwise, we cannot explain why the participles from the previous paragraph with a Hebrew original are translations of Hebrew ‘imperfects’ and *wəqatals*: this is the case for Gen. 2:24 (bis); 32:27; 34:14; 41:38; and 44:22. Examples of assertive modality expressed by the ‘imperfect’ can be found in the Bar Kosiba letters, where Simon bar Kosiba regularly asserts that he will punish people or set their houses on fire (ySK 1:8, 12 (bis); 8:12; 14:7). Apart from the case in ySK 14:7 (פּרַעַזוּתָא) ‘let it be known [יהי + G pt. P] that I *will punish* [G ipf.] you’), where יהוּא ידִיעַ ‘let it be known’ could be construed as signalling assertivity, there are no overt markers of assertivity in these examples. The difference seems to be that the participle is used when the asserted proposition is immediately relevant (although possibly relative to some reference time). This can be seen in the minimal pair in xyRH:

- (34) a. xyRH 2: דְּלֵא מוּסִיף יִסּוּף  
One who *does not increase* (C pt.) (his knowledge of the law) *will perish* (G ipf.).
- b. xyRH 4: דִּישְׁתַּמֵּשׁ בְּתִגְמָא חֲלִי  
One who *makes (unworthy) use* (Dt ipf.) of the crown (of learning) (*thereby*) *passes away* (G pt.).

If one does not sustain his knowledge of the law, he will eventually come in a situation that he cannot handle, and perish (34a).<sup>65</sup> The person who uses the ‘crown of learning’ for personal gain, however, passes away as a direct result of that in a retributionist manner (34b). This distinction between the participle and the ‘imperfect’ thus reflects their use in the future tense, where the participle is used for the imminent future; the ‘imperfect’ is more general, but is pushed into the further future by the participle.

## 4.4 Evidentiality

Evidentiality is sometimes included as a modal category proper and sometimes only as a related concept (for discussion, see Squartini 2016, 57–64). It is the expression of the source of a proposition (e.g. ‘sensory’ or ‘hearsay’). As with dynamic modality, there is no convincing evidence of the integration of this concept into the verbal system in Hebrew and Aramaic. For instance, Callaham (2010, 64–68) discusses the usage of the BH infinitive absolute in ‘sensory’ and ‘reported’ evidentials. However, all examples concern infinitives of verbs like רָאָה ‘to see’ and שָׁמַע ‘to hear’. Also the BH particle וְהִנֵּה, which Gzella (2003, 93–94) claims can ‘introduce something evident’ is normally preceded by a verb of perception. The evidentiality is therefore expressed lexically, not grammatically.

Gzella (2004, 276–277) argues that AOA expresses ‘direct’ evidentiality with the participle, as in Dan. 6:22 (וּמְתַחֲנִין) ‘and they found Daniel praying and pleading’). However, here, too, it is not the participle in itself which expresses evidentiality; the sentence is evidential due to the lexical semantics of שָׁכַח. The participle is required by the context (would be perhaps even if it would

65. With this reading, the statement has basically the same meaning as the other three in this mishnah: one must always continue to study, but not for his own grandeur.

concern a punctual verb), because a ‘perfect’ in a subordinate clause would imply pluperfect meaning (‘they found that Daniel had prayed and pleaded’), which would point to deductive modality rather than direct evidentiality. Should the participle be an overt marker for direct evidentiality, there should also be a way to indicate contemporaneous events which are *not* witnessed directly. The ‘imperfect’ does not have this function, as it is not used for true contemporaneity in this stage of the language any more, and nominal clauses would not be able to express telic events.

The forms discussed are therefore not true markers of direct evidentiality, they merely tend to co-occur with this type of modality. In the case of the participle, this is logical, since the witnessed event is necessarily contemporaneous with the sensory event. As for the infinitive absolute and verbs of perception, it remains unclear whether there is a significant correlation between the two. There is no question, however, that the Semitic languages have not grammaticalised evidentiality into the verbal system: there is, for instance, no specific morpheme that can be attached to the verb of the witnessed event to express nuances of evidentiality.<sup>66</sup> This is also the case for JPA.

## 4.5 Generalising Relative Clauses

Let us finally consider generalising relative clauses.<sup>67</sup> In Aramaic, such clauses are typically introduced with a construction like *kol mā/man dī* ‘everything that/everyone who’, although each of the three constituents is optional. These clauses are related to epistemic modality, because it is usually unknown to the speaker to whom or what the clause actually refers. The speaker therefore does not have direct access to the described event or its truth value. In both the Old and Middle Judaean corpus and the Genizah fragments we find both participles and ‘imperfects’ used within these clauses.<sup>68</sup> The goal of this section is to determine the conditions for the choice between these forms.<sup>69</sup>

Key examples from Old and Middle Judaean are:

- (35) a. ySK 110: וכול גבר תקועי די יתשכח לותכן  
And (concerning) all men from Tekoa that *shall be found* (Gt ipf.) with you (their houses ... shall burn in flames).
- b. yJE 210: כל די אנש מתהנה בהלתהדה  
Whatever one *should take* (Gt pt.) from this grave (is an offer to God from the one who [lies] in it).
- c. yyEN 3:2–5: כל מן דיהיב פלגו בן גבר לחבריה הי אמר לשן ביש על חבריה לעממיה הי גניב  
צבותיה דחבריה הי מן דגלי רזה דקרתה לעממיה דין  
Whoever *causes* (G pt.) discord between a man and his companion, or *speaks* (G pt.) badly (lit. bad speech) about his companion to the non-Jews, or *steals* (G pt.) the property of his companion, or whoever *reveals* (G pt.) the secret of the city to the non-Jews (may [God] eradicate him from the earth).

66. See Palmer 2001, 35–52 for examples of systems which have truly integrated the notion into their grammar.

67. For this term (and the parallel construction in BH), see Joüon and Muraoka (2006, §144fa).

68. There is one ambiguous case in the Bar Kosiba letters which could be a ‘perfect’ instead of a participle: כל דאלישע אמר לך עבד לה ‘and whatever Elisa *tells* [G pt.]/*has told* [G pf.] you, do/make it for him!’ (ySK 4:2–3). There does not seem to be a reason why the construction would not appear with the ‘perfect’, and with the small number of occurrences in both corpora (see below) we may attribute this to historical accident. Indeed, the parallel construction in BH is attested with the ‘perfect’: מָה רָאִיתָם עֲשִׂיתִי ‘what you have seen that I have done’ (Jdg, 9:48). Note that events in the past will more often be certain and are therefore a priori less likely to occur in (but not incompatible with) clauses of this type.

69. Sometimes, the two appear to be interchangeable; especially in xyRH 2–4 where they stand parallel to each other. There is some overlap, but nevertheless general tendencies can be observed.

Considering the amount of evidence we must be reluctant to draw conclusions from this, but it is noteworthy that example (35a) with the ‘imperfect’ refers to a specific moment in the future whereas examples (35bc) apply more generally. This analysis can be supported with data from the Genizah fragments:<sup>70</sup>

- (36) a. MS B, Gen. 4:14: וְיִהְיֶה כָּל־דֹּמֵשׁ [כַּח יתה י] קטול יתה  
 And it *will be* (G ipf.) that whoever *chan[ces upon* (G pt.) him *will kill* (G ipf.) him.
- b. MS A, Ex. 21:22: מתקנסה יתקנס הידמה די ישווי עלוי בעלה דאתתה ויתן על-פם דייניא  
 (If men fight, and they push a pregnant woman, and the child is lost, ...), he *shall be fined* (Gt inf. abs. + ipf.): according to whatever the woman’s husband *imposes* (D ipf.) upon him he *must pay* (G ipf.) upon the decision of the judges.<sup>71</sup>

It is unknown whether the event described by the participle in (36a) will ever occur. Only by context do we know that it will occur at most once (because after that, Cain has been killed) — looking only at the generalising relative clause there is no reason there cannot be more than one person finding Cain in the future. On the other hand, the second ‘imperfect’ in (36b) describes an event of which we can reasonably assume that it will occur (assuming the husband does not grant amnesty), and that it will occur only once (because the law would not allow for an unbounded number of fines).

There are other ways to interpret the data, however. The distribution would suggest differences in use between the corpora: while in Old and Middle Judaeen the participle is used most often, the Genizah fragments prefer the ‘imperfect’ — as far as this can be said with the amount of data available, of course.<sup>72</sup> It is difficult to see how genre could have an impact on this distribution. However, in all cases in the Genizah fragments, the translation uses the same form as the original. Should we therefore want to explain the difference in distribution, we might suggest that BH influence is at play here (in which case we would have to exclude the Genizah data from the analysis of the conditions behind the choice between participle and ‘imperfect’). However, with this amount of data the difference in distribution can be attributed to historical accident; if we can reasonably explain the data as a single coherent system, this must be preferred (cf. section 1.3).

70. See further, with the participle: MS C, Gen. 31:43; with the ‘imperfect’: MS A, Ex. 21:30; MS C, Gen. 34:9, 12; MS D, Gen. 44:9.

71. It is unclear which of the two surrounding clauses is the main clause. Klein (1986, I: 284) takes the first clause and understands the last clause consecutively. It is more common, however, for a generalizing relative clause to appear before the corresponding main clause, which is why I understand the *waw* to be apodotic.

72. Even if we account for skewing in the Middle Judaeen corpus due to four occurrences of the participle in (35c), that corpus uses the ‘imperfect’ less than the Genizah fragments.



## Chapter 5

# Conclusions

The aim of this study was to describe the system of Tense, Aspect and Modality (TAM) as it appears in Jewish Palestinian Aramaic (JPA) and to relate it to that of Achaemenid Official Aramaic (AOA) to check for diachronic developments and to that of Biblical Hebrew (BH) to check for influence of this system on the language of the Palestinian targum. In this final section, the main results of these comparisons are outlined. It is not meant as a comprehensive overview of either the functions of the verbal forms or the expression of the TAM categories; given the length of this work, such a summary would be unnecessarily repetitive.

Much work remains to be done. This study has primarily focused on the expression of TAM using verbal forms, particularly the ‘perfect’, ‘imperfect’, and the participle. Matters such as word order and particles like <sup>c</sup>*ad* ‘until, while’ have not rigorously been incorporated and will have to be dealt with elsewhere. Also the expression of TAM in adverbial clauses, such as the difference between temporal clauses with a preposition and a participle or infinitive, must still be looked at in more detail. Finally, a comparison with other strands of Western Aramaic would be welcome to put the results into a broader context.

### 5.1 Differences with Achaemenid Official Aramaic

As we have seen, the JPA TAM system is very similar to that of AOA. Nevertheless, a few differences have been found.

First, I have suggested that the so-called ‘konstatierenden „Perfekt“’ (Gzella 2004, 118–119) may also occur *before* the events it summarises (section 2.1). Although this would not be very surprising, the relevant case (yyZZ 36:6) is from a marriage contract — this instance may therefore be specific to legal register, and it would have to be compared to a larger corpus of legal texts before generalising claims can be made.

I have also drawn attention to the syntactic patterns and meaning of periphrastic constructions (section 3.2). While these are traditionally explained as marking imperfective aspect, there are several cases in which such a reading is doubtful, even though it is difficult to find examples where it is clearly excluded. The best evidence for a difference in usage are the periphrastic constructions in a midrash on Gen. 44:18 which have been removed in toseftot based on that midrash, thus hinting at linguistic updating to a dialect in which the construction had become more rigid (section 3.2.2). Furthermore, it seems that the construction is more transparent than elsewhere. These observations point to an earlier stage of grammaticalization; these constructions may therefore actually reflect an older stage of the language than AOA, although we can also explain the data with reanalysis of the AOA constructions (and thus avoid assuming a western undercurrent preserving this older stage during Achaemenid times).

Something that may not be different from AOA, but has received little attention, is the use of the participle with assertive-declarative modality. It is thus not the case that the participle is neutral with respect

to modality, as one may get the expression: because the participle normally states things that are the case, it can be used to explicitly assert something. One may assume that such distinctions would go hand in hand with emphasis in spoken language, but such claims cannot be verified.

Finally I have described the alternation between imperative and ‘imperfect’ for commands in the Bar Kosiba letters. In my analysis, there is no difference in meaning or function whatsoever, and this choice is determined by syntax (just as the use of the ‘imperfect’ in negated commands with *lā*).

## 5.2 Possible Influences from Biblical Hebrew

A number of possible influences of the BH TAM system have been described, although in none of these instances a solid case can be made.

As in AOA, the passive participle can be used for events in the past with a lasting effect in the present. However, in the targum this is less frequent, and a ‘perfect’ of a derived stem is often used instead (section 2.1). This may well be attributed to BH influence, although it can also be related to genre.

In Old and Middle Judaeen, the imminent future is normally expressed by the participle for telic events or the ‘imperfect’ for atelic events (section 2.3). This distinction can also be found in the Genizah fragments, but is less strong: and some BH atelic participles and telic ‘imperfects’ in this temporality are translated with the same form. These instances can be analysed on a case-by-case basis, however, based on other properties of the two forms; it is not needed to ascribe the lack of a different form in the targum to BH influence.

In generalising relative clauses, the Genizah fragments tend to prefer the ‘imperfect’ while the Old and Middle Judaeen predominantly use a participle (insofar as this can be said with the amount of data available; section 4.5). In all these cases, the targum has the same form as the BH original. However, despite the difference in distribution between the two corpora, the instances can be explained by a single rule. The difference in distribution may therefore be due to historical accident with no BH influence involved whatsoever.

On the contrary, the fact that forms from the original are sometimes retained when they have a certain property that would otherwise be lost (as has been argued in section 2.3) rather shows a great awareness of the targumic translators for these kinds of nuances. As outlined in section 1.3, if reasonably possible an explanation covering the full range of JPA dealt with here must be preferred over one assuming BH influence. Again, what is reasonable here remains open to debate, but to me the data analysed here do not warrant such an assumption. Indeed, the targum overall appears to be perfectly idiomatic Aramaic, at least when it comes to TAM. I would therefore refrain from attempting to capture the method of the targumic translators in a small number of relatively simple rules, as Bombeck (1997, 17–18) does. That such a system may succeed in the majority of cases is due to the similarity of the languages (as known from genealogical observations) and does not show that these rules were consciously, or even unselfconsciously, followed.

# Bibliography

- Aikhenvald, A. Y. 2016. 'Sentence Types.' In *The Oxford Handbook of Modality and Mood*, edited by J. Nuyts and J. van der Auwera, 141–165. Oxford: Oxford University Press.
- Ayoun, D., and J. Rothman. 2013. 'Generative approaches to the L2 acquisition of temporal-aspectual-mood systems.' In *Research Design and Methodology in Studies on L2 Tense and Aspect*, edited by M. R. Salaberry and L. Comajoan, 119–156. Studies in Second and Foreign Language Education 2. Berlin: De Gruyter Mouton.
- Bergström, U. 2015. 'The progressive-imperfective path from Standard to Late Biblical Hebrew.' *Old Testament Essays* 28 (3): 605–635.
- Beyer, K. 1984–2004. *Die aramäischen Texte vom Toten Meer samt den Inschriften aus Palästina, dem Testament Levis aus der Kairoer Genisa, der Fastenrolle und den alten talmudischen Zitaten*. 3 vols. Göttingen: Vandenhoeck & Ruprecht.
- Bombeck, S. 1997. *Das althebräische Verbalsystem aus aramäischer Sicht: masoretischer Text, Targume und Peschitta*. Frankfurt am Main: Peter Lang.
- Bybee, J., R. Perkins, and W. Pagliuca. 1994. *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World*. Chicago: The University of Chicago Press.
- Callahan, S. N. 2010. *Modality and the Biblical Hebrew Infinitive Absolute*. Abhandlungen für die Kunde des Morgenlandes 71. Wiesbaden: Harrassowitz Verlag.
- Comrie, B. 1976. *Aspect*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.
- Cook, J. A. 2012. *Time and the Biblical Hebrew Verb. The Expression of Tense, Aspect, and Modality in Biblical Hebrew*. Linguistic Studies in Ancient West Semitic 7. Winona Lake: Eisenbrauns.
- Corbett, G. G. 2006. *Agreement*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.
- Dik, S. C. 1987. 'Copula Auxiliariation: How and Why?' In *Historical Development of Auxiliaries*, edited by M. Harris and P. Ramat, 53–84. Trends in Linguistics 35. Berlin: Mouton de Gruyter.
- Díez Macho, A. 1968–79. *Neophyti I. Targum Palestinense. Ms. de la Biblioteca Vaticana*. 6 vols. Madrid: Consejo Superior de Investigaciones Científicas.
- Elliger, K., and W. Rudolph, eds. 1967–1977. *Biblia Hebraica Stuttgartensia*. Stuttgart: Deutsche Bibelstiftung.
- Fassberg, S. E. 1983. 'A Grammar of the Palestinian Targum Fragments from the Cairo Genizah,' Harvard University.
- Filip, H. 2012. 'Lexical Aspect.' In *The Oxford Handbook of Tense and Aspect*, edited by R. I. Binnick, 721–751. Oxford: Oxford University Press.

- Flesher, P. V. M., and B. Chilton. 2011. *The Targums: A Critical Introduction*. Studies in the Aramaic Interpretation of Scripture 12. Leiden: Brill.
- Gianto, A. 1998. 'Mood and Modality in Classical Hebrew.' *Israel Oriental Studies* 18:183–198.
- . 2008. 'Lost and Found in the Grammar of First-Millennium Aramaic.' In *Aramaic in its Historical and Linguistic Setting*, edited by H. Gzella and M. L. Folmer, 11–25. Veröffentlichungen der Orientalischen Kommission 50. Wiesbaden: Harrassowitz Verlag.
- Golomb, David M. 1985. *A Grammar of Targum Neofiti*. Harvard Semitic Monographs 34. Chico: Scholars Press.
- Gzella, H. 2003. *Cosmic Battle and Political Conflict: Studies in Verbal Syntax and Contextual Interpretation of Daniel 8*. Biblica et orientalia 47. Rome: Editrice Pontificio Istituto Biblico.
- . 2004. *Tempus, Aspekt und Modalität im Reichsaramäischen*. Wiesbaden: Harrassowitz.
- . 2008. 'Zum periphrastischen Infinitiv in Gen. VIII 5.' *Vetus Testamentum* 58 (1): 1–11.
- . 2015. *A cultural history of Aramaic: from the beginnings to the advent of Islam*. Leiden: Brill.
- . 2019. *Non-Iterative and Non-Habitual Uses of Imperfective Aspect in Ancient Hebrew*. Presented at *Tense and Aspect in Ancient Language*, Berlin, 28–29 June.
- Hewson, J. 2012. 'Tense.' In *The Oxford Handbook of Tense and Aspect*, edited by R. I. Binnick, 507–535. Oxford: Oxford University Press.
- Holmstedt, R. D. 2011. 'The Typological Classification of the Hebrew of Genesis: Subject-Verb or Verb-Subject?' *Journal of Hebrew Scriptures* 11.
- Hopper, P. J. 1979. 'Aspect and Foregrounding in Discourse.' In *Discourse and Syntax*, edited by T. Givón, 213–241. Syntax and Semantics 12. New York: Academic Press.
- Hopper, P. J., and S. A. Thompson. 1980. 'Transitivity in Grammar and Discourse.' *Language* 56 (2): 251–299.
- Joüon, P., and T. Muraoka. 2006. *A Grammar of Biblical Hebrew*. 2nd ed. Rome: Gregorian & Biblical Press.
- Klein, M. L. 1986. *Genizah Manuscripts of Palestinian Targum to the Pentateuch*. Cincinnati: Hebrew Union College Press.
- Koller, A. J. Forthcoming. In *Textual History of the Bible*, edited by R. Fuller and A. Lange, vol. 3. Leiden: Brill.
- Kutscher, E. Y. 1976. *Studies in Galilean Aramaic*. Translated by M. Sokoloff. Originally published in Hebrew as 'מחקרים בארמית הגלילית', *Tarbiz* 21 (1950), 192–205. Ramat-Gan: Bar-Ilan University.
- Kuty, R. J. 2008. 'Studies in the syntax of Targum Jonathan to Samuel,' Leiden University.
- Lyons, J. 1977. *Semantics*. 2 vols. Cambridge: Cambridge University Press.
- Malchukov, A. L., and V. S. Xrakovskij. 2016. 'The Linguistic Interaction of Mood with Modality and Other Categories.' In *The Oxford Handbook of Modality and Mood*, edited by J. Nuyts and J. van der Auwera, 196–219. Oxford: Oxford University Press.
- Muraoka, T. 1966. 'Notes on the Syntax of Biblical Aramaic.' *Journal of Semitic Studies* 11 (2): 151–167.
- Muraoka, T., and B. Porten. 2003. *A Grammar of Egyptian Aramaic*. 2nd ed. Handbook of Oriental Studies 32. Atlanta: SBL Press.

- Nöldeke, T. 1966. *Kurzgefasste syrische Grammatik*. 2nd ed. Reprinted with additions by A. Schall. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Nuyts, J. 2016. *Analyses of the Modal Meanings*, edited by J. Nuyts and J. van der Auwera, 31–49. Oxford: Oxford University Press.
- Palmer, F. R. 1986. *Mood and Modality*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.
- . 2001. *Mood and Modality*. 2nd ed. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.
- Porten, B., and A. Yardeni. 1986–1999. *Textbook of Aramaic Documents from Ancient Egypt*. 4 vols. Winona Lake: Eisenbrauns.
- Sarna, N. M. 1989. *Genesis*. The JPS Torah Commentary. Philadelphia: The Jewish Publication Society.
- Saussure, L. de, J. Moeschler, and G. Puskás. 2007. 'Introduction.' In *Recent Advances in the Syntax and Semantics of Tense, Aspect and Modality*, edited by L. De Saussure, J. Moeschler, and G. Puskás, 1–9. Berlin: Mouton de Gruyter.
- Squartini, M. 2016. 'Interactions between Modality and Other Semantic Categories.' In *The Oxford Handbook of Modality and Mood*, edited by J. Nuyts and J. van der Auwera, 50–67. Oxford: Oxford University Press.
- Stevenson, W. B. 1962. *Grammar of Palestinian Jewish Aramaic: With an Appendix on the Numerals by J. A. Emerton*. 2nd ed. Oxford: Oxford University Press.
- Thacker, T. W. 1963. 'Compound Tenses Containing the Verb 'Be' in Semitic and Egyptian.' In *Hebrew and Semitic Studies Presented to Godfrey Rolles Driver in Celebration of his Seventieth Birthday*, edited by D. Winton Thomas and W. D. McHardy, 156–171. Oxford: Oxford University Press.
- Vogt, E. 1994. *Lexicon linguae aramaicae Veteris Testamenti documentis antiquis illustratum*. 2nd ed. Roma: Editrice Pontificio Istituto Biblico.
- Waltke, B. K., and M. O'Connor. 1990. *An Introduction to Biblical Hebrew Syntax*. Winona Lake: Eisenbrauns.
- Weist, R. 2002. 'The first language acquisition of tense and aspect: A review.' In *The L2 Acquisition of Tense-Aspect Morphology*, edited by R. Salaberry and Y. Shirai, 21–78. Language Acquisition & Language Disorders 27. Amsterdam: John Benjamins Publishing Company.
- Yadin, Y., H. M. Cotton, and A. Gross. 2002. *The documents from the Bar Kokhba period in the cave of letters*. Jerusalem: Israel Exploration Society.