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SOME GENERAL REMARKS ON INTERACTIONS BETWEEN ASPECT, MODALITY, AND EVIDENTIALITY IN BIBLICAL HEBREW

1. Introduction

Since the end of the nineteenth century, the endless discussion about the basic functions of the verbal forms in Biblical Hebrew has been characterized by the opposition of a "temporal" and an "aspectual" approach. That is, while some scholars maintain that the finite conjugations mark the location of an event or a situation in time (more specifically, past versus present-future), as had been the mainstream opinion for centuries, or in relation to a point of reference (relative anteriority versus relative contemporaneity or posteriority), others prefer to operate with the more abstract, and contextually less evident, notions of completed (perfective aspect) and in progress (imperfective aspect). The rationale underlying this antagonism appears to be the desire to accommodate, with varying degrees of sophistication, seemingly conflicting tense values of the same verbal form with a transparent and straightforward one-to-one association of morphological categories and semantic notions (for an overview, see Gzella 2004: 5–35; Cook 2006).

Hence the problem that a "long imperfect" like $ya \ case$ has to be translated either with a future tense 'he will do' (e.g., Josh 3:5), with a durative-iterative past 'he used to do' (Job 1:5; 1 Sam 1:7), with a modal nuance 'may he do' (1 Sam 3:17), or with either a future or a modal form ('he will/shall/can do' in 1 Sam 2:35), is resolved by means of more general labels: the "long imperfect" would then simply mark either contemporaneity or imperfectivity, the "perfect" with nonstative verbs relative past or perfectivity. No agreement has been reached so far. Such attempts, however, by necessity result in an oversimplified interpretation of the Hebrew verbal system and appear to be governed more by the straightjacket of old-fashioned school grammar than by insights into the workings of language: they do not adequately account for the fact that, e.g., the "long imperfect" in narrative specifically seems to refer to ongoing or repeated situations in the past and not merely to events simply contemporaneous with a point of reference in the past, as becomes clear from its frequent co-occurrence with temporal adverbs like 'every day', whereas the "perfect" occurs predominantly for past events, which would be difficult to square with its interpretation as a completely tenseneutral form that only indicates that an event has been completed (Gzella 2011). What is more, they ignore the manifold interactions between tense, aspect, and other domains. It should be noted that a discourse pragmatic analysis of verbal forms for creating foreground and background effects, which is very popular in the study of Biblical Hebrew, can easily be combined with tense-aspect semantics, as narrative forms with strong past and/or perfective marking tend to depict foreground events. Language, after all, is not a plain geometrical system but a bewilderingly complex organism shaped by many different forces.

As a result, approaches that do not oppose tense and aspect as monolithic entities but integrate them into a more coherent framework have been gaining ground during the past years, especially since they can be supported by advances in descriptive, typological, and theoretical linguistics. Verbal forms, particularly in languages with lighter verbal morphology like the classical Semitic idioms, would then cover broader functional ranges that include intersecting temporal, aspectual, and moral notions instead of clearly defined basic functions. Andrzej Zaborski himself has argued for such a more nuanced interpretation of the verb in Semitic (Zaborski 2002), and his views are informed by a profound experience with many of the world's languages (not to mention his excellent active command of several of them!). In a similar vein, the following general remarks in his honour are simply meant to stimulate some further discussion and to outline possible perspectives for future research: first, by integrating modality as a third dimension into the tense-aspect matrix; then, by exploring the interaction between these notions. They do not argue a particular point but merely invite to take a closer look at areas of ambiguity in language.

2. The trilateral interaction between aspect, modality and evidentiality

Current scholarship on Hebrew reflects a growing interest in modality besides tense and aspect. Its study is customarily confined to the forms expressing volition: the imperative for the second person, the jussive for the third person, and the cohortative for the first person (so still Blum 2008). Recent contributions, however, informed by linguistic theory, seek to understand modality as a broader notional category in its own right that covers various nuances of obligation ("deontic modality") or speaker certainty ("epistemic modality"), yet with frequent overlaps in the formal marking strategies, just as in English *must* and *may* (Gianto 1998; Gzella 2004a; Callaham 2010). To these, evidentiality, i.e., an indication of the speaker's source of information, such as hearsay, inference, or immediate sense perception, can be added (Gianto 2005).

Besides the well-known relation between tense and aspect, especially in grammaticalization theory, it has already been observed that modality and future tense share the notion of uncertainty, even to the extent that some linguists deny the existence of a future tense as a proper category. Hence analytic future tenses are often grammaticalized from modals, e.g., will in English. The subtle interactions between the categories of aspect, modality, and evidentiality, by contrast, are much less well researched and provide an intriguing subject matter for descriptive, historical, and theoretical studies devoted to these phenomena in the languages of the world. Nonetheless, data from Semitic idioms is notably absent in the current, lively, discussion (no such evidence has been included in Abraham & Leiss 2008), even though their particular structure, with a considerable functional load being distributed across comparatively few formal categories, and their long period of attestation could shed new light on our theoretical understanding of the interaction between aspect, modality and evidentiality. Biblical Hebrew also occupies a central place within the study of Semitic and thus provides a particularly obvious point of departure. This trilateral intersection and its typological underpinnings can be briefly illustrated as follows:

a) Aspect and modality

Theoretical attention for the interaction between aspect and modality has steadily grown in the last ten years, as the various papers in Abraham & Leiss (2008) show. In Russian, for instance, there is a preference for imperfective aspect to convey deontic meaning and for perfective aspect to express dynamic modality (Divjak 2009). This is ascribed to the fact that both perfective aspect and dynamic modality are bounded or marked, while imperfective aspect and deontic modality are unbounded (see also Fortuin 2007; Auwera & Filip 2008). Other languages, by contrast, exhibit a strong convergence between imperfective aspect and epistemic modality (Abraham 2008; Ziegeler 2008), as appears from the distinction between deontic *He must leave now* (with lexically perfective infinitive) and epistemic *He must be leaving now* (with imperfective infinitive) in English. It is unclear how this seemingly conflicting evidence can be reconciled.

In addition, ability modals like *can* result in different nuances depending on the aspect. Perfective aspect in, e.g., French and Italian yields "actuality entailments", that is, the inference that the proposition holds in the actual world, and not merely in some possible world(s), as in *I bambini hanno potuto giocare* 'The kids were allowed to play (and, indeed, played)' (cf. Bhatt 1999; Hacquard 2006), whereas the combination with imperfective aspect, as in *I bambini potevano giocare* 'The kids had permission to play', would only assert the subject's ability to do so.

b) Aspect and evidentiality

The link between aspect and evidentiality has often been observed. In languages such as Turkish, Bulgarian, Estonian, and Georgian, the use of the present perfect, or a similar resultative category, triggers an additional inferential interpretation (Comrie 1976:108–110; Izvorski 1997; see also various contributions in Johanson & Utas 2001). In these languages, the sentence *I have come* receives an interpretation as *I have apparently come*. Comrie (1976:110) suggests that this link between aspect and evidentiality is due to the fact that both the perfect and the inferential present an event via its results. Evidentials would thus relate to a past event by means of the present situation much the same way as the present perfect stresses the ongoing relevance of something that has happened in the past: both would then share a basic retrospective orientation.

c) Modality and evidentiality

The relation between modality and evidentiality is a controversial one. For some researchers, evidentiality should be subsumed under modality, and analyzed in terms of possible world semantics (Kratzer 1991). More commonly, evidential systems are viewed as systems that lexically encode the kinds of knowledge for a statement, while modal systems encode a speaker's strength of belief in a statement in terms of necessity, probability, or possibility (Aikhenvald 2004; Palmer 2001). Both categories are nevertheless often intertwined: visual evidence for a statement entails a high degree of certainty on behalf of the speaker, while third-hand evidence can be used to convey that a statement is only likely to be true. However, as evidentials tend to exhibit a regular cross-linguistic association with the present perfect that non-evidential epistemic modals do not seem to have, it has been argued that both are complementarily related.

3. Aspect, modality, and evidentiality in Biblical Hebrew

Several interesting peculiarities of the marking of aspect, modality, and evidentiality in Biblical Hebrew seem to be at odds with typological data mentioned above. A better understanding of the situation in Hebrew will therefore contribute to reformulating the theoretical underpinnings of research on modality in language. It is thus necessary to undertake a thorough study of the interactions between modality and other categories in Biblical Hebrew on the basis of a sound conceptual framework. As this has not yet been done, a few general observations have to suffice:

a) Aspect and modality

In Biblical Hebrew, deontic modality is usually expressed by the "short imperfect" (or "jussive"), whereas epistemic modality belongs to the functional range of the "long imperfect". Both forms have evolved from two

originally separate conjugations in an earlier stage of Northwest Semitic (Gzella 2004b:310–324). While the corresponding forms have largely merged for sound verbal roots, several classes of weak roots still reflect the older morphological differences (e.g., *yiben* 'let him build' [short form, deontic] < */yabniy/ vs. *yibnē* 'he might/will build' [long form, epistemic] < */yabniyu/). Furthermore, "short imperfects" almost invariably take the clause-initial position in Hebrew, whereas "long imperfects" practically always occur in clause-medial position. Lastly, both have their own negations, '*al* and *lō* respectively. Here are two examples:

- (1) *ydabber-nā* 'ădōnī ham-mɛlɛk say-3M.SG.IMPF-PART lord-1SG DET-king Let my lord the king speak! (2 Sam 14:18; short form: deontic, permission)
- (2) lammā tdabber 'ōd dbārēkā
 PART say-2M.SG.IMPF still matter-PL-2M.SG
 Why do you still talk about your own affairs?
 (2 Sam 19:30; long form: epistemic)

(1) contains a "short imperfect", here together with the particle $-n\bar{a}$ 'please', (2) uses a "long imperfect". The latter form marks modality in what must be a reproach, as also the particle *lammā* 'why?' (which generally occurs in accusations: Jepsen 1967) indicates; otherwise a participle would have been used (cf. Josh 5:14). However, the "short" form, clearly associated with deontic modality, does not interact with the imperfective aspect but with the perfective one. Its immediate ancestor could also serve as a narrative form for completed past events, and this function has given rise to the new *wavyiqtol* conjugation in Classical Hebrew prose. The past or perfective function of this form is universally accepted. The "long imperfect", on the other hand, can express present and future tense as well as imperfective aspect for durative or iterative situations in the past (Gzella 2011). Hebrew thus sides with the association of deontic modality with perfective aspect and of epistemic modality with imperfective aspect, as in Germanic, unlike the other way round, as is often suggested on the basis of evidence from Slavonic languages. This adds to a theoretically well-founded unified explanation of the functional range of the "long imperfect".

In addition to that, there seem to be some crossovers between the "short" and the "long" form, since occasionally the one occurs where the other would normally be expected. These cases are often treated as scribal mistakes in grammars and commentaries, which only means that a more rigorous and consistent account has not yet been found. Some of them could perhaps be explained by overlaps in the modal domain (cf. 2 Sam 13:12 with Ex 20:10 and Gen 22:12). Lastly, the elusive w- $q\bar{a}tal$ conjugation in Classical Hebrew combines iterative past in

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narrative with modal nuances, such as deontic modality or expected consequence after an injunction, similar to the use of *would* as in *he would do so every day*. More research on the intersection between aspect and modality could contribute to a more comprehensive analysis of this form.

b) Aspect and evidentiality

The link between the resultative present perfect and evidentiality is typologically well-established. In Hebrew, it surfaces in cases where the quotative marker $l\bar{e}m\bar{o}r$ occurs together with the "perfect" (Gianto 2005:143–144), whose functional range apparently includes the lasting relevance of a past event. However, direct sense perception is also expressed by the deictic marker *w*-*hinn* \bar{e} (based on the presentative *hinn* \bar{e}) together with a participle (*ibid.* 145–149):

(3)	wa-'ănī	hāyī <u>t</u> ī	mē <u>b</u> īn	w-hinnē ṣpīr-hā- 'izzīm bā	
	and-I	be-1sg.	think-PTC.M.SG	PART	he-goat come-ptc.m.sg
	And I wa	s contemplat	ting: the he-goat -	- there	he came! (Dan 8:5)

Elsewhere, the participle expresses present tense, immediate future, and circumstantial situations contemporaneous with a main event. Hence, it seems to be more directly related to the imperfective aspect and gradually takes over the present-tense functions from the "imperfect":

(4)	w-hinnī	mašḥī <u>t</u> ām	min-hā- 'ārɛṣ
	and-part-1sg	destroy-ptc.m.sg-3m.pl	PREP-DET-earth
	And I am going t	to destroy them together with	n the earth. (Gen 6:13)

This correlation disagrees with a general tendency observed in 2b above. Further work on evidentiality in Hebrew is thus likely to shed more light on the important question whether there is a relationship between tense-aspect and the various linguistic means for marking evidentiality.

c) Modality and evidentiality

In order to better understand the third facet of the triangular interaction between aspect, modality and evidentiality, one should examine more rigorously whether the "long imperfect", the form most closely associated with epistemic modality, can also mark evidential nuances. Evidentiality in Hebrew appears to be expressed mainly by presentative markers and the participle (Gzella 2012), but it may play a role in usages of the "long imperfect" not yet fully understood:

(5)	yō <u>b</u> a <u>d</u>	yōm	'iwwālɛ <u>d</u>	$b\bar{o}$
	perish-3M.SG.IMPF	day	bear-1sg.impf.pass	in-3м.sg
	Let perish the day	e born on! (Job 3:3a)		

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The clause-initial "short imperfect" *vobad* 'let perish' no doubt marks deontic modality, but the nuance of the clause-medial "long imperfect" 'iwwāled 'I was born' is somewhat elusive. For past time references, the "long imperfect" most commonly indicates ongoing or repeated events (often in combination with expressions like 'every day', 'all the time' etc.), or circumstantial situations (Cook 2006, Gzella 2011), but this is apparently not the case here. It has to be investigated by means of a meticulous analysis whether a nuance like 'Evidently, I was born [for suffering]' makes more sense for appreciating the force of Job's complaint and similar utterances, or whether another interpretation applies here. The different scope of negations with epistemic modality and evidentiality would also play a role. With the presentative and the participle, by contrast, nonevidential modal shades seem rather untypical. If evidential and other epistemic nuances were indeed neatly divided across different formal categories in Biblical Hebrew, this would support a wider-ranging attempt to establish clear boundaries between epistemic-modal and evidential usages and thus single out evidentiality, despite their overlaps in many languages.

4. Conclusion

A more comprehensive study of the intersection of aspect, modality, and evidentiality in Biblical Hebrew and in other Semitic languages would make a welcome contribution to linguistic typology and theory. It can show that some widespread assumptions do not hold with absolute regularity while confirming others. Hence, Semitic data should not be ignored in the current attempts to define the nature of aspect and modality. Such work would also add to a deeper understanding of modality in Hebrew, thereby taking the stagnant debate about "tense versus aspect" in Hebrew to a next level, and introduce notions that could be useful for various kinds of Old Testament exegesis (e.g., the use of evidentiality in prophecy) as well as translation practice.

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