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***QOTEL* AND ITS DYNAMICS (PART ONE)**

Abstract

The present study (divided into two papers) provides a dynamic – conceptually consistent and typologically plausible – classification of the QOTEL form in the Biblical, Rabbinic and Modern Hebrew languages. While preserving the entire semantic and functional richness of the construction, the author defines the gram as a portion of the imperfective path, which is additionally bifurcated into modal contamination and modal ability clines. The comparison of the dynamic states of the formation at the three diachronic époques furthermore demonstrates that the evolution of the QOTEL pattern may not be equaled to a simple change from a progressive aspect into a present tense. First, the QOTEL (in present and future temporal spheres) fails to suffer any qualitative semantic development, spanning the same section of the posited trajectory over the three historical periods – the modification is generally quantitative. Second, the QOTEL in a past time frame (both as a simple QOTEL morphology and in combination with the auxiliary *hayah* ‘be’) offers qualitative and quantitative alternations. Most importantly, it has lost progressive senses but acquired modal values of possibility and probability which are prompted by its prominent habitual meaning.

The present article, which constitutes the first part of the series, addresses methodological issues and presents the semantic potential of the QOTEL gram in Biblical and Rabbinic Hebrew.

1. Introduction

1.1. The problem of the qotel gram and the objective of the paper

The Hebrew morphological pattern *qotel* – which is illustrated below by the Biblical Hebrew BH (1.a), Rabbinic Hebrew RH (1.b) and Modern Hebrew

MH (1.c) examples – is a troublesome object. On the one hand, there are controversies regarding the position of the construction in the BH verbal system and its semantic classification. To be precise, scholars disagree on whether the *qotel* is a nominal or verbal category. Likewise, they fail to have the same opinion with regards to the definition of the gram when it is employed in the verbal function. Is it a circumstantial form, an aspect or a tense (cf. section 3.1 below)? On the other hand, various descriptions of the posterior development of the construction, although essentially correct, simplify the real state of affairs. Namely, the view whereby the BH participial input was merely transformed into a finite verbal category in Rabbinic and Modern Hebrew – a present tense – tells only a part of the story; the diachronic fate of the *qotel* is more complex.

- (1) a. **וַיֹּאמֶר אֶת־אֶחָיו אֲנֹכִי מְבַקֵּשׁ** (Gen. 37: 16)
‘And the man said: I **am seeking** my brothers’
- b. **הַקּוֹרֵא קוֹרֵא** (Pérez 1992: 206)
‘The reader **is reading** / **reads**’
- c. **אֲנִי אוֹהֵבֵת כְּלָבִים** (Dekel 2010: 122)
‘I **love** dogs’

The present paper demonstrates that the above-mentioned classification problems and diachronic simplifications can be overcome if we analyze the *qotel* construction in dynamic terms, following the definition of verbal grams as posited by Andrason (2011a: 28-34). According to this definition, the total meaning of a gram corresponds to a set-theoretic union of all the individual values available in concrete uses, ordered and represented as a portion of an evolutionary cline, additionally enriched by the information concerning their frequency (cf. also Andrason 2012b). To be exact, the author will propose dynamic definitions of the *qotel* form in Biblical, Rabbinic and Modern Hebrew, portraying the construction as a map of interconnected senses, either prototypical (frequent) or peripheral (rare), chained by means of universal diachronic templates (paths). The dynamic definitions of the *qotel* at these three historical époques will, in turn, enable us to provide a more accurate model of its evolution across centuries. Before analyzing the nature and properties of the BH, RH and MH *qotel* in depth, we will first meticulously explain the model of the description of verbal meaning adopted in this study.

1.2. Methodological background

Andrason (2011a) demonstrates that the semantic-functional potential of a gram should first be classified as the union set (but not the intersection) of atomic elements $\{a_a...a_x\}$ – values encountered in empirical cases. Subsequently, by

employing universal diachronic paths, the members of that set may be arranged and represented as an ordered whole – a coherent map. That is to say, we can organize the elements $\{a_a \dots a_x\}$ of the union-set into an unidirectional trajectory (or a cluster of trajectories) that matches a portion of a regular historical process, namely an evolutionary cline. This means that a category may be defined in its totality and pictured as a homogenous phenomenon if we understand the particular senses displayed by the gram (i.e. the elements of the union set $\{a_a \dots a_x\}$) as frozen vestiges of its own grammatical development: each specific value a corresponds to a determined phase during the semantic-functional-structural evolution of a gram. Given that semantic-functional-structural properties are stored in following the principles governing language evolution, i.e. in accordance with laws established by grammaticalization theory, these laws (or under a less strong claim, tendencies) – geometrically represented as paths – may be employed in order to determine the synchronic potential of grammatical formations. Consequently, an apparently disordered union set may be re-structured so that the indexation of its elements $\{a_a, a_b, a_c, a_d \dots a_x\}$ corresponds to a sequence of phases located on a given – typologically plausible – developmental path-law, i.e. $\{a_1, a_2, a_3, a_4 \dots a_n\}$. Within this understanding and classification of verbal constructions, grams may display various, superficially, unrelated and disparate values. The path representation will regularly enable us to chain them – both conceptually and diachronically – and represent them as members of a single cline and thus as components of a sole homogenous phenomenon. The traditional whether-or issue (for instance, the problem whether a formation is an aspect or a tense, or an imperfective or a present) disappears because the total nature or meaning of a gram is represented as a continuum whose elements belong to various semantic domains and functional types, and display several structural properties. The synchronic gram is a dynamic meta-stable object. We “take” it for a thing, being nevertheless aware that it is a process (Andrason 2011a: 28-34 and 2012b; for a similar model see Heine, Claudi and Hünemeyer 1991 and Bybee 2010).¹

This qualitative model of the semantic potential of a form may additionally be enriched by numerical data regarding the frequency of the components of the map. According to cognitive and corpus linguistics, the representation of the meaning of a gram involves two studies: qualitative (the variety of senses conveyed by the form is detected and mapped) and quantitative (a statistical

¹ The view, presented above, harmonizes with the principle of cognitive and grammaticalization linguistics which understands the meaning as a complex semantic network of interconnected and contextually induced specific senses (Croft and Cruse 2004: 258, Evans and Green 2006: 352-353, 368 and Nikiforidou 2009: 16-17). In our model, the connecting template is granted by diachronic evolutionary scenarios. These patterns – in contrast with psychological liking – are objective: they have been identified empirically (Bybee, Perkins and Pagliuca 1994; see also Heine, Claudi and Hünemeyer 1991 and Haspelmath 2003).

frequency of the identified senses or components of the grid is established; see Gries 2006: 5). As a result, the most frequent senses are viewed as prototypical – they are stabilized and likely correspond to the users’ representation of the meaning of a form. In this manner, a high frequency is supposed to be correlated with a prototypicality understood as “the first-come-to-mind manifestations of abstract thoughts” (Gilquin 2006: 180). In other words, the prototype is cognitively the most salient item and this saliency can overtly be observed by the item’s high frequency within a given corpus (cf. Geeraerts 1988: 221-222, Stubb 2004 and Gilquin 2006: 159). It is the dominant (from a statistical point of view) portion of the map.

From the above discussion, it is clear that in order to dynamically define the *qotel* gram at the three phases of the Hebrew language, i.e. in Biblical, Rabbinic and Modern Hebrew, – which will in turn permit us to provide an alternative proposal concerning the classification of the gram in the biblical language and its posterior development – certain evolutionary paths must be discussed in detail. In particular, we are required to describe a universal scenario that represents the grammatical life of imperfective formations arisen from participial inputs, and that accounts for all the possible values (modal uses included) displayed by such grams at any moment of their diachronic progression (on the imperfective path and its modal extensions, see section 2.1 and 2.2, respectively). This “intuitive” assumption, whereby the imperfective cline (or other trajectories related to it) should be used in order to rationalize and encompass the meanings provided by the *qotel*, is based upon three facts. Firstly, the gram is genetically derived from a participial construction – viz. an active participle –, which is a common source of imperfective grams (Waltke and O’Connor 1990, Cook 2002 and Joosten 2012). Secondly, according to the grammatical tradition, at the BH period, the formation – when employed in a verbal function – approximates an imperfective-progressive category, while in the rabbinic and modern languages it corresponds to the present tense. As will be demonstrated, these two meanings match two stages located on the imperfective path (cf. sections 2.1 and 2.2). Thirdly, other analyses, founded on the grammaticalization framework, have identified the *qotel* as a gram developing along the imperfective path (cf. Cook 2002 and Joosten 2012).

Once we are in the possession of a path that codifies the development of participial imperfective constructions, we will be able to match values displayed by the *qotel* at different historic époques with stages of that cline. Thus, the semantic-functional properties of the construction – superficially incongruent and chaotic – will be represented as a homogenous phenomenon, i.e. as a portion of the trajectory, or as a multi-segmental state. This, in turn, will enable us to posit a more accurate model of the evolution of the gram. To be more specific – we will elaborate on how the state of the formation, i.e. its path representation, was modified during the three historical periods.

2. Grammaticalization paths of imperfectives

2.1. Imperfective path

The standard, commonly quoted, model which portrays the grammatical (semantic and functional) life of imperfective and present grams has been posited by Bybee, Perkins and Pagliuca (1994) and is next maintained by Haspelmath (1998) and Dahl (2000). According to Bybee, Perkins and Pagliuca (1994: 125-715), imperfective formations originate in lexical periphrases that are usually derived via reduplication and hence accompanied by an inherent iterative force. Depending on whether the repetition concerns a single or various occasions, such locutions display a continuative (the gram expresses the idea of keeping on doing something on one occasion) or frequentative (the gram denotes events that are repeated, whether on one occasion or numerous occasions) sense, respectively. Subsequently, the frequentative construction develops into the habitual (it introduces situations which span extended periods of time), while the continuative becomes the progressive (it denotes ongoing activities and is usually not used in stative situations). At the next stage, the two trajectories, and, thus, the two types of constructions, may merge into an imperfective aspect (Bybee, Perkins and Pagliuca 1994: 125-175).² In posterior phases, imperfective grams commonly abandon their aspectual value, developing into general present tenses.³ Consequently, general present tenses are common successors of old imperfective grams which have been bereaved of their original continuative, progressive, continuous, frequentative and habitual values (Haspelmath 1998: 41-45).⁴ This change regularly occurs due to the formation and expansion of

² Before this merger, the progressive develops into a continuous where a situation (and not only a process) is viewed as being in progress. This means that the formation tolerates non-dynamic and stative predicates (cf. Bybee, Perkins and Pagliuca 1994: 317).

³ Commonly, the notion 'simple' is used in order to refer to such general present tenses (cf. *Simple Present* in English or *Presente Simple* in Spanish). However, in order to avoid the confusion with an identical term that is employed when referring to 'simple past tenses,' (which makes reference to an entirely different phenomenon), we will prefer the label 'general' (cf. footnote 9, below).

⁴ This reduction may generate further modifications in the semantic-functional nature of an old imperfective. In particular, when new present tenses are developed, the previously prototypical function of the older formation, i.e. its present temporal value, is lost. As a result, the construction maintains values which correspond to non-invaded segments of its semantic-functional load, namely, future and subjunctive uses. Consequently, the older imperfective and/or present gram becomes restricted to non-imperfective, non-present, and even non-indicative uses. It evolves into a future and/or a subjunctive (Bybee, Perkins and Pagliuca 1994: 230-236, 274-278 and Haspelmath 1998: 41-45). The phenomenon whereby grams of distinct antiquity develop "in waves", along the same evolutionary scenario is labeled 'layering' (Hopper and Traugott 2003: 125). The older grams, whose domain is invaded by novel formations, are denominated 'doughnut grams' (Dahl 2000: 10-12).

new continuative-progressive and frequentative-habitual formations. Thus, old imperfectives evolve into present tenses due to the reduction of their original semantic and functional domain. The imperfective paths may be geometrically represented in the following manner (Figure 1):⁵



Figure 1: Imperfective path of reduplicative inputs
(adapted from Bybee, Perkins and Pagliuca 1994: 166-73 and Dahl 2000: 14-17)

The above presented model may be regarded as a standard codification of the grammatical fate of imperfectives and present tenses. The author of the present paper has himself employed it in his previous analyses (cf. Andrason 2010a: 173-174 and 2012a: 5). However, this representation exhibits various limitations and inconsistencies. Below, I will demonstrate that a slightly different treatment of the rise and evolution of imperfectives and presents is necessary. Consequently, I will provide a new interpretation of the imperfective path.

In the standard model, the consecutive evolutionary stages represent gram types with their different semantic-functional properties. By this procedure, one gets the impression that grams develop, converting (or “jumping”) from one phase to another. This is, in fact, the language the authors commonly use, arguing that a gram *x* develops into *y*. Real-world grammatical formations however do not “jump” from one stage to another. Quite on the contrary, they amass meanings that correspond to sections of a given evolutionary cline.⁷ Thus, a gram which in some contexts functions as a general or simple tense may in others provide progressive or habitual value. This phenomenon can be clearly observed in the grammatical life of resultative constructions. The evolutionary cline governing the evolution of such grams states that resultatives employed within the present reference time develop into present perfects, next into perfective pasts and finally into simple past tenses (Bybee, Perkins and Pagliuca 1994: 51-105 and Dahl 2000: 14-17). The real state of affairs is different: original resultatives gradually acquire present perfect meanings (inclusive, iterative, experiential and indefinite). Later, they may gain an explicit past value, first perfective and

⁵ In the figure in Bybee, Perkins and Pagliuca (1994: 173) the imperfective evolves into intransitive. In our study this change is irrelevant and will be omitted.

⁶ In “classical models,” it is assumed that imperfective tenses (normally, presents or pasts) develop into simple tenses. On the notion of a ‘simple tense,’ see in footnote 3 and 9, as well as below, in the present section.

⁷ This accumulation of stages-meanings is referred to as a ‘state’.

subsequently simple.⁸ The term “acquire”, however, does not imply that uses or senses, previously developed and incorporated, must be abandoned, i.e. that a gram “jumps” from a phase to another. Thus, it is not surprising that there are formations whose total meaning corresponds to various stages on the path, and that a single gram may function as a resultative proper, as a present perfect and as a perfective or simple past, e.g. *passé composé* in French, the “past tense” (*napisalem*) in Polish, the *wayyiqtol* in Hebrew or the *iprus* in Akkadian (the amount of examples is overwhelming; cf. Andrason 2010b: 339, 2011b: 31-32). Consequently, instead of saying that a gram develops from a category *x* into a category *y*, the standard model should be reinterpreted as the codification of a gradual and ordered incorporation of new senses and formal characteristics, prototypical to formations that originate in certain inputs.

Since a gram is always a gram in an environment, and given the fact that linguistic entities acquire new characteristics in concrete situations – a new meaning means acceptability in a new context – the intrinsic value of a gram may be understood as a sum of all of its uses in all possible milieus (Dahl 2000: 14, Hopper and Traugott 2003: 100 and Heine and Kuteva 2007: 35-37, for a detailed argumentation of reaching a semantic-functional definition of a given gram consult Andrason 2011a: 21-24 and 2011b: 16-22). Grams develop by extending (or limiting) their compatibility with certain contexts. Hence, they may acquire new values, without necessarily losing previously developed senses.

Following this view, paths codify the series of integrated and lost meanings: semantic-functional properties are stored following the order established on a cline. This ordered – and, in a way, abstract – chain of values may subsequently be used to determine the synchronic potential of a given realistic gram. Grams may amalgam values – taxis, aspectual, temporal and their sub-types – that are located on the path which they follow, in a virtually free manner. The only constraint is that the total meaning of a formation should match an uninterrupted section of a trajectory. In other words, no “islands” (i.e. interruptions in values corresponding to a portion of a path) are allowed in the overall meaning of a verbal construction. As a result, the semantic-functional potential of a formation comprises a large set of different elements and properties. In some cases, it may even span the entire cline (cf. again the *passé composé* in French).

Accordingly, if we comprehend the path as an “equation” that governs the acquisition of new values, certain changes and refinements must be introduced to the model schematized in Figure 1, above.

First, the stage labeled as ‘imperfective’ should be eliminated because the imperfective – as is correctly observed by Bybee, Perkins and Pagliuca (1994: 125-126, 141, 317) – includes all the values previously developed on

⁸ The simple past meaning may be acquired directly, i.e. without the intermediate phase of a perfective aspect.

the imperfective path (i.e. continuative-progressive and frequentative-habitual) or, at least, the majority of them (cf. the next paragraph). What happens at the “imperfective” stage is that the gram enters in a systematic contrast with another simple or perfective formation. It is also less semantically restricted and usually allows all types of verbs, irrespective of their nature. This means that “imperfective” is not a new sense the gram incorporates but rather a summation of various more specific microscopic values as well as their “macroscopic” interaction with another construction (a perfective or simple tense). It is a label that relates and unifies various distinct, more individual concepts and behaviors.

Furthermore, in accordance with the observation already found in Bybee, Perkins and Pagliuca (1994: 125-126, 172-173), we should introduce the segment ‘durative’. During this phase, the gram becomes acceptable in stative situations, expressing duration without making any particular reference to the actual progressivity or habituality of an event (e.g. in Polish: *Pomnik Kościuszki stoi w Warszawie* ‘The monument of Kosciuszko stands in Warsaw’). It also acquires a gnomic universal value (cf. again in Polish: *Ziemia kręci się wokół Słońca* ‘Earth turns around Sun’ or *Lubię lody* ‘I like ice-cream’) and is globally admissible: restrictions typical for progressives and frequentatives are removed (a similar stage ‘imperfective/gnomic’ was posited by Bertinetto and Lenci 2010; cf. footnote 14, below).

The agglomeration of continuative-progressive, frequentative-habitual and durative (-gnomic) values and uses would then deliver a prototypical imperfective gram. Not all such properties must, however, be present in a formation labeled in reference grammars as imperfective. While in French and Polish imperfective past tenses (*j’aimais* and *kochałem* respectively) span the entire length of the path from the continuative-progressive and frequentative-habitual sections to the durative segment, the Spanish *imperfecto* (*amaba*) and the Modern Hebrew *hayah qotel* (cf. below section 3.3) have lost their continuative-progressive uses.

Second, the comprehension of the phase corresponding to a simple tense must also be revised. The ‘simple’ temporal value (especially ‘simple past tense’), as the imperfective, is not *a new value* diachronically subsequent to the durative. The adjective ‘simple’ makes reference to a non-overt aspectual sense: the gram may express situations and activities which approximate both imperfective and perfective aspects, depending on the context. Prime examples would be the Spanish *preterito indefinido* that can introduce perfective actions (e.g. *Aquel día el rey murió* ‘On that day the king died’) as well as activities which express duration (e.g. *Viví en España durante varios años* ‘I lived in Spain for many years’). See also the Swedish simple past, viz. preterite, which is used as a punctual perfective past (e.g. *Hann mördade pojken* ‘He assassinated the boy’) and as a durative, even progressive past (e.g. *Jag tittade på TV då hann kom* ‘I was watching TV when he came’). What happens during the transformation of imperfective grams – of any extension, i.e. of any amalgamation of the

meaning reflecting stages up to the durative phase – is that they spread to non-imperfective uses, such as punctual and, as paradoxical as it sounds, perfective values (cf. Bertinetto and Lenci 2010: 36-38). The arrangement of meanings corresponding to continuative-progressive, frequentative-habitual and durative stages on the one hand, and the senses reflecting punctual-perfective uses on the other, delivers under a single construction what we label ‘a simple tense’. Thus, the simple tense and the imperfective are terms referring to a particular collection of specific values. They do not correspond to new specific or atomic meanings! The process of spreading to perfective contexts may be observed in Icelandic where, in the modern colloquial usage, the originally progressive gram *var að* can be employed to denote punctual and unique actions: *Hann var að koma klúkkann 6* ‘He came at 6 o’clock’ (originally, ‘He was coming’).⁹

Additionally, further adjustments are needed. The model established by Bybee, Perkins and Pagliuca (1994: 125-175; cf. particularly pages 166-174) is especially pertinent for reduplicative inputs. Since in our case we will deal with an adjectival-participial source, the iterative basis of the two sub-tracks is less relevant. The inherent value of progressive constructions derived from adjectival or participial sources is, quite the reverse, the idea of circumstantial simultaneity. For instance, in Icelandic, the progressive formation *vera* ‘be’ + active participle (e.g. *Hann er sofandi* ‘He is sleeping’) still preserves the original circumstantial simultaneous value derivable from the participle that underlies the gram. This circumstantial force of the participle may be perceived in cognate locutions such as *Ég se/sá/mun sjá hann sofandi* ‘I see/saw/will see him sleeping’. Given that the iterative foundation is less pertinent, the distinctions between continuative and progressive on the one hand, and between frequentative and habitual on the other, are likewise less palpable. Therefore, we will treat the continuative-progressive and frequentative-habitual segments as single phases, labeled for simplicity’s sake as ‘progressive’¹⁰ and ‘habitual,’ respectively. Furthermore, again approximating reality – but certainly respecting empirical evidence (cf.

⁹ It should be observed that the term ‘simple’ in the categories of a ‘simple present tense’ and a ‘simple past tense’ does not refer to the same phenomenon. A simple present may be understood either as a broad general present tense (with all possible senses up to the durative or gnomic stage, cf. Spanish *hago* ‘I do, I am doing’) or as a habitual-durative-gnomic present that stands in a contrast to a progressive or continuous present gram (cf. the English Simple Present *I do*; Bertinetto and Lenci 2010: 38). The simple past, however, usually refers to a past tense that expresses any kind of past activities (cf. Bertinetto and Lenci 2010: 36-38). As explained above, it can denote both perfective (punctual) and imperfective (durative or iterative) actions and situations (cf. again the Swedish Simple Past *jag tittade* ‘I watched, I was watching, I used to watch’). In our model, the notion ‘simple’ makes reference to such an imperfective-perfective character of a form.

¹⁰ Likewise, for the sake of simplicity, the independence of a continuous sub-stage will be disregarded. This phase will be incorporated into the label ‘progressive’. As explained, the distinction between the progressive and continuous sense consists in the following: the former indicates on-going actions or processes while the latter introduces on-going situations.

already Bybee, Perkins and Pagliuca 1994: 141-142 and Bertinetto and Lenci 2010: 39) –, the progressive and habitual stages will be arranged in a consecutive order. As shown by Turkish *iyor*, Icelandic *var að* and Mandinka *kan* formations, original progressives may develop habitual and subsequently durative values (see also Bybee, Perkins and Pagliuca 1994: 135). For instance, in Icelandic, the prototypical progressive *Hann var að skrifa* ‘He was writing’ has recently become, at least in the colloquial language, acceptable in habitual and durative contexts: *Hann var að búa þar* ‘He used to live there’ and *Húsið er að standa í Reykjavík* ‘The house is standing (i.e. stands) in Reykjavík’ (for an analogical development in Mandinka, see Andrason 2012c).

Summa summarum, the new model of the grammatical life of “imperfective” grams may be codified in the following manner:¹¹

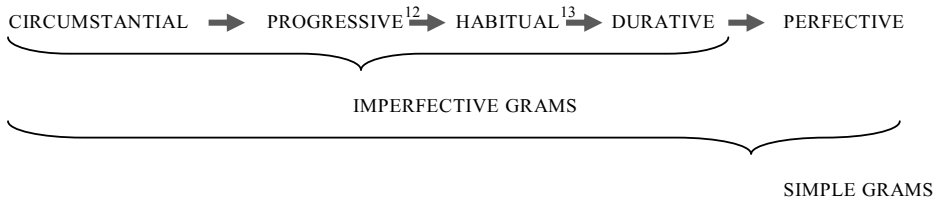


Figure 2: Imperfective path¹⁴

¹¹ It shall be noted that our scheme refers to formations that may develop in a present and past time frame, yielding general presents (either broad presents or grams restricted to the non-progressive and non-continuous senses) and simple pasts (imperfective-perfective), respectively. It seems unlikely that an imperfective present or a general present (as noted by Bybee, Perkins and Pagliuca 1994: 141, 175, a general present tense is an imperfective present, although it is sometimes restricted to habitual-durative-gnomic uses) could acquire a perfective value in the way the imperfective past does, thus developing into a simple – aspectually neutral – present tense, equivalent to a simple past. This assumption, however, needs investigation.

¹² This stage may be decomposed into a sequence of more specific consecutive senses-phases: continuative > progressive > continuous. In all of them, however, the “ongoing-ness” is profiled.

¹³ This stage contains in fact two more specific values: iterative > habitual. In both cases, the repetitiveness of an event or situation is profiled.

¹⁴ A similar drift (progressive > habitual > gnomic) was posited by Marchese (1986), Haspelmath (1998) and Bertinetto and Lenci (2010; see also Bybee, Perkins and Pagliuca 1994: 140-144). What distinguishes our model is the fact that we introduce a special stage of ‘circumstantiality’ (an initial phase prototypical to grams that originate in “present (active) participles”) and that we employ the label ‘durative’ in order to refer to a semantic domain that includes the idea of general duration (not necessarily on-going or habitual) and gnomic truth. Furthermore, we posit a stage responsible for the acquisition of a perfective sense which, in turn, leads to the creation of simple – i.e. aspectually neutral – tenses (as already mentioned, this development is relevant for imperfective past grams).

2.2. Imperfective-path gram and modality

The imperfective path – besides explaining a gradual acquisition of values such as circumstantial simultaneity, continuative-progressive, frequentative-habitual, durative and perfective; and codifying the emergence of imperfective aspects and simple tenses – is also related to certain modal properties. In particular, grams whose meanings have arisen following the imperfective path may develop modal functions. The development of such modal properties – or a conversion into a fully modal category – may stem from two different processes and thus be codified with two distinct clines, namely the modal contamination path of indicative inputs and the modal ability path of habituais.

2.2.1. Modal contamination

We have already noted that “old” imperfectives and, especially, general present tenses, due to a reduction of their scope of uses may be reinterpreted as subjunctives and/or futures. When new imperfective and present formations are shaped, the functions which were previously typical for older imperfective and present grams may be abandoned. The remaining values will thus reflect non-invaded fragments of the imperfective path. Usually, they correspond to the domain of future and subjunctive uses.¹⁵ Put differently, old imperfectives and presents are gradually limited to non-imperfective, non-present and non-indicative contexts (Bybee, Perkins and Pagliuca 1994 and Haspelmath 1998: 41-45).

The conversion of old presents into modal categories corresponds, in fact, to a wider process whereby originally non-explicitly modal formations acquire modal values as a result of modal contamination. During this phenomenon, indicative locutions, due to their common use in semantically, syntactically or pragmatically marked modal contexts may develop into properly modal categories. This process will be referred to as a ‘modal contamination path’ or ‘modalization by contamination’ (cf. Andrason 2010c: 6-8). The phenomenon corresponds to the concept of ‘conventionalization of implicature’ (Dahl 1985: 11 and Bybee, Perkins and Pagliuca 1994: 25-26 and 296) and ‘context-induced reinterpretation’ (Heine, Claudi and Hünemeyer 1991: 71-72), as well as to the notion of ‘semantization’ (Hopper and Traugott 2003: 82).

As already mentioned, the process of modal contamination affects input formations that are originally indicative, i.e. non-overtly modal (stage 1). However, in an immense number of languages, indicatives may be employed in certain modal contexts. Due to a repeated use of such expressions in modal environments, original indicatives progressively acquire a modal tone of the grammatical milieu in which they appear. Put differently, an indicative gram

¹⁵ Future uses arise when a formation develops along the imperfective cline in a future temporal sphere. The subjunctive value stems from the use in certain dependent or subordinated clauses, e.g. after introductory verbs such as *want*, *order*, *say* etc. (cf. below in this section).

provides modal values or uses associated with the context in which it is used (stage 2: modally colored indicative). Subsequently, once such modal uses have been generalized and regularized, an “old” indicative gram becomes fully identified with the modal sense which was originally imposed by the contextual factors. During this phase, non-modal readings of the construction are no longer available and the gram equals a mood (stage 3: indicative is converted into a mood with no indicative uses; Dahl 1985: 11, Bybee, Perkins and Pagliuca 1994: 25-26 and Hopper and Traugott 2003: 82).¹⁶ At the ultimate state of evolution, a modally contaminated gram – employed as a legitimate mood – may furthermore be “emancipated” from the explicitly modal milieu that triggered a given modal sense, now indissoluble from the gram itself. This means that the fully modalized construction can be employed in a modally neutral – i.e., non-overt and explicit – environment, preserving the modal meaning, which now constitutes an inherent portion of its semantic potential (stage 4: contextual mood is freed from the context and may be used independently; Bybee, Perkins and Pagliuca 1994: 296). The process of the modal contamination may be represented in the following, simplified, manner:¹⁷

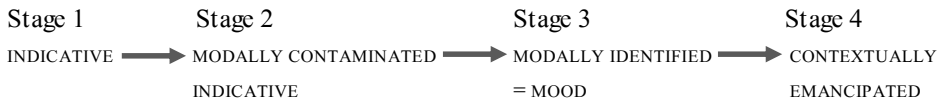


Figure 3: Modal contamination path

The contexts that prototypically produce a modal contamination – i.e. milieus which introduce a modal undertone to the integral semantic load of originally indicative locutions – are conditional phrases, imperative environments, subordinate (final or temporal) clauses, as well clauses introduced by predicates such as *want*, *wish* and *order* (cf. Bybee, Perkins and Pagliuca 1994: 217-218, 235).

¹⁶ The identification may stem from – or be encouraged by – an elimination of indicative uses, for instance, due to the development and expansion of novel imperfective or present grams.

¹⁷ In this chart each stage represents a gram-type. The phases can, however, be also understood in terms of the incorporation of new properties so that more than one stage may actually occur within a single gram. An exemplary case of the modal contamination cline may be found in the Romance family. The Classical Latin construction *amāveram* offered a standard pluperfect (past perfect) meaning ‘I had done’. However, in Modern Spanish, because of a regular use of the gram in conditional periods and in various subordinate clauses, the Latin pluperfect has developed an evident, almost exclusive modal value. Nowadays, under the form of *amara*, it is classified as a subjunctive mood corresponding to English expressions such as ‘(that/if/so that...) I may/would love’. Nevertheless, in certain literary texts, one may still – certainly highly infrequently – encounter the original pluperfect use of the *amara* gram. Additionally, the formation shows traces of emancipation: in some infrequent instances, it is used in main clauses, conserving the modal meaning developed in subordinated and dependent milieus (cf. Andrason 2011c: 7).

2.2.2. Modal trajectory of habitual grams

The modal tone of grams developing along the imperfective path may also have its roots in the habitual value of such formations. The modal nature of habituality has been noted by a wide range of scholars (Carlson 1977, Dahl 1975, Comrie 1985: 40, Holm 1988: 160, Fleischman 1995: 537-539, Langacker 1997: 198, Palmer 2001: 179, Hellenthal 2007: 24, 31, Bittner 2008: 376-377, 379, Boneh and Doron 2008: 321 and 2010: 352-363, Bertinetto and Lenci 2010: 38-39, as well as Andrason 2012a). Namely, quite commonly, a habitual performance of an activity triggers a conclusion whereby the agent of the action knows how to perform it. This implies that he or she *is able, can* and *may possibly* realize it at any time now and in the future. Put differently, a regular repetition of an action can be regarded as a tendency, and thus as a possibly general rule which refers not to the actual validity of statements but to their potential application. As a result, habitual grams – i.e. formations which have incorporated habitual value and are employed in order to portray the usual manner in which things happen – may be used in predictions and suppositions that maintain a clear modal force (Danaher 2001: 16 and Hellenthal 2007: 24). Furthermore, habituals may be used to denote conceptual distancing and hence to introduce modal hypothetical facts (Danaher 2001: 21-22). I treated this development in detail in my previous paper where I demonstrated that the modal nature of the Akkadian *iparras* had had its roots in the habitual sense of that formation (Andrason 2012a: 17-18):

...the sentence *This car goes 250 km/h* may have two readings. One habitual which describes a habitual property of a particular car, and another ‘modal’ denoting its ability or capacity (cf. Dahl 1975, Green 2000 and Menéndez-Benito 2005). Similarly, the sentence *He speaks Spanish* may mean that the person does it repeatedly *He speaks Spanish every day at school* or that he knows how to and thus can speak this language *He will help you with this translation; he speaks Spanish*. Also a Polish sentence *Ten chłopak skacze 6 metrów* ‘lit. This boy jumps [present imperfective] 6 meters’ may have two readings. First, it states that the boy frequently jumps 6 meters, and second, it describes his ability. In this latter sense, it may be employed for modal purposes predicting a possibility [2]. In fact, given the boy’s physical conditions, height, strength and other circumstances, the sentence can be true even if no actual jumps to the said height have been witnessed. The statement may thus display a clear modal (dispositional or ability) sense.

- (2) speaker A – *Myślisz że skoczy 6 metrów?*
 speaker B – *O, on **skacze** 6 metrów*
 speaker A – ‘Do you think that he will jump 6 meters?’
 speaker B – ‘Oh, he **can jump** [lit. he jumps] 6 meters’

Boneh and Doron (2010: 352 and 355) affirm that habitual expressions differ from progressives not only in the iterativity of an event, but especially in their relation to the modality. Namely, habituality is inherently modal and possesses an intrinsic modal component. For instance, the sentence [3.a] is contradictory while [3.b] is not because “the habitual operator [...] does not require actualization” (Boneh and Doron 2010: 360). Put differently, since habitual grams do not necessitate the actuality of the event which is described (Palmer 2001: 179 and Hellenthal 2007: 31) they naturally lend themselves to extension over possible worlds (Fleishman 1995: 537–9 and Danaher 2001: 18).

- (3) a. ****They *are issuing* visas at the consulate, but they are closed this month**
b. **They *issue* visas at the consulate, but they are close this month**

Summa summarum, we can affirm that when an iterative or progressive gram gains a palpable habitual force, it may subsequently acquire a modal sense of ability. Considering this, once it is employed to express agentive modal situations of physical and mental ability and capacity, it may undergo a regular evolution codified by a properly modal path, namely, the ability cline (Bybee, Perkins and Pagliuca 1994: 230-236, 295-300 and Andrason 2010a: 183-186 and 2012a: 17-20). In particular, it may develop the value of root possibility as well as epistemic, intentional and permission-prohibitive senses. Afterwards, it can be used as a subjunctive modality, as a modal future and as an imperative.¹⁸

Having established the main evolutionary scenarios affecting imperfective formations – and especially imperfective grams derived from participial inputs –, we will now analyze properties of the *qotel* at the three historical époques. We will show that, at each diachronic period, partially incoherent semantic and functional characteristics of the Hebrew formation may be rationalized and represented as a coherent, homogenous phenomenon. Namely, by employing the clines posited above, we can picture the state of the gram (i.e. its entire semantic and functional potential) as a single geometrical object, a portion of a path.

¹⁸ It shall moreover be observed that the acquisition of clear future uses may encourage further identification of the construction with the concept of non-indicative modality. This occurs because the central function of future grams is the idea of intention and prediction. Consequently, future tenses are less exclusive temporal categories but rather more “agent-oriented and epistemic modalit[ies], with important temporal implications” (Bybee, Perkins and Pagliuca 1994: 280). We should hence not be surprised by the fact that even prototypical future tenses commonly provide certain modal nuances.

3. Evidence

3.1. Biblical Hebrew¹⁹

The *qotel* gram has received significantly less attention than other central constructions (e.g. the *qatal*, the *yiqtol* – both long and short –, the *wayyiqtol* and the *weqatal*) in semantic analyses dedicated to the BH verbal system. Most commonly, it has been left outside the set of core verbal categories and treated as if it did not belong to the nucleus of the BH verbal organization (cf. however Driver 1892, Joüon 1932, Longacre 1989 and 1992, Rattray's 1992, DeCaen 1995, Hatav 1997 and Joosten 1999 and 2012; the ideas of all of these scholars are briefly discussed in this section, below).

The reluctance of the incorporation of the gram into the BH verbal system stems from two facts. It has its roots in the so-called 'double nature' of the *qotel* morphology (it can be both nominal [adjectival] and verbal) and in its analytical shape when employed verbally (in verbal uses, the *qotel* lacks personal endings – the subject is expressed analytically by an independent personal pronoun (Gordon 1982, Dyk 1994: 210-212, Cook 2002: 262 and Joosten 2012: 19, 229). For instance, Joüon (1923: 338) states that the *qotel* can be employed as an attributive adjective (which reflects its participial origin) and as a verb. Waltke and O'Connor (1990) detect four main functional types of the *qotel*. Namely, the form shows substantival use (1990: 614), adjectival use (1990: 619), relative use (an intermediate use, i.e. with both adjectival and verbal properties; 1990: 621) and predicative-verbal use, encountered especially in verbless clauses (1990: 623). In a similar vein, Andersen and Forbes (2007: 209) affirm that, besides showing verbal (in particular, whenever it governs an object) and adjectival behaviors, the *qotel* corresponds to a hybrid verbal-adjectival form. Cook (2008: 12) classifies the gram as inherently adjectival and derives from this essence various verbal and nominal characteristics of the *qotel* morphology. Joosten (1989 and 2012: 19, 229) defines it as a verbal noun, morphologically, an adjective which in a predicative position and in combination with an overt subject assumes verbal functions (see also Cohen 1975).²⁰

¹⁹ In this section we treat Biblical Hebrew as one linguistic system, being however aware of the fact that it may represent various diachronic and dialectal organizations. In particular, the stages of Early Biblical Hebrew, Classical Biblical Hebrew and Late Biblical Hebrew could be distinguished. For a discussion of Late Biblical Hebrew, see footnotes 21, 22, 23 and especially footnote 31, below.

²⁰ This functional ambiguity and difficulty in classification is typical for participles, a category which displays properties that characterize both verbal and nominal entities (cf. Haspelmath 1994 and Cook 2008: 3-4). This means that, in an extreme case, the same morphological form may function as an attributive adjective and as a verb, or that a verbal gram, arisen from a participial input, may provide traces of an "adjectival" behavior, even at highly advanced stages of the development, i.e. where it functions as a core verbal category. The former situation may

As for the “verbal” or predicative subtype of the *qotel*, the form has frequently been viewed as external to the core section of the BH verbal organization. Driver (1892: 2, 5), however, considers it as a legitimate member of his tripartite system and defined as *continuing*. Joüon (1923: 338, 346) also included the *qotel* into his model of the BH verbal organization, regarding it as a temporal present-future form semantically close to the *yiqtol* with a patent durative undertone. Longacre (1989: 81-107 and 1992: 180-181) classifies the *qotel* as durative in the narrative texts and as being “backgrounded” in the predictive and procedural discourse. Waltke and O’Connor (1990) – treating the gram as a peripheral element of the verbal system – propose that the *qotel* approximates the long *yiqtol* (ibid.: 624). It introduces durative circumstances and describes background activities, contemporaneous with the main action, being however devoid of any modal volitional tone. Consequently, in the past and present time frame, the construction corresponds to a circumstantial,

be illustrated by Semitic examples. Akkadian included in its verbal system a gram referred to as *parsaku* (labeled also ‘permansive’ or ‘predicative’) which is derived from a Proto-Semitic verbal adjective (resultative participle) **qat(i/u/a)l* and a postponed personal pronoun. During the Old Babylonian period, the participial input was partially verbalized and the periphrastic construction converted into a synthetic finite construction, the *parsaku* (in some cases, the form – originally intransitive – was employed transitively, yielding a construction which is a direct ancestor of the BH *qatal* or Arabic *qatala*). However, in various cases, the participle could still be used with an adjectival force as an attribute. Even at later époques, once the PS periphrastic predicative expression was fully verbalized and became a central conjugation – for instance in Biblical Hebrew and in Classical Arabic – the same morphology could be used as a verb or an adjective. For instance, כָּתֵב *kātēb* may mean ‘he is/has been/was heavy’ (a verb in the *qatal*) or ‘heavy’ (an adjective). The latter situation may be exemplified by an Indo-European case. In Polish, the core past tense (in fact, the only properly verbal past form in the language) derives from a participial analytic locution built on the perfect active participle and the verb *be* (the auxiliary is omitted in the third person singular and plural). Nowadays, in most cases, the form is synthetic and constitutes a fully verbal gram: *napisalem* ‘I have written / I wrote’ (from *napisal* + *jsem*). However, the gram still offers some vestiges of its participial original although the participial form, which underlies the form, has vanished from the language as a paradigmatic category. For instance, it is inflected for gender: *napisalem* [masculine] but *napisalam* [feminine]. Additionally, the slot corresponding to the original participle may be released from the verbal gram and the whole construction used as if it were analytic: *jam to napisal* ‘I have written / wrote it’.

Such disparate functions may be harmonized within the dynamic view, adopted in this paper – they simply correspond to distinct stages of the evolution of the gram. As already explained, during its grammatical life, a verbal construction may develop new functions and properties without, however, losing those characteristics that reflect more initial phases (e.g. less verbal) or that are provided by the original input expression (e.g. derived from non-verbal units, such as nouns and adjectives) which underlies the gram. Thus, a dissimilar character of a form at a given synchronic time stems from the fact that the uses provided by this construction match distinct phases on the grammaticalization cline, covering, for instance, stages from ‘non-verbal’ to ‘fully verbal’, through various intermediate steps (cf. Hopper and Traugott 2003: 69 and their examples of the English expression *be going to*).

simultaneous, progressive form (ibid.: 625). However, in the future temporal sphere, besides its regular circumstantial function, the gram is capable of introducing immediate and general future activities (ibid.: 627). When employed with the auxiliary ‘be’, the construction provides past progressive (*wayyihi + qotel*), perfect progressive (*hayah + qotel*), or future progressive meanings (*yihyeh + qotel*; cf. ibid.: 628). Despite all these verbal functions, Waltke and O’Connor (ibid.) emphasize that the *qotel* does not function as a finite verb, contrary to what might be observed in rabbinic and modern varieties of the Hebrew language. The status of the *qotel* as a component of the BH verbal organization has been “upgraded” in more recent studies. For instance, Rattray (1992: 149-150) incorporates the *qotel* into her modality-aspect model and defines it as an ‘imperfective immediate realis’. Similarly, Joosten (1999: 16 and 2012: 19, 2292-30) views the form as a rightful member of the core BH verbal system and defines it as an indicative present tense (Joosten 1999: 16; see also DeCaen 1995). In his later study, however, Joosten (2012: 19-20, 62, 64 and 229-230) understands the predicative participle as a regular expression of the real (i.e. progressive) present and circumstantiality. He also maintains that apart from its inherently real and circumstantial character, the *qotel* possesses another constant trait: it is invariably non-modal (Joosten 2012: 64-65). Additionally, other less regular uses may be encountered: imminent future, general present, fictional present, historical past, performative and immediate past (Joosten 2012: 59-60, 240-243 and 254-256). From the system perspective, the participle is classified as a manifestation of the renewal of a progressive gram, viz. a younger “brother” of the *yiqtol* (Joosten 2012: 77-78). Similarly, Hataav (1997: 29) regards the *qotel* as a full constituent of her (aspectual-modal-discursive) model of the BH verbal organization and specifies its value as non-sequential, non-modal, non-perfect but positively marked as for progression. Cook (2001: 135, 2002: 267-268, 271 and 2008) revitalized the idea of the BH verbal system without the *qotel*. In his view, similarly to Waltke and O’Connor (1994), the formation is not an integral part of the BH finite verbal system – in particular, it is not a present tense form (2002: 267). However, it does belong to verbal peripheries. Cook defines the participle as a progressive aspect, from which other contextually dependent values may be derived (e.g., present progressive, past progressive, past habitual, gnomic, and expected future). Similarly to Joosten (2012), within the grammaticalization model, the *qotel* formation is classified as a younger form which develops along the same imperfective path as the *yiqtol* (Cook 2002: 268).

Although scholars share certain well-established views – the double (nominal vs. verbal) nature of the *qotel* is generally acknowledged and the main function of the predicative variety is most commonly defined as progressive (present) and/or circumstantial – several dissimilarities and problems may be found. Linguists disagree in the classification of the *qotel* morphology as

a genuine component of the verbal system: some exclude it from the verbal organization, others include it as a peripheral gram and yet others classify it as a core construction. As for the predicative variant, which is employed verbally, its definitions range from an indicative present to a progressive and/or circumstantial form. Additionally, the uses with the sense of a future are quite frequently left outside the proposed definitions. In fact, each classification emphasizes the most dominant and prototypical (in its own view) portion of the semantic potential of the gram, minimalizing the relevance of other – less common – uses and their contribution to the total meaning of the gram (this especially holds for the sense of a future and general present). In sum, the category resists a straightforward categorization within established taxonomical classes, such as noun, adjective or verb, on the one hand, and (when verbal uses are envisaged) as a progressive-continuous, simple present or future, on the other.

In accordance with the research strategy outlined previously, in order to overcome the problems related to the classification of the BH *qotel*, the author will develop a dynamic explanation of the functional and semantic complexity of this gram. As mentioned in section 1 and 2, such a dynamic definition obligatorily begins with a careful analysis of the semantic and functional properties of the form under analysis. In the remaining portion of this section, we will present a detailed description of the semantic potential and functional load of the *qotel* gram in Biblical Hebrew.

The BH *qotel* morphology is based upon an adjectival-participial source with a temporally static sense. It is therefore not surprising that the form could be used with an attributive force, prototypical for adjectives and participles (4.a). Additionally, since participles and adjective are propitious to be substantivized, the *qotel* sometimes functions as a noun (4.b).

- (4) a. כִּי יִהְיֶה אֱלֹהֶיךָ אֵשׁ אֹכֶלֶת הָאָדָם (Deut. 4:24)
 ‘For the Lord, your God, is a **consuming** fire’
 b. וְהַפִּילוּ הַשֹּׁפֵט (Deut. 25:2)
 ‘And the **judge** will cause him to lie down’

The *qotel* gram is commonly employed in order to express the idea of circumstantial simultaneity which is certainly related to the participial origin of the formation (cf. Joosten 2012: 64 and 77). In these – highly frequent – cases, it denotes situations which accompany main actions, conveyed by a finite verbal form. The temporal setting of the activity expressed by the participle stems from the time of the verb that introduces the principal action and may refer to the present, past or future:

- (5) a. וְאֶשְׁמַע אֶת מְדַבֵּר אֵלַי (Ezek. 2:2)
‘And I heard him **speaking** to me’
b. כִּי שָׁמַעְתִּי אֲמָרִים (Gen. 37:17)
I heard them **saying**
c. וְנִפְקְחוּ עֵינֵיכֶם וְהִייתֶם כְּאֱלֹהִים יָדְעֵי טוֹב וָרָע (Gen. 3:5)
‘You will be like God, **knowing** good and evil’

In a predicative position and in a present time frame, the *qotel* typically introduces present progressive activities. This function may likewise be regarded as prototypical. *De facto*, the semantic domain of progressivity and continuity is most frequently rendered in the Hebrew Bible by the *qotel* (cf. Joosten 2012: 20, 62 and 77).

- (6) a. וְאָמַר אָנָּה אַתָּה הַלֹּךְ (Zech. 2:6)
‘I asked: Where **are** you **going**?’
b. וַיֹּאמֶר אֶל-זִבְלִי הִנֵּה-עֹמֵם יוֹרֵד מִרְאשֵׁי הַהָרִים (Judg. 9:36)
‘And he said to Zebul: Look, people **are coming** down from the tops of the mountains!’

Less commonly, the participle can denote repetitive events (7.a) or durative (even “omnitemporal”) activities (7.b and 7.c), i.e. situations which, spanning larger periods of time, are not limited to the speaker’s here-and-now (cf. general present in Joosten 2012: 256):²¹

- (7) a. דָּוָר הַלֵּל וְדָוָר בָּא וְהָאָרֶץ לְעוֹלָם עֹמֶדֶת (Eccl. 1:4)
‘Generations **come** and generations **go**, but the earth remains forever’
b. כִּי יֵדַע אֱלֹהִים כִּי בַיּוֹם אֲכַלְכֶּם מִמֶּנּוּ וְנִפְקְחוּ עֵינֵיכֶם (Gen. 3:5)
‘For God **knows** that when you eat of it your eyes will be opened’
c. דָּוָר הַלֵּל וְדָוָר בָּא וְהָאָרֶץ לְעוֹלָם עֹמֶדֶת (Eccl. 1:4)
‘Generations come and generations go, but the earth **remains** forever’

In a past time frame, as was the case with the present temporal reference, the *qotel* typically indicates a circumstantial value of simultaneity and, related to it, an actual progressive sense (8.a and 8.b). In certain cases, the entity is introduced by an overt past verbal form, in particular by the predicate היה ‘be’ in the *qatal* or *wayyiqtol* constructions (8.c and 8.d). These subtypes – built on

²¹ This value is more frequent in Late Biblical Hebrew (cf. Joosten 2012: 390, 394).

the participial *qotel* segment and an auxiliary verb – will be labeled hereafter as *hayah qotel* and *wayyihl qotel*, respectively (cf Joosten 2012: 257-258):

- (8) a. וַיְהוֹנָתָן וַאֲחִימָלֵךְ עֹמְדִים בְּעֵינֵי־רֹגֶל (2 Sam. 17:17)
 ‘Jonathan and Ahimaaz **were staying** at En Rogel’
 b. עוֹד | זֶה מְדַבֵּר וְהָ בָא וַיֹּאמֶר אֵשׁ אֱלֹהִים (Job 1:16)
 ‘While he **was** still **speaking**, another messenger came and said...’
 c. וְאֶשְׁמַע מִדְּבַר אֵלִי מִהַבִּית וְאִישׁ הָהָה עֹמֵד אֵצְלִי (Ezek. 43:6)
 ‘I heard someone speaking to me from inside the temple while the man **was standing** beside me’
 d. הִבְקִר הָיוּ חֲרָשׁוֹת וְהָאֲתָנוֹת רֹעוֹת עַל־יְדֵיהֶם (Job 1:14)
 ‘Your oxen **were plowing** and the donkeys [**were**] **feeding** beside them’

The *qotel* – alone (9) or with the auxiliary היה (10) – can also introduce past habitual activities.²²

- (9) a. וְהָעֹרְבִים מְבִיאִים לוֹ לֶחֶם וּבֶשֶׂר בַּבֹּקֶר וּלְחֶם וּבֶשֶׂר בָּעֶרֶב וּמִן־הַנָּחַל יִשְׁתָּה (1 Kgs. 17:6)
 ‘The ravens **brought (used to bring)** him bread and meat each morning and evening, and he drank from the brook’
 b. רַק הָעָם מִזְבְּחִים בְּבָמֹת כִּי לֹא־נִבְנְהָ בַיִת לַשֵּׁם יְהוָה עַד הַיָּמִים הָהֵם (1 Kgs. 3:2)
 ‘At that time the people of Israel **sacrificed (used to sacrifice)** their offerings at local places of worship, for a temple honoring the name of the LORD had not yet been built’
 c. וְנָהָר יֵצֵא מֵעֵדֶן לְהַשְׁקוֹת אֶת־הַגֶּן (Gen. 2:10)
 ‘A river **flowed** from the land of Eden, watering the garden’
 (10) a. מִיָּכָה הַמֹּרֶשֶׁתִּי הָיָה נִבֵּא בִימֵי חִזְקִיָּהוּ מֶלֶךְ־יְהוּדָה (Jer. 26:18)
 ‘Micah of Moresheth **prophesied (used to prophesy)** during the reign of King Hezekiah of Judah’

²² Again, this usage becomes more regular in Late Biblical Hebrew (cf. Joosten 2012: 394-6). Additionally, according to Waltke and O’Connor (1990) and Joüon (1923: 341), due to the Aramaic influence, the participial periphrasis with the auxiliary היה ‘be’ in the *qatal* or *wayyiqtol* (i.e. the expressions *hayah qotel* and *wayyihl qotel*), could be employed in Late Biblical Hebrew as simple past tenses, not only conveying progressive and habitual meanings but also indicating punctual, and unique events.

- b. יַעַן אֲשֶׁר עָשׂוּ אֶת־הָרַע בְּעֵינַי וַיְהִיו מְכַעֲסִים אֹתִי מִן־הַיּוֹם אֲשֶׁר יָצְאוּ אֲבוֹתֶם
(2 Kgs. 21:15)
'Because they have done evil in my sight, and **have been provoking**
(**used to provoke and still provoke**) me to anger since the day their
fathers came out of Egypt, even to this day'
- c. וַיְהִיו יָמִים שְׁלוֹשָׁה בָּנָזִים אֶת־הַשָּׁלָל כִּי רַב־הוּא
(2 Chron. 20:25)
'And they **gathered** the spoil during three days because there was so
much'

In a future time frame, the value of the *qotel* is comparable with what we have observed in cases where it appears with the present and past reference. The formation is most frequently employed with a circumstantial force of simultaneity, as well as in a progressive sense (11.a, 11.b and 11.c; cf. Joosten 2012: 242-245). Additionally, it can sometimes express future habitual and durative actions (11.d; cf. also Joosten 2012: 258). On the other hand, the participle may also denote punctual, unique and perfective future events, both immediate (close future) and – albeit less frequently – indefinite (remote future). In those cases, the nuances of progressivity or durativity are unavailable or, at least, secondary (11.e and 11.f). Thus, with the future temporal reference, the *qotel* not only conveys meanings corresponding to stages characteristic for imperfective grams, but also provides values that reflect phases typical for simple tenses. Put differently, the value of the gram spans and covers the entire imperfective cline as posited in Figure 2.

- (11) a. הִנֵּה עוֹדָךְ מְדַבֵּרֶת שֵׁם עַם־הַמֶּלֶךְ וְאֲנִי אָבוֹא אַחֲרֶיךָ וּמֵלֵאֲתִי אֶת־דְּבָרֶיךָ
(1 Kgs. 1:14)
'Then, while **you are** still **talking** (i.e. you **will be talking**) there with the king, I also will come in after you and confirm your words'
- b. וְהָיִיתָ מִמַּשֵּׁשׁ בָּצֻהִים (Deut. 28:29)
'And you **shall grope** (you **will be groping**) at noonday, as a blind man gropes in darkness'
- c. הִנֵּנִי מִמָּטִיר כְּעַתָּה מֵחֹר בָּרֶד כָּבֵד מְאֹד (Exod. 9:18)
'Behold, tomorrow about this time **I will cause** very heavy hail **to rain** down (i.e. **I will be sending it**)'
- d. כִּי לַיָּמִים עוֹד שִׁבְעָה אֲנֹכִי מִמָּטִיר עַל־הָאָרֶץ אַרְבָּעִים יוֹם וְאַרְבָּעִים לַיְלָה (Gen. 7:4)
'For after seven more days **I will cause** it **to rain** on the earth forty days and forty nights'
- e. כִּי לְחֹשֶׁבֶת הַשָּׁנָה מֵלֶךְ אֲרָם עֹלָה עָלֶיךָ (1 Kgs. 20:22)
'For in the spring of the year the king of Syria **will come up** against you'
- f. כִּי־מִשְׁחָתִים אֲנַחֲנוּ אֶת־הַמָּקוֹם הַזֶּה (Gen. 19:13)
'For **we will destroy** this place'

It should be noted that the BH participial form may likewise provide certain modal nuances (*contra* Hatav 1997 and Joosten 2012: 64-65). For example, the *qotel* may express the idea of physical or mental ability and possibility, carrying a force similar to the English and Romance adjectives in *-ble* (i.e. *able to*).

- (12) a. ויבאו רחבעם וירושלם ויקהל את כל בית יהודה ואת שבט בנימין מאה ושמנים אלף
בְּחֹר עֲשֶׂה מִלְחָמָה לְהִלָּחֵם עִם־בֵּית יִשְׂרָאֵל (1 Kgs 12:21)
'And when Rehoboam came to Jerusalem, he assembled all the house of
Judah with the tribe of Benjamin, one hundred and eighty thousand
chosen men **able to go into battle / skilled in war** to fight against the
house of Israel' (cf. Joüon 1923: 342 *apt au combat*)
- b. וְהַנִּפְּלִים מֵאֶה וְעֶשְׂרִים אֶלֶף אִישׁ שֶׁלֶף חֶרֶב (Judg. 8:10)
'For one hundred and twenty thousand men who **could / were able to**
draw the sword had fallen'
- c. בְּנֵי־רְאוּבֵן וְגָדִי וְחֻצֵי שִׁבְט־מְנוּשָׁה מִן־בְּנֵי־חֵיל אַנְשִׁים נִשְׂאִי מִגֶּן וְחֶרֶב וְדֹרְכֵי קֶשֶׁת
וְלִמּוּדֵי מִלְחָמָה אֲרֻבָּעִים וְאַרְבָּעָה אֶלֶף וּשְׁבַע־מֵאוֹת וְשֵׁשִׁים יָצְאִי צָבָא (1 Chr.
5:18)
'The sons of Reuben, the Gadites, and half the tribe of Manasseh [had]
forty-four thousand seven hundred and sixty valiant men, **men able to**
bear shield and sword, **able to shoot** with the bow, and skillful in war,
who could go to war'

Additionally, the gram can be encountered in conditional periods, with a clear hypothetical force, either real (13.a) or unreal (13.b and 13.c; cf. Joüon 1923: 515-516). Certainly, these modal uses of the predicative *qotel* are only found in overtly marked modal environments. However, given the principle of cognitive linguistics whereby the semantic potential of a form equals this form's compatibility with the contexts in which it can appear, we must assume the following: being compatible with certain modal milieus, the semantic scope of the *qotel* includes the domain of modality. Consequently, in such cases, the gram receives a slight modal tone.

- (13) a. אִם־לִקַּח יַעֲקֹב אִשָּׁה מִבְּנוֹת־חֵת כְּאֵלֶּה מִבְּנוֹת הָאָרֶץ לְמָה לִּי חַיִּים (Gen. 27:46)
'If Jacob **takes** a wife of the daughters of Heth, such as these [which are]
of the daughters of the land, what good shall my life do me?'
- b. וְלֹא אֶנְכִּי שֶׁקֶל עַל־כִּפִּי אֶלֶף כֶּסֶף לֹא־אֶשְׁלַח יָדִי אֶל־בֶּן־הַמֶּלֶךְ (2 Sam. 18:12)
'Though I **should receive (if I received)** a thousand [shekels] of silver in
mine hand, [yet] would I not put forth mine hand against the king's son'
- c. וְלֹאִי כִנִּי יְהוֹשָׁפָט מֶלֶךְ־יְהוּדָה אֲנִי נִשְׂאֵא אִם־אֲבִיט אֵלָיְךָ וְאִם־אֶרְאֶךָ (2 Kgs 3:14)
'**If I did not have respect** for the presence of Jehoshaphat king of Judah,
I would not look at you or even notice you'

In conclusion, the BH *qotel* displays a high functional and semantic complexity, which is irreducible to a single label. This superficially incongruent set of values may, however, be grasped in its totality if we classify it as a portion of the imperfective path (cf. Figure 2) which is additionally bifurcated following the modal contamination cline and the modal ability track of habituals.

The *qotel*, a construction derived from a participial source, corresponds to various synchronic taxonomical types or traditionally established categories. Besides being used in the attributive force (as an adjective) and substantival force (as a noun), it may be employed as a verb. Nevertheless, this fientive use of the construction is far from being prevalent or regularized. The main function of the morphology seems still to be participial. It is therefore not surprising that, in predicative uses, the gram commonly displays senses which correspond to initial stages of the imperfective path. Namely in the majority of the cases, the construction maintains a participial circumstantial value of simultaneity and introduces actual progressive activities in the three time spheres. On the other hand, it also shows – although certainly less frequently (Dyk and Talstra 1999 and Joosten 2012) – traces of more advanced portions of the imperfective path: it is sometimes employed with a habitual and durative force.²³ Finally, in a future time frame, approximating the category of a simple tense, it is not only able to denote meanings usually conveyed by imperfective grams (i.e. senses located on the cline up to the stage of the durative meaning), but can also express punctual unique perfective events. Consequently, the semantic potential of the future time *qotel* covers the entire imperfective trajectory.

As for the non-indicative values, the construction may sporadically provide certain modal meanings (especially ability and possibility) and be employed in explicit modal contexts with a hypothetical sense. The former can be rationalized as resulting from a modal extension of the habitual value, while the latter most probably arose due to a modal contamination.

The processes of generalization²⁴ and specialization²⁵ are also far from being concluded at the Biblical Hebrew time. The value of the simple *qotel* morphology, to some extent, overlaps with the use of the participle in other periphrastic locutions built on verbal auxiliaries: *hayah qotel*, *wayyihi qotel* and *yihyeh qotel*. While the simple *qotel* may refer to the three time spheres, the

²³ As previously mentioned, these ‘more advanced’ senses are more common in Late Biblical Hebrew.

²⁴ During the process of the generalization the set of possible constraints on the use of a given forms – e.g. the semantics of verbal roots – diminishes (Hopper and Traugott 2008: 102, see also Klausenburger 2000: 24-26, 74-81, Heine 1993: 54).

²⁵ It consists of the elimination of other alternative constructions used to indicate a determined meaning. This may finally lead to the election of one form that will cover all contexts in which a given gram might be used. As a consequence, the specialization equals to a “thinning out of the field of candidates for grammaticalization” (Hopper and Traugott 2003: 118).

hayah qotel and *wayyih qotel* are typical in the past time frame, and the *yihyeh qotel* is most commonly used in order to denote future events.

In sum, given the frequency of uses, the prototypical semantic nucleus of the participle is constituted by the circumstantial and progressive-continuous senses, which reflect the initial stages of the imperfective path. Other values correspond to subsequent – albeit conquered, still not regularized – phases of this evolutionary scenario.

3.2. Rabbinic Hebrew

In Rabbinic Hebrew, the *qotel* is regarded as a fully legitimate member of the verbal system. Due to its semantic-functional advancement as well as to the profound generalization it was subjected to, it is widely accepted that the form turned into a paradigmatic verbal finite category. Scholars also generally agree that the *qotel* functions as a present tense (see for instance, Segal 1927, Bermann 1978, Pérez 1992 and Cook 2001). However, even though the systematic status of the gram seems less controversial than was the case in the biblical language, the classification of the gram is far from unambiguous and simple. In particular, as will be demonstrated below, the formation cannot be equaled with an invariant present tense. Yet again, its semantic and functional characteristics are complex and multidimensional, being related to the domains of aspect, tense and mood, and to distinct grammatical categories such as verb, participle, attribute and noun.

First of all, it should be observed that in certain cases in Rabbinic Hebrew, the *qotel* preserves its adjectival and nominal character being used as an attribute or as a noun (Pérez 1992: 206). It is commonly employed with a circumstantial value in the three time frames (past, present and future), accompanying a main verb and commenting on the principal action or event (ibid.: 214):

- (14) קרא עומד (ibid.: 209)
'Read **standing**'

Besides these “less” verbal functions, the *qotel* is likewise used as a principal means of conveying the present and future tenses (Segal 1927, Pérez 1992: 206-209 and Cook 2008). In the present time sphere, the gram is able to express any value located on the imperfective path: for instance, progressive (15.a), habitual (15.b) or durative, including gnomic statements (15.c) (cf. Berman 1978: 139-140 and her classification of the *qotel* as a neutral present tense in Mishnaic Hebrew; see also Cook 2001: 135). The progressive value – and thus the ability to introduce actual events – is particularly widespread and patent in various introductory formulas, such as אני פוטר אני ‘I am specifying’ or שומע אני ‘I am interpreting’.

- (15) a. **והמלך עומד ומקבל וקורא** (Pérez 1992: 208)
 ‘The King (**now**) **stands up, takes** it and **reads** it’
 b. **ארבע מידות בהולכי לבית המדרש: הולך, ואינו עושה** (Pérez 1999: 133)
 ‘There are four types among those who (usually) attend the study hall.
 One who (**usually**) **goes** but **does** nothing...’
 c. **על שלשה דברים העולם עומד** (Pérez 1992: 170)
 ‘The world (**eternally**) **rests** on three things’

Moreover, the *qotel* may appear with a performative force (16),²⁶ prototypical for general present grams, i.e. non-restricted to a progressive sense (cf. Austin 1962: 56-57). In addition, the *qotel* frequently appears in narrative with the value of a historic present (Pérez 1992: 208).

- (16) **גודר אני** (ibid.)
 ‘I **command**’

Besides being employed as a broad present, the gram is likewise commonly used in order to introduce future activities, both immediate (17.a)²⁷ and general or distant (17.b; cf. Pérez 1992: 212-213). As is shown by the following examples, the formation is not limited to the future progressive-habitual-durative values, but may also denote perfective (punctual and unique) actions.²⁸

- (17) a. **אני מת** (ibid.: 212)
 ‘I **will die**’
 b. **אבל לעתיד לבא אין נגאלין אלא בתשרי** (ibid.)

Additionally, the *qotel* may be encountered in narrative texts describing past events. In this environment, it indicates progressive and habitual activities that contrast with concrete principal events, usually expressed by the *qatal* (ibid.: 208). Although a past-time situation may be conveyed by the simple *qotel*, this type of meaning is typically expressed by a periphrasis – which existed already in Biblical Hebrew – built on the auxiliary היה ‘be’ in the *qatal* form.²⁹ Since, at the rabbinic époque, the suffix conjugation reached highly advanced stages of the resultative path, providing perfective and simple past narrative values, the

²⁶ This usage is very rare in Biblical Hebrew (cf. Joosten 2012: 254).

²⁷ According to Azar (1995: 15), participles express future activities beginning immediately after the speech point. In his view, the *qotel* is a non-modal form.

²⁸ It should be noted that the eschatological future – i.e. the inevitable future of certainty – is conveyed by another periphrastic locution which is composed by the participle and the particle עתיד as well as by an analytic participial construction with the lexeme עתיד.

²⁹ The *wayyiqtol* – and thus the *wayyiqtol qotel* – was lost in Rabbinic Hebrew.

reference time of the participial expression was overtly established by means of the verb היה in the *qatal* (Andrason 2013: 127-129). Consequently, because the *hayah qotel* invariably had a past value, providing past progressive or past habitual meanings, the simple *qotel* – although still applicable to the three temporal spheres – began being specialized as a non-past category. As noted by Pérez (1992: 211), the *hayah qotel* construction, which was rare in Biblical Hebrew, was employed with certain regularity in rabbinic texts.

- (18) a. כשהיה מתפלל על החולים, היה אומר (ibid.; cf. also Pérez 1999: 19, 20, 137)
 ‘When he **prayed** for the sick he **used to say**’
 b. הוא היה אומר (Pérez 1992: 49)
 ‘He **used to say**’

A similar phenomenon may be observed when the *qotel* is used with the auxiliary היה ‘be’ in the *yiqtol* form (ibid.: 171 and 212). At the rabbinic époque, the *yiqtol* functions as an advanced imperfective and modal-ability cline gram with clear future and modal uses (Andrason 2010c: 47-8).³⁰ Consequently, the periphrasis *yihyeh qotel* (and its varieties *yehye / yehey qotel*) almost invariably denotes future (progressive or habitual) activities. This construction, which was still infrequent in Biblical Hebrew, was regularized – although with a lesser extent than the *hayah qotel* – in the rabbinic language.

- (19) הריני נזיר על מנת שאהא שותה יין ומטמא למתים (Pérez 1992: 212)
 ‘I will be a Nazirite so long as I **can carry on drinking** wine
 polluting myself with dead bodies’

Besides its common indicative uses, the pattern *qotel* increases its compatibility with the idea of modality. First of all, it can appear with a modal tone of possibility or permission (20.a; cf. Pérez 1992: 171 and 213). Furthermore, when used in the future temporal context – and thus when already bestowed with a future force –, the gram may be employed with an imperative value. This meaning clearly stems from the idea of immediate-inevitable futurity and is contextually induced (20.b; cf. Pérez 1992: 213):

- (20) a. האיש מדיר את בנו בניר, ואין האשה מדרת את בנה בניר (ibid.: 171)
 ‘A man **can / may force** his son with a Nazirite vow, woman **cannot / may not force** her daughter’
 b. משישב המלך על כסא יהוה את מברית זרע עמלק (ibid.: 213)
 ‘When the King has seated on the throne of the Lord, you **shall destroy**
 (**destroy!**) the offspring of Amalek’

³⁰ This means that the gram displays meanings which correspond to an advanced portion of the imperfective and modal-ability clines.

In addition, the *qotel* – and its compounds – may be encountered in explicit modal environments (especially in protases of conditional phrases) with a palpable hypothetical value (ibid.: 214). In protases, both unmarked and introduced by the particle **אם** 'im 'if', the gram expresses possible or real future conditions (21.a; cf. Pérez 1992: 318). However, when the periphrastic form *hayah qotel* appears in the protasis and apodosis, the meaning is counterfactual and unreal (21.b; cf. Pérez 1992: 319).

- (21) a. **המוצא** מת בתחלה משכב כדרכו – נוטלו ואת תבוסתו (ibid.: 214)
 'If one **finds** / **would find** in his field a body in the usual position of a buried man, the first time, he may remove it with the ground it occupies'
- b. **אם משה לא היה יודע, אהרן היה יודע?** (Pérez 1999: 216)
 'If Moises **had not known** it, **would** Aaron **have known** it / **could** Aaron **have known** it?'

To conclude, in comparison with Biblical Hebrew, at the rabbinic époque, the verbal use of the *qotel* was vastly generalized. In the present and future time frames, providing the same ranges of uses, the gram was regularized and increased its frequency. To be exact, the *qotel* became the principal means of conveying the values typical of a progressive, habitual and durative present (observe that the last two were less common in Biblical Hebrew). It was also commonly employed as a simple future, being able to introduce future imperfective and perfective (punctual or unique) activities. Under the shape of the periphrasis *hayah qotel*, the gram was specialized as a past progressive and past habitual. Similarly, the *yihyeh qotel* was restricted to future progressive and habitual senses. Finally, the *qotel* grams – both the simple variety and the *hayah qotel* – increased their acceptability in modal environments. Namely, they could be modally colored providing senses of possibility, probability, permission and imperative obligation. On the other hand, it should not be forgotten that the *qotel* formation was still acceptable in the adjectival (attributive) and nominal functions and that it was extensively employed with a – typically participial – idea of circumstantial simultaneity in the three time spheres.³¹

Yet again, the functional and semantic complexity of the gram – irreducible to a single semantic or functional sphere-label – may be envisaged in its totality

³¹ If one makes a distinction between Classical Biblical Hebrew and Late Biblical Hebrew, the progress towards a verbalization of the predicative *qotel* and its advancement on the imperfective path may already be perceived in the Bible. Namely, the comparison between these two diachronic strata demonstrates that the predicative participle acquired a more verbal status in Late Biblical Hebrew (e.g. it can be used with no overt subject) and “takes over uses that are normally expressed by WEQATAL and YIQTOL in C[classical] B[iblical] H[ebrew]”, for instance general present, habitual, iterative and future (Joosten 2012: 390; see also pages 391-396; see also Cook 2012).

if we understand the formation as a manifestation of the imperfective path (cf. circumstantial, progressive, habitual, durative and perfective meanings) and modal contamination (cf. hypothetical and imperative meanings) and modal ability (cf. possibility meaning) clines: each value corresponds to a stage on the three, inter-connected, evolutionary trajectories. Although the segments of the paths invaded by the *qotel* are virtually identical to those detected in the biblical period, their frequency and intensity is not equal. Namely, the properly verbal senses (which correspond to the phases of a progressive, habitual and durative gram) are much more common than in Biblical Hebrew, where the circumstantial value – and its direct diachronic successor, the progressive use – prevailed. To conclude, the *qotel* expanded the range of its prototypicality – at the rabbinic time in addition to the circumstantial and progressive senses, it also commonly includes habitual and durative values in the present as well as all kinds of the future. Additionally, the *qotel* form underwent a temporal specialization, being typically employed within a present time frame. As a result, the shift in meaning – as might have been perceived by speakers – corresponds to a development from a young imperfective diachrony (typically circumstantial and progressive) into a more advance (but not “old”) imperfective gram (typically circumstantial, progressive, habitual and durative present with additional common future uses).

4. Interim

The present article – which constitutes the first part of the series – familiarized the reader with the methodological issue of mapping semantic potentials of verbal grams by means of universal diachronic templates. In particular, three clines which are related to the constructions that function as progressives, imperfectives or presents were explained in detail: imperfective path, modal contamination path and the modal path of habituals. In addition, the evidence concerning the semantic potential of the *qotel* formation in Biblical and Rabbinic Hebrew was introduced. Due to the limitations in space, the presentation of data related to Modern Hebrew, the formulation of a holistic dynamic classification of the gram at the three diachronic periods and, finally, the discussion of the changes in its semantic states (portrayed as a portions of paths) across centuries must all be postponed and will be dealt in the second part of the study, which will appear in next issue of *Folia Orientalia*.

References

- Andersen, F. I.; A. D. Forbes. 2007. The Participle in Biblical Hebrew and the Overlap of Grammar and Lexicon. In: S. Malena, D. Miano (eds.) *Milk and Honey: Essays on Ancient Israel and the Bible in Appreciation of the Judaic Studies Program at the University of California, San Diego*. 185-212. Winona Lake, Indiana.

- Andrason, A. 2010a. *Iparras* – two diachronies in a single morphology. *Journal for Semitics* 19/1. 160-192
- Andrason, A. 2010b. The Akkadian *Iprus* from the unidirectional perspective. *Journal of Semitic Studies* 55/2. 325-345
- Andrason, A. 2010c. The panchronic *yiqtol*. Functionally consistent and cognitively plausible. *Journal of Hebrew Scriptures* 10/10. 1-63
- Andrason, A. 2011a. The Biblical Hebrew verbal system in light of grammaticalization – the second generation. *Hebrew Studies* 52. 19-51
- Andrason, A. 2011b. The Biblical Hebrew *Wayyiqtol* – a dynamic definition. *Journal of Hebrew Scriptures* 11/7. 1-50
- Andrason, A. 2011c. The BH *weqatal*. A homogenous form with no haphazard functions. Part 1. *Journal of Northwest Semitic Languages* 37/2. 1-25
- Andrason, A. 2012a. Cognitive foundations of the Old Babylonian *iparras*. *Journal of Semitic Studies* 57/ 1. 1-24
- Andrason, A. 2012b. Thermodynamic model of the Biblical Hebrew verbal system. In: D. Eades (ed.) *Grammaticalisation in Semitic*. *Journal of Semitic Studies Supplement Series* 29. 146-163. Oxford.
- Andrason, A. 2012c. The *KAD* verbal form in Basse Mandinka – structure and meaning. *Studia Linguisticae Universitatis Iagellonicae Cracoviensis* 129. 1-14
- Andrason, A. 2013. El sistema verbal hebreo en su contexto semítico: una visión dinámica. Estella.
- Austin, J. L. 1962. *How to Do Things with Words*. Oxford.
- Azar, M. 1995. *The Syntax of Mishnaic Hebrew*. Jerusalem.
- Berman, R. A. 1978. *Modern Hebrew Structure*. Tel Aviv.
- Bertinetto, P. M.; A. Lenci. 2010. Iterativity vs. habituality (and gnomic imperfectivity). *Quaderni del Laboratorio di Linguistica della Scuola Normale Superiore di Pisa* 9/1. 1-46
- Bittner, M. 2008. Aspectual universals of temporal anaphora. In: S. Rothstein (ed.) *Theoretical and Crosslinguistic Approaches to the Semantics of Aspect*. 349-386. Amsterdam.
- Boneh, N.; E. Doron. 2008. Habituality and the Habitual Aspect. In: S. Rothstein (ed.) *Theoretical and Crosslinguistic Approaches to the Semantics of Aspect*. 321-348. Amsterdam.
- Boneh, N.; E. Doron. 2010. Modal and Temporal Aspects of Habituality. In: M. Rappaport Hovav, E. Doron, I. Sichel (eds.) *Lexical Semantics, Syntax, and Event Structure*. 338-363. Oxford.
- Bybee, J. 2010. *Language, Usage and Cognition*. Cambridge.
- Bybee, J.; R. Perkins; W. Pagliuca. 1994. *The Evolution of Grammar*. Chicago, London.
- Carlson, G. 1977. *Reference to Kinds in English*. PhD dissertation. University of Massachusetts.
- Comrie, B. 1975. *Tense*. Cambridge.
- Cook, J. 2001. The Hebrew Verb: A Grammaticalization Approach. *Zeitschrift für Althebraistik* 14/2. 117-143
- Cook, J. 2002. *The Biblical Hebrew Verbal System: A Grammaticalization Approach*. PhD dissertation. Department of Hebrew and Semitic Studies, University of Wisconsin-Madison.

- Cook, J. 2008. The Hebrew Participle and Stative. *Journal of Northwest Semitic Languages* 34. 1-19
- Cook, J. 2012. *Time and Biblical Hebrew Verb*. Winona Lake.
- Croft, W.; A. Cruse. 2004. *Cognitive Linguistics*. Cambridge.
- Dahl, Ö. 1975. On generics. In: E. Keenan (ed.) *Formal semantics of natural languages*. 99-112. London, New York.
- Dahl, Ö. 1985. *Tense and Aspect Systems*. Oxford.
- Dahl, Ö. 2000. The Tense and Aspect Systems of European Languages in a Typological Perspective. In: Ö. Dahl (ed.) *Tense and Aspect in the Languages of Europe*. 3-25. Berlin, New York.
- Danaher, D.S. 2001. Czech Habitual Verbs and Conceptual Distancing. *Journal of Slavic Linguistics* 9. 5-28
- DeCaen, V. 1995. *On the Placement and Interpretation of the Verb in Standard Biblical Hebrew Prose*. PhD dissertation. University of Toronto.
- Dekel, N. 2010. *A matter of time: tense, mood and aspect in Spontaneous Spoken Israeli Hebrew*. Utrecht.
- Driver, S. R. 1892. *A treatise on the use of the tenses in Hebrew and some other syntactical problems*. Oxford.
- Dyk, J. 1994. *Participles in Context: A Computer-Assisted Study of Old Testament Hebrew*. Amsterdam.
- Dyk, J.; E. Talstra. 1999. Paradigmatic and Syntagmatic Features of Identifying Subject and Predicate in Nominal Clauses. In: C. L. Miller (ed.) *The Verbless Clause in Biblical Hebrew: Linguistic Approaches*. 133-185. Winona Lake, Indiana.
- Evans, V.; M. Green. 2006. *Cognitive linguistics: an introduction*. Edinburgh.
- Fleischman, S. 1995. Imperfective and irrealis. In: J. Bybee, S. Fleischman (eds.) *Modality in grammar and Discourse (= Typological studies in language 32)*. 519-551. Amsterdam.
- Geeraerts, D. 1988. Where does prototypicality come from?. In: B. Rudzka-Ostyn (ed.) *Topics in Cognitive Linguistics*. 207-229. Amsterdam.
- Gilquin, G. 2006. The place of prototypicality in corpus linguistics. In: S. Gries, A. Stefanowitsch (eds.) *Corpora in Cognitive Linguistics*. 159-191. Berlin.
- Gordon, A. 1982. The Development of the Participle in Biblical, Mishnaic and Modern Hebrew. *Monographic Journals of the Near East, Afroasiatic Linguistics* 8/3. 121-179
- Green, L. 2000. Aspectual BE-type constructions and coercion in African American English. *Natural Language Semantics* 8. 1-25
- Gries, S. 2006. Introduction. In: S. Gries, A. Stefanowitsch (eds.) *Corpora in Cognitive Linguistics*. 1-17. Berlin.
- Haspelmath, M. 1994. Passive Participles across Languages. In: B. A. Fox, P. J. Hopper (eds.) *Voice: Form and Function*. 151-177. Amsterdam.
- Haspelmath, M. 1998. The Semantic Development of Old Presents: New Futures and Subjunctives without Grammaticalization. *Diachronica* 15/1. 29-62
- Haspelmath, M. 2003. The geometry of grammatical meaning semantic maps and cross-linguistic comparison. In: M. Tomasello (ed.) *The New Psychology of Language*. 211-242. Mahwah.

- Hatav, G. 1997. *The Semantics of Aspect and Modality. Evidence from English and Biblical Hebrew*. Amsterdam, Philadelphia.
- Heine, B. 1993. *Auxiliaries: Cognitive Forces and Grammaticalization*. New York.
- Heine, B.; U. Claudi; F. Hünemeyer. 1991. *Grammaticalization. A Conceptual Framework*. Chicago.
- Heine, B.; T. Kuteva. 2007. *The Genesis of Grammar: a Reconstruction*. Oxford.
- Hellenthal, A-C. 2007. Modality properties of sentence type markers in Sheko. In: P. Hendriks, F. Rau, K. Soucková, J. van der Wal (eds.) *Leiden Papers in Linguistics* 4/2. 17-32. Leiden.
- Holm, J. 1988. *Pidgins and Creoles. Theory and Structure*. Cambridge.
- Hopper, P.; E. Traugott. 2003. *Grammaticalization*. Cambridge.
- Joosten, J. 1999. The long Form of the Prefix Conjugation Referring to the Past in Biblical Hebrew Prose. *Hebrew Studies* 40. 15-26
- Joosten, J. 2012. *The Verbal System of Biblical Hebrew*. Jerusalem.
- Joüon, P. 1923. *Grammaire de l'hébreu biblique*. Roma.
- Klausenburger, J. 2000. *Grammaticalization: Studies in Latin and Romance morphosyntax*. Amsterdam.
- Langacker, R.W. 1997. Generics and habitual. In: A. Athanasiadou, R. Dirven (eds.) *On Conditionals Again*. 191–222. Amsterdam.
- Longacre, R. 1989. *Joseph: A Story of Divine Providence. A Text Theoretical and Textlinguistic Analysis of Genesis 37 and 39-40*. Winona Lake.
- Longacre, R. 1992. Discourse Perspective on the Hebrew Verb: Affirmation and Restatement. In: W. R. Bodine (ed.) *Linguistics and Biblical Hebrew*. 177-189. Winona Lake.
- Marchese, L. 1986. *Tense / Aspect and the Development of Auxiliaries in the Kru Language Family*. Arlington.
- Menéndez-Benito, P. 2005. *The Grammar of Choice*. PhD dissertation. University of Massachusetts.
- Nikiforidou, K. 2009. Constructional analysis. In: F. Brisard, J-O. Östman, J. Verschueren (eds.) *Grammar, Meaning and Pragmatics*. 16-32. Amsterdam, Philadelphia.
- Palmer, R.F. 2001. *Mood and Modality*. Cambridge.
- Pérez Fernández, M. 1992. *La Lengua de los Sabios I. Morfosintaxis*. Estella.
- Pérez Fernández, M. 1999. *An Introductory Grammar of Rabbinic Hebrew*. Leiden, Boston, Köln.
- Rattray, S. 1992. *The Tense-Mood-Aspect System of Biblical Hebrew with Special Emphasis on 1 and 2 Samuel*. PhD dissertation. University of California.
- Segal, M. 1927. *A Grammar of Mishnaic Hebrew*. Oxford.
- Stubb, M. 2004. On very frequent phrases in English: distributions, functions and structures. Talk at the 25th Conference of the International Computer Archive for Modern and Medieval English. Verona, Italy, 19-23 May 2004.
- Waltke, K.; M. O'Connor. 1990. *An Introduction to Biblical Hebrew Syntax*. Winona Lake.